Baseline Water Quality Data

Inventory and Analysis

Cumberland Gap
National Historical Park



Water Resources Division and Servicewide Inventory and Monitoring Program

National Park Service - Department of the Interior
Fort Collins - Denver - Washington

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BASELINE WATER QUALITY DATA

INVENTORY AND ANALYSIS

CUMBERLAND GAP
NATIONAL HISTORICAL PARK

National Park Service
Water Resources Division
Fort Collins, CO 80525

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EXECUTIVE SUMMARY

This document presents the results of surface-water-quality data retrievals for Cumberland Gap National Historical Park (CUGA) from six of the United States Environmental Protection Agency's (EPA) national databases: (1) Storage and Retrieval (STORET) water quality database management system; (2) River Reach File (RF3); (3) Industrial Facilities Discharge (IFD); (4) Drinking Water Supplies (DRINKS); (5) Water Gages (GAGES); and (6) Water Impoundments (DAMS). This document is one product resulting from a cooperative contractual endeavor between the National Park Service's (NPS) Servicewide Inventory and Monitoring Program, the National Park Service's Water Resources Division (WRD), and Horizon Systems Corporation to retrieve, format, and analyze surface water quality data for all units of the National Park System containing significant water resources. The primary goal of the project is to provide descriptive water quality information in a manner and format that is both consistent with the goals of the Servicewide Inventory and Monitoring Program and useable by park resource managers. The document provides: (1) a complete inventory of all retrieved water quality parameter data, water quality stations, and the entities responsible for the data collection; (2) descriptive statistics and appropriate graphical plots of water quality data characterizing period of record, annual, and seasonal central tendencies and trends; (3) a comparison of the park's water quality data to relevant EPA and WRD water quality screening criteria; and (4) an Inventory Data Evaluation and Analysis (IDEA) to determine what Servicewide Inventory and Monitoring Program "Level I" water quality parameters have been measured within the study area. Accompanying the report are disks containing digital copies of all data used in the report, as well as all components of the report (tables, figures, etc.).

The results of the retrievals for the study area from the IFD, DRINKS, GAGES, and DAMS databases located 20 industrial/municipal dischargers; six drinking water intakes; five active or inactive U. S. Geological Survey (USGS) water gages (including stream and well); and three water impoundments. The results of the STORET retrieval for the study area yielded 123,211 observations for 328 separate parameters collected by the NPS, USGS, EPA, Tennessee Valley Authority (TVA), Tennessee Department of Environment and Control, Virginia Department of Environmental Quality, and Kentucky Department of Natural Resources and Environmental Protection at 97 monitoring stations from 1953 through 1997. Of the 123,211 observations, approximately 94 percent were reported by the NPS from 1978 through 1997, including data collected by CUGA and the University of Tennessee to monitor the potential impacts of tunnel construction through Cumberland Mountain on the waters, bed sediments, and biota of park streams. Of the 97 monitoring stations, 42 stations were located within the park boundary (see Station Period of Record Tabulation). One of these 97 monitoring stations contained data locked by the EPA[†]. These locked data are not included in the 123,211 total observations retrieved from STORET for the CUGA study area.

Many of the monitoring stations represent either one-time or intensive single-year sampling efforts by the collecting agencies. Thirty-two stations within the study area (19 within the park boundary) yielded longer-term records consisting of multiple observations for several important water quality parameters (see Station Period of Record Tabulation). The stations yielding the longest-term records within the park boundary are: (1) Tunnel Creek near the Little Yellow Creek confluence (CUGA 0065); (2) Davis Branch, upstream of Little Yellow Creek (CUGA 0058); (3) Little Yellow Creek, downstream of Tunnel Creek (CUGA 0066); (4) Little Yellow Creek, upstream of Tunnel Creek (CUGA 0067); and (5) Davis Branch, upper reaches (CUGA 0045). The stations yielding the longest-term records within the study area, but outside of the park boundary, are: (1) Yellow Creek near Middlesboro, KY (CUGA 0061); (2) Stony Fork near the mouth at Middlesboro, KY (CUGA 0097); (3) Gap Creek, 0.3 miles upstream from the park boundary (CUGA 0037); (4) Gap Creek Tributary within the town of Cumberland Gap, TN (CUGA 0035); (5) Gap Creek within the town of Cumberland Gap, TN (CUGA 0031); and (6) a drainage ditch at a railroad tunnel (CUGA 0047)[††].

[†]When data are entered into STORET and locked by the controlling agency (EPA), results of a STORET retrieval are limited to general station information and any "unlocked" portions of the data. Additional data must be obtained by contacting the controlling agency (EPA).

[††]Water quality station location descriptions are verbatim from STORET. Any misspellings and abbreviations in STORET are replicated in this document.

Screening criteria consisting of published EPA water-quality criteria and instantaneous concentration values selected by the WRD were used to identify potential water quality problems within the study area. While the criteria represent important threshold concentrations of pollutants, it is important to remember that criteria may have been exceeded due to any number of natural or anthropogenic factors, including errors in field, laboratory, and/or recording procedures. The reader is advised to read the Introduction for additional caveats in interpreting the exceeded criteria in this report. The results of the CUGA water quality criteria screen found 19 groups of parameters that exceeded screening criteria at least once within the study area. Dissolved oxygen, pH, cyanide, arsenic, cadmium, copper, lead, mercury, and zinc exceeded their respective EPA criteria for the protection of freshwater aquatic life. Chloride, sulfate, nitrate, nitrite, arsenic, cadmium, chromium, copper, lead, mercury, and bis (2-ethylhexyl) phthalate exceeded their respective EPA drinking water criteria. Fecal-indicator bacteria concentrations (total coliform, fecal coliform, and *E. coli*) and turbidity exceeded the WRD screening limits for freshwater bathing and aquatic life, respectively.

Dissolved oxygen concentrations were measured 2,738 times at 55 monitoring stations from 1961 through 1997. Ninety-six observations at 22 stations in the western portion of the study area were less than or equal to the 4 milligrams per liter (mg/L) EPA criterion for the protection of freshwater aquatic life from 1964 through 1996.

The pH was measured 4,840 times at 80 monitoring stations from 1953 through 1997. Four-hundred-ninety-seven observations at 45 stations were outside the pH range of 6.5 to 9.0 standard units (SU) (EPA chronic criteria for freshwater aquatic life) from 1961 through 1997. One-hundred-six observations were greater than or equal to pH 9.0 and 391 observations were less than or equal to pH 6.5. Approximately 73 percent of the 497 observations outside the edit criteria were reported from 24 stations within the park from 1990 through 1997. The highest pH of 12.5 SU was reported in the midstream of Tunnel Creek (CUGA 0056) in June 1992. The lowest pH of 2.0 SU was reported in Little Yellow Creek at the park boundary (CUGA 0077) in August 1992.

Turbidity was measured 2,354 times at 48 monitoring stations from 1967 through 1997. One-hundred-ninety-eight observations at 31 stations exceeded the WRD screening criterion of 50 Jackson Candle/Formazin/Nephelometric Turbidity Units (JTU/FTU/NTU) from 1967 through 1997. Approximately 66 percent of the observations exceeding the criterion were reported from 21 stations in the western portion of the park from 1990 through 1997, including the highest concentration of 425 NTU in Little Yellow Creek, downstream of Tunnel Creek (CUGA 0066), in March 1993.

Total coliform concentrations were measured 40 times at three monitoring stations (CUGA 0012, CUGA 0024, CUGA 0025) from 1967 through 1976. Twenty-eight observations at these three stations, in Gap Creek near Arthur, TN (CUGA 0024, CUGA 0025) and Indian Creek, south of U. S. Route 58 at Nash Mill (CUGA 0012), exceeded the WRD bathing water screening criterion of 1,000 Colony Forming Units/Most Probable Number per 100 milliliters (CFU/MPN/100 ml) from 1967 through 1976. Twenty-one of the 28 observation exceeding the criterion were reported from the two stations in Gap Creek near Arthur, TN (CUGA 0024, CUGA 0025), including the highest value of 70,000 MPN/100 ml at the station monitored by the TVA (CUGA 0024) in February 1968. Fecal coliform concentrations were measured 98 times at six monitoring stations (CUGA 0012, CUGA 0013, CUGA 0024, CUGA 0025, CUGA 0040, CUGA 0090) from 1967 through 1997. Seventy observations at five stations, in Indian Creek, south of U. S. Route 58 at Nash Mill (CUGA 0012), Gap Creek near Arthur, TN (CUGA 0024, CUGA 0025), and Yellow Creek (CUGA 0040, CUGA 0090), equaled or exceeded the WRD bathing water screening criterion of 200 CFU/MPN/100 ml from 1967 through 1982. Thirty-nine of the 70 observations exceeding the criterion were reported in Indian Creek, south of U. S. Route 58 at Nash Mill (CUGA 0012), from 1971 through 1976, including the highest value of 40,000 CFU/100 ml in May 1971. *E. coli* concentrations were measured 287 times at 12 monitoring stations during 1989 and 1990. Thirty-six observations at these 12 stations exceeded the WRD bathing water screening criterion of 126 CFU/100 ml during 1990. Twenty-three of the observations exceeding the criterion were reported from eight stations within the park (CUGA 0014, CUGA 0016, CUGA 0028, CUGA 0029, CUGA 0042, CUGA 0050, CUGA 0068, CUGA 0074). The highest value of 10,000,000 CFU/100 ml was reported twice, in Station Creek at U. S. Route 58 (CUGA 0014) and Gap Creek, 0.25 miles south of Tiprell, TN (CUGA 0048), in November and February 1990, respectively.

Cyanide concentrations (including total and free) were measured 21 times at 16 monitoring stations from 1980 through 1997. Two total concentrations of 0.090 mg/L at the Middlesboro, KY Sewage Treatment Plant (CUGA 0087) exceeded the acute freshwater criterion of 0.022 mg/L in November 1982.

Chloride concentrations (including dissolved and total) were measured 2,645 times at 69 monitoring stations from 1953 through 1997. One total concentration in Yellow Creek near Middlesboro, KY (CUGA 0061) equaled the secondary drinking water criterion of 250 mg/L in October 1968.

Sulfate concentrations (including dissolved and total) were measured 2,649 times at 69 monitoring stations from 1953 through 1997. Eight total concentrations at five stations near Middlesboro, KY, in Yellow Creek (CUGA 0061, CUGA 0084, CUGA 0085), Bennetts Fork (CUGA 0095), and Stony Fork (CUGA 0097), equaled or exceeded the secondary drinking water criterion of 250 mg/L from 1964 through 1980. The highest concentration of 998 mg/L was reported in Yellow Creek near Middlesboro, KY (CUGA 0061) in October 1968.

Nitrate concentrations (including dissolved and total as N and dissolved as NO_3) were measured 2,629 times at 57 monitoring stations from 1953 through 1997. Fifteen dissolved as N concentrations at six stations, in a drainage ditch within the park, near the junction of State Route 988 and U. S. Route 25E (CUGA 0043), Gap Creek (CUGA 0031, CUGA 0037), Station Creek (CUGA 0015), Davis Branch, upstream of Little Yellow Creek (CUGA 0058), and Little Yellow Creek, upstream of Tunnel Creek (CUGA 0067), exceeded the drinking water criterion of 10 mg/L for nitrate as N from 1992 through 1996. Ten of the 15 observations exceeding the criterion were located in a drainage ditch within the park, near the junction of State Route 988 and U. S. Route 25E (CUGA 0043), during 1992 and 1993. The highest concentration of 63.7 mg/L was reported in Little Yellow Creek, upstream of Tunnel Creek (CUGA 0067), in August 1992.

Nitrite concentrations (including total as N and dissolved as NO_2) were measured 2,551 times at 46 monitoring stations from 1964 through 1997. Eighteen total as N concentrations at ten stations, in Tunnel Creek (CUGA 0053, CUGA 0056), Davis Branch (CUGA 0045, CUGA 0058), a drainage ditch within the park, near the junction of State Route 988 and U. S. Route 25E (CUGA 0043), a drainage ditch south of the junction of U. S. Routes 25E and 58 (CUGA 0022), Gap Creek Tributary within the town of Cumberland Gap, TN (CUGA 0035), Gap Creek, 0.3 miles upstream from the park boundary (CUGA 0037), inside the highway tunnel on the Tennessee side (CUGA 0038), and a drainage ditch on the Kentucky side of the railroad tunnel (CUGA 0047), equaled or exceeded the drinking water criterion of 1 mg/L for nitrite as N from 1991 through 1993. Fourteen of the 18 observations exceeding the criterion were reported from six stations in the western portion of the park (CUGA 0038, CUGA 0043, CUGA 0045, CUGA 0053, CUGA 0056, CUGA 0058), including the highest concentration of 4.47 mg/L in a drainage ditch within the park, near the junction of State Route 988 and U. S. Route 25E (CUGA 0043), in July 1992.

Arsenic concentrations (including dissolved and total) were measured 501 times at 46 monitoring stations from 1964 through 1997. Eight dissolved concentrations at eight stations, in Tunnel Creek (CUGA 0053, CUGA 0054, CUGA 0056, CUGA 0065), Little Yellow Creek (CUGA 0067, CUGA 0077), Gap Creek Tributary within the town of Cumberland Gap, TN (CUGA 0035), and a sediment basin along Tunnel Creek (CUGA 0060), exceeded the drinking water criterion of 50 micrograms per liter (µg/L) from 1990 through 1993. The highest of these eight concentrations, 390 µg/L reported in Little Yellow Creek, upstream of Tunnel Creek (CUGA 0067), also exceeded the acute freshwater criterion of 360 µg/L in December 1993. Six of the eight concentrations exceeding the drinking water criterion were reported from six stations in the western portion of the park (CUGA 0053, CUGA 0054, CUGA 0056, CUGA 0060, CUGA 0065, CUGA 0067) from 1991 through 1993.

Cadmium concentrations (including dissolved and total) were measured 581 times at 47 monitoring stations from 1964 through 1997. Of the 275 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 54 dissolved concentrations at 26 stations exceeded the acute freshwater criterion of 3.9 µg/L and also the drinking water criterion of 5.0 µg/L from 1990 through 1995. Approximately 69 percent of the observations exceeding the criteria were reported from 19 stations within the park from 1990 through 1995, including the highest concentration of 28,000 µg/L in Little Yellow Creek, upstream of Tunnel Creek (CUGA 0067), in February 1995.

Chromium concentrations (including dissolved, hexavalent, and total) were measured 2,545 times at 52 monitoring stations from 1964 through 1997. Three dissolved concentrations, ranging from 100 µg/L to 120 µg/L, in the midstream of Tunnel Creek, within the park (CUGA 0056), equaled or exceeded the drinking water criterion of 100 µg/L during 1991 and 1992. The highest concentration of 120 µg/L was reported in October 1991.

Copper concentrations (including dissolved and total) were measured 2,545 times at 52 monitoring stations from 1967 through 1997. Ninety-one observations at 27 stations exceeded the acute freshwater criterion of 18 µg/L from 1968 through 1995. The highest of these 91 concentrations, 1,370 µg/L, reported in a drainage ditch on the Kentucky side of the railroad tunnel (CUGA 0047), also exceeded the drinking water criterion of 1,300 µg/L in August 1995. Approximately 64 percent of the observations exceeding the acute freshwater criterion were reported from 18 stations in the western portion of the park from 1990 through 1994.

Lead concentrations (including dissolved and total) were measured 2,539 times at 52 monitoring stations from 1964 through 1997. Of the 2,538 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 673 observations at 34 stations exceeded the drinking water criterion of 15 µg/L from 1971 through 1993. Seventy-six of these 673 concentrations also exceeded the acute freshwater criterion of 82 µg/L from 1990 through 1992. Approximately 51 percent of the observations exceeding the criteria were reported from 22 stations in the western portion of the park from 1990 through 1993. The highest concentration of 940 µg/L was reported in Gap Creek, south of the tributary receiving runoff from U. S. Route 58 (CUGA 0036), in February 1991.

Mercury concentrations (including dissolved and total) were measured 936 times at 44 monitoring stations from 1970 through 1996. Of the 581 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), nine dissolved concentrations at eight stations, in Little Yellow Creek (CUGA 0067, CUGA 0073, CUGA 0077), the midstream of Tunnel Creek (CUGA 0056), Lewis Hollow, upstream from U. S. Route 58 (CUGA 0021), Gap Creek Tributary within the town of Cumberland Gap, TN (CUGA 0035), the upper reaches of Davis Branch (CUGA 0045), and a sediment basin along Tunnel Creek (CUGA 0060), exceeded the drinking water criterion of 2.0 µg/L and also the acute freshwater criterion of 2.4 µg/L from 1990 through 1994. Seven of the nine observations exceeding the criteria were reported from six stations in the western portion of the park (CUGA 0021, CUGA 0045, CUGA 0056, CUGA 0060, CUGA 0067, CUGA 0073) from 1990 through 1994, including the highest concentration of 960 µg/L in Lewis Hollow, upstream from U. S. Route 58 (CUGA 0021), in February 1994.

Zinc concentrations (including dissolved and total) were measured 2,544 times at 52 monitoring stations from 1967 through 1997. Nineteen concentrations at 12 stations equaled or exceeded the acute freshwater criterion of 120 µg/L from 1967 through 1997. Fourteen of the observations exceeding the criterion were reported from seven stations in the western portion of the park (CUGA 0039, CUGA 0046, CUGA 0053, CUGA 0054, CUGA 0058, CUGA 0062, CUGA 0066) from 1991 through 1997. The highest concentration of 1,000 µg/L was reported in a drainage ditch on the Kentucky side of the railroad tunnel (CUGA 0047) in October 1990.

Bis (2-ethylhexyl) phthalate concentrations were measured six times at six monitoring stations (CUGA 0040, CUGA 0069, CUGA 0075, CUGA 0086, CUGA 0087, CUGA 0090) from 1981 through 1985. Two concentrations, 19 µg/L in Yellow Creek at the Kentucky State Route 441 Bridge (CUGA 0090) and 9 µg/L in Yellow Creek at the Kentucky State Route 188 Bridge (CUGA 0040), exceeded the drinking water criterion of 6 µg/L in May 1982.

The IDEA conducted for CUGA indicates that STORET data exist for all 13 Level I parameter groups in the study area. For 12 of the parameter groups, at least 67 percent of the observations were recorded since 1985. Data for two groups, Chlorophyll and Bacteria, were recorded at less than half of the 97 monitoring stations. Relative to other parameter groups, data were limited for the groups Chlorophyll and Bacteria. Results for 68 of the 126 EPA priority toxic pollutants (consisting of inorganic and organic parameters, metals, and pesticides) were retrieved from STORET. Of the 97 monitoring stations, 12 stations measured only bacteriological parameters.

Surface water resources in the CUGA study area include the Powell River and the Martins Fork of the Cumberland River; Gap, Yellow, Little Yellow, Indian, Shillalah, and numerous other creeks and runs; Otey Mill, Butchers, and other springs; Fern, Cannon Creek, and other impounded lakes; and several small, natural lakes and ponds. Most of the 97 monitoring stations are located in the western half of the study area, particularly within park boundaries or near the towns of Middlesboro, KY and Cumberland Gap, TN. Many of the water quality observations in this area have been collected by CUGA and the University of Tennessee during construction of a highway tunnel through Cumberland Mountain for U. S. Route 25E. The data inventories and analyses contained in this report indicate that surface waters within the study area have been impacted by human activities. Potential anthropogenic sources of contaminants include municipal and industrial wastewater discharges; urban and residential development; highway tunnel construction; stormwater runoff; agricultural and timbering operations; quarrying and mining activities; recreational use; landfill operations; and atmospheric deposition.

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INTRODUCTION

The National Park Service's (NPS) Organic Act of 1916 states that the mission of the NPS is to promote and regulate the use of national parks, monuments, and other units "... to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." One task embodied by this mission is preserving and protecting water resources and water dependent environments in parks. Ensuring the integrity of park water quality, due to its importance in sustaining natural, aquatic park ecosystems and supporting human consumptive and recreational use, is fundamental to successfully addressing this task. The first step in ensuring the integrity of park water quality is defining historic and extant water quality.

This document represents one product of an ongoing effort by the NPS Water Resources Division (WRD) and the Servicewide Inventory and Monitoring Program to characterize baseline water quality using existing data at park units containing significant natural resources. This effort was initiated in 1993 by the award of a contract to Horizon Systems Corporation to retrieve, format, and analyze surface water quality data from the Environmental Protection Agency's (EPA) Storage and Retrieval (STORET) database system. The scope of work identified in the Request For Proposals outlined several sequential, interrelated project phases, including, but not limited to: (1) determining the water quality retrieval/query area around each park; (2) downloading and assessing the quality of the data from STORET; (3) generating basic water quality summary statistics and graphic plots; (4) reformatting water quality data for compatibility with the park-based Water Quality Data Management System presently under-development; and (5) providing recommendations concerning possible hardware, software, and personnel options for storing combined park databases in a centralized NPS water quality database. This report documents the results of phases one through four of this effort for this park unit.

Goal

The goal of this document is to provide descriptive water quality information in a format usable for park planning purposes (eg. Water Resources Management Plans, Resource Management Plans, and General Management Plans). The report is designed to characterize baseline water quality rather than assess specific water quality problems at a park. This is consistent with the Servicewide Inventory and Monitoring Program's goal of obtaining basic, "Level I", water quality parameters for key waterbodies at each park (National Park Service 1993). Consequently, this report is best used as a reference document to help design new goal-driven water quality monitoring programs rather than as conclusive evidence of previous or existing water quality problems.

Purpose

The purpose of this report is to inventory existing park water quality data; establish baseline water quality at the park; identify potential water quality problems; and establish a park water quality database. This report is intended to enable park resource managers to compare and contrast water quality data collected as part of ongoing inventory and monitoring programs with historical water quality trends. Additionally, this report is intended to foster better designed park-based water quality inventory and monitoring programs in the future. The water quality databases which accompany this report will also lay the groundwork for establishing a NPS water quality database that will allow Regions and Washington Offices to generate regional and national assessments of park water quality.

Objectives

Specific objectives of the study documented in this report are to:

1. Retrieve water quality and related data from the EPA's STORET and other database systems;

2. Develop a complete inventory of all retrieved data;

3. Produce descriptive statistics and appropriate time series and box-and-whiskers plots of water quality data to characterize period of record, annual, and seasonal central tendencies and trends;

4. Compare water quality data with relevant national EPA water quality criteria on a station-by-station and study area basis;

5. Determine the presence and/or absence of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameters within the study area; and

6. Reformat water quality and other related data for use in the park-based Water Quality Data Management System, presently under-development, and other appropriate analytical tools.

Document Overview

This report is comprised of five chapters. The first chapter, this Introduction, provides a brief statement of the study's background; goal, purpose, and objectives; and the key personnel who helped produce the document. This chapter also contains this brief overview of the document's contents and important interpretive caveats to consider when referring to and using this document. The second chapter focuses on the methods, procedures, and databases that were employed to retrieve and analyze water quality data for the park. The third chapter is the user's interpretive guide to chapter four. Chapter three explains how to interpret all the tables and figures presented in chapter four. Chapter four, which likely comprises the majority of the document (unless there isn't much water quality data for the park), contains detailed inventories, descriptive statistics, graphics, and national EPA water quality criteria comparisons characterizing the park unit's water quality data on a station-by-station basis and over the entire study area. This chapter also contains a comparison of park water quality data with the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameters and a listing of water quality observations that were outside the STORET edit criteria range. Chapter five, the Appendices, contains more specialized materials such as the file names and database structures included on floppy disk(s) with this report; STORET edit criteria; national EPA water quality criteria; Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameters; selected water quality references; and other materials which provide background on the methods, procedures, and databases used or produced by this study.

The water quality and other related data referenced in this report accompany the document on floppy disk. The water quality parameter data file is in DBASE III+[1] format and will be useable in the park-based Water Quality Data Management System presently under-development. The water quality stations, industrial facilities discharges, drinking water intakes, water gages, water impoundments, and River Reach databases are also in DBASE III+ and/or ASCII format for ready-use in Geographic Information Systems (GIS), Computer-Aided Design Systems, or Desktop Mapping Systems.

Caveats

While intended primarily as a reference document, it is important that users peruse the first three chapters and Appendices of this report to better understand and interpret the results presented in chapter four. As a means for identifying potential areas for more intensive study, comparisons of the park's water quality data with relevant national EPA water quality criteria for appropriate designated uses[2] and with the Servicewide Inventory and

[1]The use and/or mention of specific proprietary hardware or software packages is for informational purposes only and is not intended to connote or denote an endorsement.

[2]The Environmental Protection Agency's Quality Criteria for Water 1995 Final Draft (Silver Book) was the primary source of water quality criteria. In the spirit of the other caveats offered in this section, it is important to recognize that water quality criteria are often revised when new or better information become available.

Monitoring Program's "Level I" water quality inventory parameters have been made. Extreme caution must be exercised in interpreting the results of these comparisons. Observations that exceed water quality criteria may have occurred due to any number of natural or anthropogenic factors, as well as other reasons. For example, STORET is a "user-beware" water quality database system. While there is some rudimentary edit (bounds) checking of any data entered in STORET (See Appendix C), users are basically free to enter their own data. Beyond data entry errors, the possibility of inaccurate data entering the system due to inappropriate measurement techniques, sample mistreatment, and other reasons is a serious concern. Consequently, if observations for a particular parameter frequently exceed the EPA water quality criterion over a prolonged time period, the best approach is to examine in detail the data exceeding the criterion. Questions which should be asked regarding the data include: What water source(s) are manifesting the problem? Does the data make sense? Was it collected by a reputable organization following a sound study plan and employing accepted techniques? If the answers to these questions still cause concern, a specific cause and effect water quality investigation focusing on the parameters of concern may be warranted. Similarly, the absence of particular Servicewide Inventory and Monitoring Program "Level I" water quality parameters from the park only means that no entity or organization has collected and entered this data into the EPA's STORET database. Too frequently, data that are collected in and around NPS units never make it into the EPA's national water quality database. These data may exist in published or unpublished reports, file cabinets, or other databases. Before definitively concluding that no baseline data exist for a particular parameter, these alternative resting grounds for data should be investigated. Such a detailed exploration, however, was beyond the scope of this study.

Key Personnel

Many individuals contributed to the design and implementation of this project. The primary contributors and their roles in the project are briefly mentioned below.

National Park Service, Water Resources Division:

Dean Tucker was the Contracting Officer's Technical Representative responsible for designing, coordinating, and implementing all aspects of this effort.

Mike Matz coordinated and managed the team which prepared all components of the report.

Gary Rosenlieb provided administrative oversight and was involved in quality control for all tasks related to this project.

Barry Long and Roy Irwin reviewed technical tasks and provided water quality expertise related to data analysis.

Donnie Dustin and Greg Harp helped prepare reports and write the Executive Summaries.

Elizabeth Eisenhauer, Brian Verbeck, Robert Flynn, and Dawn Grandbois provided digital cartographic support, both in determining retrieval/query areas and producing maps and graphics.

Kelli O'Connor, Mary Beth Talty, Curtis Cooper, Paul McElvery, J. Chris Echohawk, Kristie Maczko, Adam Henson, Shawndra Mawhorter, Lisa Smith, Eric Janney, and Ryan Shy uploaded water quality data to STORET prior to report preparation.

Jacquie Nolan designed the cover.

Horizon Systems:

Cindy McKay served as Project Manager for Horizon Systems, performed the initial requirements analysis, and was involved in all quality control tasks related to the project.

Alan Cahoon was responsible for automating the procedures which produced the water quality databases and Water Quality Results chapter.

Sue Hanson, P.E., provided technical advice for writing this document.

Dr. Jim Loftis was the data quality analyst for the project.

Armando F. Ballofet, P.E., served as the local technical liaison between Horizon Systems and the NPS.

Other National Park Service:

Several other individuals provided invaluable technical review, comments, administrative support, and/or other assistance, including: Dan Kimball, Bill Jackson, Mark Flora, Gary Williams, John Karish, Brendhan Zubricki, Richard Hammerschlag, Randy Ferrin, Gary Vequist, Mike Martin, Kevin Berghoff, and Dyra Monroe.

METHODOLOGY

This section provides an overview of the procedures and criteria used to retrieve and analyze water quality data for each park unit. Generating baseline water quality data inventories and analyses for all NPS units is a monumental task. To accomplish this undertaking given a very limited budget, the procedures employed to produce each report had to be as generic and automated as possible. Consequently, customization of reports to individual park needs and issues was not feasible. Moreover, such customization was beyond the scope of this effort which was simply intended to produce baseline water quality data inventories for all parks rather than customized issue-driven reports. During the procedure-development stages of the project, specifications for the final product evolved, within the context of the aforementioned resource constraints, to focus on comprehensive water quality baseline data inventories and concise, descriptive statistical examinations of the available water quality data for each park unit. Detailed below are the data sources and final methods and procedures that were used to create the baseline water quality inventories, analyses, databases, and other products for each park unit. A thorough understanding of the limitations of the data sources and procedures described in this chapter and the next (Interpretive Guide to Water Quality Results) is a prerequisite to intelligent use of the results presented in this document.

Delineation of Park Study Area

The first step in retrieving water resources-related data for each park was deciding on a procedure to determine the study area boundary. Since water flows through parks, utilizing the park boundary as a simple query/study area was deemed inadequate. On the other end of the continuum, using the entire watershed as the study area was considered superfluous given: (1) the areal extent of certain park watersheds (eg. the entire Mississippi River); (2) the sheer volume of potentially irrelevant data such a large study area could generate; and (3) the resources required to specify the watershed for each park unit. The approach which was ultimately adopted - a modified hydrologic boundary - reflects a compromise between the park boundary and the entire watershed. Thus the study area employed for each park is an area extending at least three miles upstream and one mile downstream from the park boundary. Although these distances are somewhat arbitrary, this approach is easy to automate and was felt to limit the data retrieved, in most instances, to that of most importance to the park. Extending the query area one mile downstream of the park was intended to capture any data immediately downstream of the park which may reflect the quality of the water in the park. A current (as possible) copy of each park's boundary was obtained in digital format directly from the park or digitized from Regional land status maps, U.S. Geological Survey (USGS) quadrangles, or other sources. Using GIS techniques, the boundary was used to create the three miles upstream, one mile downstream buffer. For a few parks with which WRD water quality specialists were very familiar with potential water quality threats and/or valuable sources of data that may lie just outside the study area, the study area may have been tweaked (enlarged) to cover these areas of concern or interest. Unfortunately, a customized study area was not feasible for all park units. Hence, the three miles upstream, one mile downstream buffer was the primary study area employed for most parks. This study area was transferred to the EPA mainframe computer and used as the basis for all water resources-related data retrievals from the data sources described below.

Data Sources

The EPA maintains many mainframe data systems related to national water resources (U.S. Environmental Protection Agency 1992). Six of these data systems were used for this project:

- STOrage and RETrieval System (STORET) - water quality parameter data, locations of sampling stations, descriptive elements about stations and parameters;
- Industrial Facilities Discharge (IFD) - locations of industrial and municipal point source discharge facilities;

- Drinking Water Supplies (DRINKS) - locations of intake pipes for drinking water supplies;
- Water Gages (GAGES) - locations of USGS and other water gages;
- Water Impoundments (DAMS) - locations of most large water impoundments (greater than 10,000 acre feet at normal pool volume) and many smaller impoundments; and
- River Reach File, Version 3 (RF3) - 1:100,000 scale geographical representation of surface waters (rivers, lakes, etc.) with a unique identifier assigned to each surface water segment and connectivity information useful for routing and navigation.

STORET is the national water quality data repository (U.S. Environmental Protection Agency 1989). Water quality data is entered in STORET by public agencies (federal, state, or local) that collect water samples and/or perform laboratory analysis. As such, STORET is a "user-beware" data system. Although the EPA manages the STORET data system and, since November 1983, has imposed some minimum quality control criteria on the data (See Appendix C), data are generated and input to STORET by the "owner" agencies. Consequently, the EPA does not certify any data within STORET. Currently, there are over 800,000 active and inactive sampling stations and more than 225 million observations covering in excess of 13,000 water quality parameters entered in STORET. The earliest data dates back to the turn of the century. Using the bi-monthly update cycle, user agencies may store results of recent monitoring activities in STORET. Included in STORET is USGS WATSTORE water quality data, which is updated on a monthly basis. Although STORET contains a phenomenal amount of data, it is important to note that data exist in STORET only if the collectors decide to upload their data to the system. Since many agencies and researchers do not upload their data to STORET, the absence of water quality data in the system for a particular area doesn't mean that there has never been any water quality data collected for the area. The data may exist in published or unpublished reports, file cabinets, or in agency-specific databases. Identifying and retrieving these other sources of data were beyond the scope of the present effort. All parameter data and water quality station location data downloaded from STORET within the park's study area are included in DBASE III+ format files on disk(s) accompanying this report (See Appendices A and B).

The data within the IFD database are extracted from the EPA's Permit Compliance System (PCS). IFD contains the facility locations of all industrial and municipal dischargers which require a National Pollutant Discharge Elimination System (NPDES) permit to operate. Over 7,100 municipal, federal, and industrial facilities discharging into the waters of the United States are tracked by PCS and IFD. If any industrial facilities discharges exist within the study area, a file in DBASE III+ format documenting a variety of information about each discharge accompanies this report on disk (See Appendices A and B).

The EPA DRINKS database identifies locations of drinking water supply intakes. This file contains data for 850 supplies which serve more than 25,000 people, and 6,800 supplies which serve between 1,000 and 25,000 people. If any drinking water intakes exist within the study area, a file in DBASE III+ format documenting a variety of information about each intake accompanies this report on disk (See Appendices A and B).

The GAGES data originates primarily with the USGS and copies are maintained on the EPA mainframe computer for ease of integration with other EPA national data systems. Although other agency's water gages, as well as some artificial gages, may appear in GAGES, the vast majority of gages are stream gages belonging to the USGS. The GAGES database contains approximately 36,000 records for both active and inactive gaging stations. If any USGS or other agency stream gages occur within the study area, a file in DBASE III+ format documenting several fields of information about each gage accompanies this report on disk (See Appendices A and B).

The Water Impoundment database was originally compiled by the U.S. Army Corps of Engineers in response to a Congressional inquiry on dam safety hazards (GKY and Associates 1990). The EPA subsequently modified the database for use in water quality investigations. Of the 68,155 dams in the database, 2,125 are considered large (impounding 10,000 acre feet or more at normal pool volume). It is important to note that while the database includes entries for 66,030 smaller dams, estimates place the actual number of dams in the U.S. at several million

(including small farm ponds). If any water impoundments occur within the study area, a file in DBASE III+ format documenting several fields of information about each impoundment accompanies this report on disk (See Appendices A and B).

The RF3 data system is a hydrologic database of surface water features across the U.S. (excluding, at present, Idaho, Oregon and Washington, which currently operate a different system - although this data is expected to be converted to RF3 soon, Alaska and Hawaii). RF3 was created primarily from 1:100,000 scale USGS Digital Line Graph data. RF3 is made up of over 3,000,000 individual "reaches". A reach is generally defined as a portion of surface water between two confluences (U.S. Environmental Protection Agency 1993). The linework underlying RF3 contains over 95,000,000 coordinate points. RF3 is designed to facilitate hydrologic routing, identifying upstream and downstream elements, and specifying the exact location of any point on a stream network. RF3 data exists as a series of traces with associated attributes. The EPA project which is producing RF3 is being conducted in three phases: Compilation, Assessment, and Revision. The Compilation phase is complete except for Idaho, Washington, Oregon, and Alaska. The Assessment phase was completed during the first half of 1994; while the Revision phase was begun in March 1994. One important outcome of the Revision phase is that the reach codes which uniquely identify each surface water feature will change. Consequently, these codes should not be used, at this time, as keys for relating other data to RF3. The RF3 data provided with this document is provisional and should be used only to provide a geographic backdrop for the park's water quality data. RF3 data covering each USGS catalog unit (a geographic area representing a single or multiple drainage basin(s), or some other distinct hydrologic feature (U.S. Geological Survey 1982)) touched by the park's study area is included in ASCII export and DBASE III+ formats on the disk(s) accompanying this report (See Appendices A and B).

For additional information on any of these data systems, contact the EPA Office of Water at (202) 260-7028.

Data Retrieval and Analysis Procedures

The six EPA data systems discussed above reside on the EPA mainframe computer located in Research Triangle Park, N.C. Horizon Systems used a dedicated, leased telephone line with a data transfer rate of 9600 bits per second to download data occurring within the park's study area from all the databases. The bisynchronous communication software and hardware provided error checking during all data transfer procedures.

As described above, the park study/query area boundary was used to select the water quality stations, industrial facilities discharges, drinking water intakes, water gages, water impoundments, and river reaches associated with the park unit. For various reasons, screening criteria (described later in this section) were employed to select appropriate water quality stations, parameters, and observations. Horizon Systems wrote several mainframe programs to automate, to the greatest extent feasible, the STORET data retrieval and storage procedures. Once the data were extracted from the EPA data systems, they were downloaded to a microcomputer for statistical analyses and reformatted into DBASE III+ compatible format.

Specifically, once on the PC, the data were processed to:

(1) Reformat the data into DBASE III+ format and other database structures;
(2) Eliminate questionable data outside the STORET edit criteria ranges (See Appendix C);
(3) Display on a map the location of water quality monitoring stations and other water resources themes;
(4) Determine the frequency of water quality observations by station, parameter, and station/parameter;
(5) Generate descriptive period-of-record water quality statistics in a tabular format;
(6) Generate appropriate descriptive annual and seasonal analyses of the water quality data in a tabular format;
(7) Plot appropriate period of record time series and annual and seasonal box-and-whisker graphs;
(8) Compare the water quality data against relevant EPA national criteria; and

(9) Compare the water quality data against the NPS Servicewide Inventory and Monitoring Program's "Level I" water quality parameters.

Special customized microcomputer programs (primarily written in Clipper and Microsoft Professional BASIC) and procedures were created to address each of these tasks. All reformatted database files are included on disk(s) accompanying this document. The contents of these databases are described briefly below. Complete database structures are included in Appendices A and B. The descriptive water quality tabular statistics (see "Statistical Analyses" below) were computed based upon NPS specifications. Command or batch files were generated to drive STATGRAPHICS 7.0 in order to produce all the time series and box-and-whiskers plots.

Park Unit Databases

Up to seven digital databases in DBASE III+ and other formats have been created for the park by querying the water resources-related data sources described above. The disk(s) containing these databases accompany the report. The contents of each of these databases are discussed briefly below. More detailed documentation of these databases is included in Appendices A and B.

(A) Water Quality Parameter Data: This database includes all the water quality parameter data downloaded from STORET that passed the STORET Edit Criteria, Date, Station Type, and Phase 0 Parameter screens (described below) and is summarized tabularly and graphically in this document. This constitutes the park's baseline water quality data. Since it is already in digital format, more sophisticated analysis of the data is possible than the descriptive statistics and graphics presented here.

(B) Water Quality Station Locations: This database consists of the STORET header information describing each station where water quality data was collected. As the latitude and longitude of the station are included in the database, this file is easily imported into the park's GIS.

(C) Industrial Facility Discharge Locations: This database includes any industrial or municipal point source discharges located within the park's study area. As the latitude and longitude of each discharge facility are included in the database, this file is easily imported into the park's GIS.

(D) Drinking Water Intake Locations: This database includes any drinking water intakes located within the park's study area. As the latitude and longitude of each intake are included in the database, this file is easily imported into the park's GIS.

(E) Water Gage Locations: This database includes water (stream, lake, estuary, well, spring, climate, or other) gages located within the park's study area. Most of the gages will likely be stream gages belonging to the USGS. As the latitude and longitude of each gage are included in the database, this file is easily imported into the park's GIS.

(F) Water Impoundment Locations: This database includes any water impoundments (dams) located within the park's study area. As the latitude and longitude of each impoundment are included in the database, this file is easily imported into the park's GIS.

(G) River Reach Data: This database includes all stream traces (1:100,000 scale) and attributes for reaches falling within any USGS catalog unit that touches the park's study area. The traces are geo-referenced in ASCII format. The attributes are in both ASCII export and DBASE III+ formats. This information is also readily incorporated into the park's GIS.

The absence of any of these seven files from the disk(s) accompanying the report indicates that there was either no data of this type within the park's study area or the data was unavailable. Several other files are included on the disk(s) accompanying this report, including digital copies of all the figures and tables contained in the document and some other items. Refer to Appendices A and B for detailed documentation of these files. Not included on

disk is an Encyclopedia File (for WRD reference) that documents the minimum and maximum values for each water quality parameter and the parks in which those values were recorded. When Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks, this Encyclopedia File will be available upon request from the NPS WRD.

Screening Methodologies and Procedures

Developing automated or semi-automated procedures to produce baseline water quality inventories and analyses for all national park units required constant testing and debugging of procedures. Three parks, Rock Creek Park, Yellowstone National Park, and Indiana Dunes National Lakeshore, were used to pilot test and refine the automated procedures. It became evident, after a preliminary analysis of all the downloaded STORET data, especially for Indiana Dunes National Lakeshore, that the specifications for the graphical analyses could generate hundreds (possibly thousands) of plots, many of which would not necessarily be useful. Also, there were many stations; parameters; and/or observations downloaded that were not part of the study's objectives; not overly useful; or of dubious quality. In order to reduce the number of graphical plots (time series, annual and seasonal box-and-whiskers) to fit within project resources, various screening criteria were investigated. Ultimately, a comprehensive set of screening criteria were developed to reduce the number of graphical plots. After initial counts of the total number of possible time series and annual and seasonal box-and-whiskers plots were generated, these counts were used to decide which screening criteria would be applied to limit the number of these plots produced for the park unit. Additional screening criteria were employed to restrict the tabular descriptive statistics results to only those deemed useful to the park. Table A provides the categories of screening criteria and to which analyses the screens were applied. A "yes" entry in the table means that the screening category eliminated or prevented data from appearing in certain tables and plots contained in the document. Consequently, in understanding how data from STORET was used in this report, it may be helpful to keep in mind the three general types of screening criteria: (1) screens that apply to stations; (2) screens that apply to certain parameters at stations; and/or (3) screens that apply only to particular observations of parameters at stations. A detailed description of each of the screening criteria categories follows this table. *It is important to note that statistics in "Inventory" reports may not be consistent with statistics in "Overview" reports since different categories of screening criteria were applied*. Also, if attempting to replicate the results of the statistical and graphical analyses presented in this document, be sure to follow the same screening methodologies.

STORET Edit Criteria

As mentioned previously, STORET is a "user-beware" data system. As the EPA doesn't certify any data in STORET, public agencies enter and are responsible for the quality of their own data. Only data entered since November 1983 have been subjected to any rudimentary edit/bounds checking. Agencies entering data since this date can elect to override the edit/bounds checking for individual observations. USGS WATSTORE water quality data is entered into STORET without any EPA edit/bounds checking to ensure data integrity between WATSTORE and STORET. Unfortunately, during the course of our pilot tests, erroneous USGS and EPA water quality data values were discovered. In order to eliminate as much "bad" data as possible, all water quality data downloaded from STORET was subjected to automatic edit/bounds checking (STORET Edit Criteria contained in Appendix C) for the 190 most common parameters. Observations falling outside the STORET Edit Criteria were documented (See the Water Quality Observations Outside STORET Edit Criteria for Park section in the Water Quality Results chapter) and then retained or discarded from the database and all tables and plots based on whether the value was judged as being in the realm of possibility. Although the STORET Edit Criteria screen likely removed some "bad" data for these common parameters, the probability of other erroneous data in the database is high. Be sure to consult the Caveat section in the Introduction.

Table A. Categories of Screening Criteria and to Which Output Products They Apply (A "yes" Entry Means the Screening Category Eliminated or Prevented Data From Being Used in the Product):

Screening Category	Data Download	Overview Tables	Inventory Tables	Annual Tables	Seasonal Tables	Standards Tables	Plots (All)
STORET Edit Criteria	yes	yes	yes	yes	yes	yes	yes
Date	yes	yes	yes	yes	yes	yes	yes
Station Type	yes	yes	yes	yes	yes	yes	yes
Phase 0 Parameter	yes	yes	yes	yes	yes	yes	yes
Phase 1 Parameter	no	no	yes	yes	yes	yes	yes
Media Type	no	no	yes	yes	yes	yes	yes
Remark Codes	no	no	yes	yes	yes	yes	yes
Composite Type	no	no	yes	yes	yes	yes	yes
Phase 2 Parameter	no	no	no	no	no	no	yes
Observations/Period of Record	no	no	no	yes	yes	no	yes

Date Screen

Every water quality observation in STORET typically has a sampling date associated with it. Unfortunately, STORET does not prevent users from entering incorrect dates. Consequently, any water quality observation with an incorrect and/or suspect date (eg. a month greater than 12; a day greater than 31; or a sample date later than the STORET retrieval date) were discarded.

Station Type Screen

STORET contains data from a wide variety of stations classified by the type of waterbody in which samples were collected. As this project's purpose was to inventory and analyze surface-water quality, the following surface-water station types were retrieved (clarification provided in parentheses):

Station Types Included In Retrieval
(a) STREAM
(b) CANAL
(c) LAKE
(d) RESERV (Reservoir)
(e) SPRING
(f) FWTLND (Fresh Water Wetland)
(g) SWTLND (Salt Water Wetland)
(h) ESTURY (Estuary)
(i) OCEAN

Ground water and/or other station type data may have been retrieved if the entering agency classified the station type incorrectly. Rectifying this error was beyond the scope and resources of this project.

Phase 0 Parameter Screen

Nearly all water quality parameters associated with each station type listed above were retrieved. The only exception to this was the exclusion of most of the STORET administrative parameters. A complete list of STORET administrative parameters is included in Appendix D. The few administrative parameters that were included in the retrievals are as follows:

Code	STORET Administrative Parameter Description
00027	Code No. for Agency Collecting Sample
00028	Code No. for Agency Analyzing Sample
00063	Sampling Points, Number of In a Cross Section
00111	Ratio of Fecal Coliform to Fecal Streptococci
00115	Sample Treatment Code (1=Raw, 2=Treated)
34772	NPDES Number, Cross Reference
45580	Method of Analysis
74065	Stream Flow Class
74066	Annual Runoff
74067	Soil Classification
74068	Water Quality Designated Use Classification

Phase 1 Parameter Screen

Some of the data retrieved from STORET was not suitable for statistical or graphical analysis. Consequently, this screening criterion eliminated all parameters which were not suitable for statistical or graphical analysis within the context of this project. The full list of these parameters is presented in Appendix E. Examples of parameters excluded from statistical and graphical analysis include the administrative parameters mentioned above, land use acreage, encoded values, dates, latitude/longitude, etc. Excluded parameters do, however, appear in the Parameter Period of Record and Station/Parameter Period of Record (two of the "Overview" Tables), as well as in the water quality parameter file included on disk(s) accompanying this report.

Media Type Screen

Water quality samples can be taken in a variety of aqueous media. Water quality data were retrieved from STORET only if the media were WATER or VERT (vertically integrated). WATER and VERT samples comprise the overwhelming majority of samples in STORET. The media screen eliminated the following water quality sampling media:

Media Screen	Description
BOTTOM	Sampled At the Bottom
DREDGE	Sampled By Dredge
PORE	Pore Sample
CORE	Core Sample

Remark Code Screen

STORET enables the agency collecting water quality samples to provide a qualifying remark for each parameter observation. These remarks provide additional information about the measured or observed value entered into STORET (See Appendix B - Parameter Data File for a complete listing and description of all remark codes). Based on the STORET remark codes, two potential screens were applied to water quality observations based on whether the measured value was used in subsequent analyses: (1) Elimination or (2) Modification/Inclusion.

Elimination:
Non-composite water quality parameters with the remark codes presented in Table B were eliminated from the period of record, annual, and seasonal descriptive statistics and graphics. Not including observations with these remarks was justified by the fact that most of the remarks: (A) indicate either less confidence in the measured value; (B) are remarks for nominal or categorical data that doesn't lend itself to statistical analysis; or, (C) complicate the statistical analysis beyond the scope of this effort. Observations containing these remark codes comprise a very small fraction of the data. Although statistical analyses weren't undertaken on this data, all water quality observations, regardless of remark code, are included on disk(s) accompanying this report. If you re-analyze this data in order to replicate the results presented here, be sure to eliminate all non-composite observations with the remark codes presented in Table B.

Table B. Non-composite Parameters With the Following Remark Codes Were Eliminated From Statistical and Graphical Analysis:

Remark Code	Description of STORET Remark Code
F	Female Species.
J	Estimated, Not the Result of Analytic Measurement.
M	Presence Verified, But Not Quantified, Below Quantification Limit. For Species, Male. For Oxygen Reduction Potential, Indicates Negative Value.
N	Presumptive Evidence of Presence.
O	Analysis Lost.
V	Analyte Was Detected In Sample and Method Blank.
W	Less Than Lowest Value Reportable Under Remark "T".
Z	Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value.

Modification/Inclusion:
Water quality parameter observations with the remark codes presented in Table C were halved prior to inclusion in period of record, annual, and seasonal descriptive statistics and graphics. These remark codes deal with observations that were below the detection limit for the parameter. The common water quality data analysis convention for these remark codes is to use half of the detection limit in statistical analyses (Ward, Loftis, and McBride 1990; Gilbert 1987). Although this is a somewhat defensible treatment of observations below the detection limit, the statistics that may be computed using these halved values may not be defensible. Consequently, any computed statistics in inventory, annual, or seasonal tables that are comprised of 50% or more K, T, and U remark codes are footnoted "Computed with 50% or more of the total observations as values that were half the detection limit." This will provide the user with some caution in using and interpreting these results. Water quality data included on disk(s) accompanying this report that may have these remark codes are stored as the original entry (detection limit). If you re-analyze this data in order to replicate the results presented here, be sure to substitute half the detection limit value in the database whenever these remark codes are encountered.

Table C. The Value of Water Quality Parameters With the Following Remark Codes Were Halved (Half of the Detection Limit Entered In STORET) Prior to Inclusion In Descriptive Statistics and Graphics:	
Remark Code	**Description of STORET Remark Code**
K	Off-scale Low, Actual Value Not Known, But Known to Be Less Than Value Shown.
T	Less Than Detection Criteria.
U	Analyzed For But Not Detected, Value is Detection Limit For Process Used. If Species, Undetermined.

Composite Type Screen

Sometimes data entered in STORET represent something other than a single measurement at one location at one point in time. These samples are typically referred to as composite samples due to the fact that they vary temporally and spatially. Consequently, the observation entered into STORET for composite data is typically a computed value that summarizes the data over time and/or space. Such data complicate statistical and graphical analyses and must be handled separately. Such treatment was beyond the scope of this study; although composite values typically represent only a fraction of STORET observations. The composite type screen eliminates all composite observations from statistical and graphical analyses, except those with a composite type code of "A" that have a one day or less sampling period and those with a composite type code "D". All water quality observations, regardless of composite type code, are included on disk(s) accompanying this report. If you re-analyze this data in order to replicate the results presented here, be sure to exclude all composite observations except those with a code of "A" that have a one day or less sampling period and those with a code of "D". Table D presents a list of possible STORET composite type codes.

Table D. Possible STORET Composite Type Codes

Composite Type Code	STORET Composite Type Description
A	Average
H	Maximum
L	Minimum
N	Number of Observations
#	Number of Observations
S	Standard Deviation
U	Sum of Squares
V	Variance
C	Coefficient of Error
X	Coefficient of Variance
E	Skewness
F	Kurtosis
Z	Number of Obs. That Exceed An Established Limit
%	Precision
$	Accuracy
B	N/A
D	Indicates Replicate Sample

Phase 2 Parameter Screen

Due to budgetary limitations, the number of graphical plots (time series, annual and seasonal box-and-whiskers) produced had to be manageable - typically no more than 100 total plots. After scrutinizing the results of the pilot tests and the Baseline Water Quality Data Inventory and Analysis Reports produced for the first group of parks, the 19 parameters which, typically, were the most frequently measured at nearly all stations were water temperature, stage, discharge, and various meteorological measurements (See Table E). Consequently, most of the graphical plots produced would be of water temperature, stage, discharge, and meteorological conditions. Although these are important parameters, particularly in conjunction with other water quality parameters, it was felt that plotting resources would be better allocated to other water quality parameters. Consequently the STORET parameter codes listed in Table E never generated graphical plots. It is important to note, however, that these parameters are included in all other aspects of the project, including all applicable period of record, annual, and seasonal descriptive statistics tables.

Table E. Frequently Measured STORET Codes That Were Prevented From Generating Plots	
STORET Parameter Code	**STORET Parameter Description**
00003	Sampling Station Location, Vertical (Feet)
00010	Water Temperature (Degrees Centigrade)
00020	Temperature, Air (Degrees Centigrade)
00021	Temperature, Air (Degrees Fahrenheit)
00025	Barometric Pressure (MM of HG)
00032	Cloud Cover (Percent)
00035	Wind Velocity (Miles Per Hour)
00036	Wind Direction in Degrees from Trun N (Clockwise)
00040	Wind Direction (Azimuth)
00045	Precipitation, Total (Inches Per Day)
00046	Precipitation, Total (Inches Per Week)
00052	Humidity, Relative (Percent)
00061	Stream Flow, Instantaneous (CFS)
00065	Stream Stage (Feet)
81903	Depth of Bottom of Water @ Sample Site (Feet)
82553	Rainfall In 1 Day Inclusive Prior to Sample (Inches)
82554	Rainfall In 7 Days Inclusive Prior to Sample (Inches)
82371	Rainfall In 3 Days Inclusive Prior to Sample (Inches)
82372	Rainfall In 14 Days Inclusive Prior to Sample (Inches)
85599	Precipitation, Total/Period-Rain Equivalent (Cm/Sample)

Observations/Period of Record Screen

Despite never plotting water temperature, stage, discharge, and meteorological measurements, the number of plots generated by some parks still exceeded the 100 plot limit. Also, some rationale was needed to plot only those parameters with sufficient data density to make a meaningful statistical graphic. For example, time series plots comprised of only a few observations or annual or seasonal box-and-whiskers plots with limited observations and/or data in only one or two years or seasons are not very informative. Consequently, a number of plotting criteria were developed to limit the number of time series and box-and-whiskers plots to, at most, 100 informative graphics by using each parameter's number of observations and period of record. Similar, albeit less stringent criteria, were used for including results of annual and seasonal analyses in descriptive statistics tables. Consequently, there are more summaries of annual and seasonal results in tables than in graphics. Whenever an entry in an annual or seasonal table generated a plot, this entry was footnoted to notify the reader of the presence of the graphic. Due to differing quantities of data at parks, different screening criteria were employed. The same

criteria for appearance in seasonal and annual tables were used for all parks. Table F presents the least stringent plot screens.

Table F. Least Stringent Plot Screening Criteria Used to Limit the Number of Plots Generated

Time Series: To generate a time series plot, a station/parameter combination must have a period of record of at least 2 years and a total of at least 8 observations. Annual Analysis: To generate an annual box-and-whiskers plot, a station/parameter combination must have at least 9 observations in each of at least 4 years. The years do not have to be consecutive. Seasonal Analysis: To generate a seasonal box-and-whiskers plot, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years. The years do not have to be consecutive.

The exact three plot screens used varied by park unit and are documented in the Overview section of the Water Quality Results chapter. If your park's plotting criteria deviated from these least stringent criteria, it is because too many plots would have been generated using these criteria.

The criteria used for appearance of station/parameter combinations in annual and seasonal analysis tables are presented in Table G. These tabular criteria, which are actually the least stringent plotting criteria, were constant from park to park.

Table G. Criteria Used for Generating Entries in Annual and Seasonal Analysis Tables

Annual Analysis: For an entry to appear in an annual table, a station/parameter combination must have at least 9 observations in each of at least 4 years. The years do not have to be consecutive. Seasonal Analysis: For an entry to appear in a seasonal table, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years. The years do not have to be consecutive.

Statistical Definitions

Since this report is intended only to characterize historical and/or existing water quality at the park rather than address specific water quality problems, only simple descriptive statistics are presented. Inferential and non-parametric statistical analysis to examine relationships and trends were beyond the scope of the study. The complete water quality dataset is provided on disk accompanying this report to afford the opportunity for more detailed exploratory data analysis. The descriptive statistics are included in the inventory, annual, and seasonal tables. Table H provides a brief definition of each descriptive statistic provided for each parameter at a station.

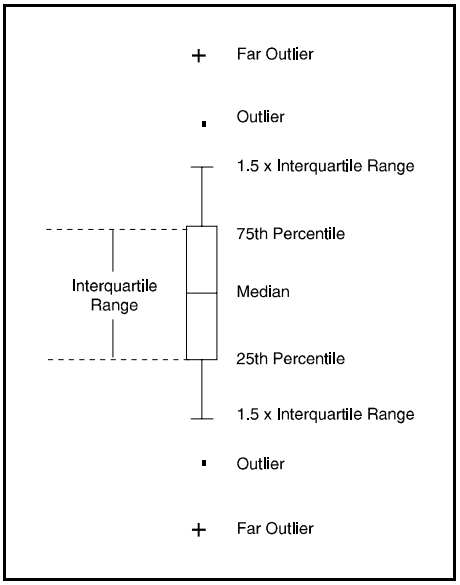
Table H. Definition of Descriptive Statistics Contained in Inventory, Annual, and Seasonal Tables

Observations:	The number of samples collected.
Median:	The median is the 50th percentile or the value in a dataset sorted in ascending order that exceeds 50% of all observations, yet is also exceeded by the remaining 50% of all observations.
Mean:	The sum of all observations collected divided by the number of observations.
Maximum:	The maximum value observed.
Minimum:	The minimum value observed.
Variance:	This is a measure of variability or dispersion of the observations; or, in other words, describes how many observations are close (or far), from the mean. It is calculated as the weighted average of the squared deviations from the mean.
Standard Deviation:	The positive square root of the variance.
10th Percentile:	The value in a dataset sorted in ascending order that exceeds 10% of all observations, yet is itself exceeded by the remaining 90% of all observations.
25th Percentile:	The value in a dataset sorted in ascending order that exceeds 25% of all observations, yet is itself exceeded by the remaining 75% of all observations. The 25th percentile is also known as the first quartile.
75th Percentile:	The value in a dataset sorted in ascending order that exceeds 75% of all observations, yet is itself exceeded by the remaining 25% of all observations. The 75th percentile is also known as the third quartile.
90th Percentile:	The value in a dataset sorted in ascending order that exceeds 90% of all observations, yet is itself exceeded by the remaining 10% of all observations.

As with the tabular descriptive statistics, the scope of the project limited the generation of exploratory graphics to time series plots and annual and seasonal box-and-whiskers plots. Plots were only generated, however, provided the parameter met or exceeded the relevant plotting criteria specified in the previous section.

Time series plots display the parameter concentration on the Y-axis and the date on the X-axis. This provides the user with a visual feeling for not only the parameter's concentration and variability over time, but also the density of data in different time periods. The time series plots provide a visual representation of the data in the basic station inventory. Due to software limitations, a line connects each measured value in sequence regardless of the time period between samples. Readers are cautioned not to assume that the concentration of the parameter between any two data points can be represented by a straight line. It is likely that the concentration varied between any two observations, particularly if the observations are separated by a significant time period.

The annual and seasonal box-and-whisker plots provide a graphical overview of the measured data and give the user a better understanding of the data's distribution and possible outliers. In essence, the box-and-whisker plots provide a visual representation of the data contained in the annual and/or seasonal tables. The interpretation of the boxes is provided in the figure to the right. Each box encompasses the middle 50 percent of measured values (from the 75th to 25th percentiles). The difference between the 75th and 25th percentiles is also known as the interquartile range. The horizontal line inside each box is the median or 50th percentile. The lines which extend out from each end of the box are the whiskers. The whiskers extend out from first quartile (25th percentile) and third quartile (75th percentile) to the smallest data point within 1.5 interquartile ranges from the first and third quartiles. Observations that extend beyond the whiskers are known as outliers. Far outliers are observations whose values lie more than three interquartile ranges below the first quartile or above the third quartile. These are designated with plus signs.



INTERPRETIVE GUIDE

TO WATER QUALITY RESULTS

This interpretive guide discusses each of the products presented in the next chapter - Water Quality Results. This chapter highlights how each of the tables and figures were prepared and how they can be used. Each subheading in this chapter corresponds to a particular product in the subsequent Water Quality Results chapter.

Overview

The Overview provides a brief one-page summary of the results of the various database retrievals for both the study area and the park. The study area results include the park results since the study area encompasses the park and all lands and waters within at least 3 miles upstream and 1 mile downstream of the park. Thus, the GIS estimated acreage of the study area should always be greater than the park acreage. The park acreage was computed from the digital boundary that was obtained for the park. More than likely this acreage will differ, perhaps significantly, from the "official" published acreage for the park due to the spatial and temporal accuracy of the digital boundary, treatment of inholdings, and other concerns. The number of STORET stations is the number of locations within the study area and park where an agency monitored (or intended to monitor) water quality. The number of stations with no data reveals the number of stations created in STORET for which water quality data were never entered. The number of stations with no statistical analysis reports the number of stations in the study area and park that contain data not amenable to normal parametric statistics. The number of longer term stations indicates the number of stations in the study area and park with at least 6 parameters having periods-of-record extending 2 years with an average of at least 1 observation per year over the period-of-record. The date of STORET retrieval is the calendar date when Horizon Systems downloaded all the data from STORET. Thus, the report documents all data entered in STORET prior to the retrieval date. Keep in mind that an agency can upload archival data at any time. Consequently, a retrieval date only guarantees that as of that date, this report contains all the data that had been entered into STORET. The period of record is the earliest date for which water quality data exist in STORET for the study area and park up to the date when the most recent data were entered prior to the retrieval date. The number of parameters measured is the number of unique water quality parameters measured within the study area and park and entered in STORET. The number of water quality observations is the sum of the total number of observations across all parameters within the study area and park. The number of industrial/municipal facilities discharges, drinking water intakes, water gages, and water impoundments are the number of each of these entities found within the study area and park. The number of time series, annual, and seasonal plots are the number of these different types of graphics produced by station/parameter combinations within the study area and park using the plotting criteria described in the previous chapter. The hydrologic seasons, described below, are the seasons used for the seasonal water quality data analysis. The time series, annual, and seasonal criteria are the plot and tabular screening criteria described in the previous chapter.

Regional Location Map

The Regional Location Map provides a small scale, general representation of the park and study area location within the United States. Digital, reproducible copies of this graphic are included on the disk(s) accompanying this report.

Water Quality Monitoring Locations Map(s)

The Water Quality Monitoring Locations Map(s) usually provides a larger scale representation of the park and study area than the Regional Location Map. This map indicates the locations within the study area where water quality has been monitored and the data entered into STORET. The water quality monitoring stations are labelled sequentially with the rightmost significant digits. The station names were assigned in numerically ascending order by latitude (for parks with a greater north-south extent than east-west) or longitude (for parks with a greater east-

west extent than north-south). Thus, this map serves as a visual index to the water quality data contained in the report. Since the 1:100,000 scale hydrography (from the River Reach File Ver. 3.0 or other sources) is displayed on the map, users can refer to the map to locate the station number on the reach in which they are interested and then find the appropriate section in the report that documents the water quality at that station. If the scale allows, USGS catalog units are also displayed on the map to provide an approximation of drainage basins. More than one Water Quality Monitoring Location map may be presented if the scale requires breaking the area into multiple maps for legibility. If multiple maps are necessary, an index map showing the geographic extent of each sub-map or panel will be present. Digital, reproducible copies of this graphic are included on the disk(s) accompanying this report. The digital, geo-referenced data files documented in Appendices A and B will allow the park to create water quality monitoring stations as a coverage in their GIS.

Dischargers, Drinking Intakes, Gages, and Impoundments Map(s)

The Dischargers, Drinking Intakes, Gages, and Impoundments Map(s) displays the same information as the Water Quality Monitoring Location Map(s) except the water quality stations are replaced by industrial/municipal facilities discharges, drinking water intakes, active and inactive gage locations, and water impoundments. This map also serves as a visual index allowing the user to determine the identification code of each discharger, drinking intake, gage, or impoundment. This number can then be used to obtain additional information about the entity on the following page of the report or to refer to the more detailed database files accompanying the report on disk. These more detailed database files are geo-referenced (See Appendices A and B), thus allowing the park to create these coverages in their GIS. More than one Dischargers, Drinking Intakes, Gages, and Impoundments map may be presented if the scale requires breaking the area into multiple maps for legibility. If multiple maps are necessary, an index map showing the geographic extent of each sub-map or panel will be present. Digital, reproducible copies of this graphic are also included on the disk(s) accompanying this report.

Industrial Facilities Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Table

This table provides some additional information about each of the discharges, drinking intakes, water gages, and water impoundments displayed on the previous map(s). This information generally includes the site identification number; the station or facility name; an address or some other indication of location; and some other pertinent information. More detailed information about each of these entities is contained in the database files on disk accompanying the report (See Appendices A and B).

Representative Mean Annual Hydrograph for Seasonal Analysis

One component of the water quality data analysis contained in the document is a seasonal analysis of the data (where adequate data exist). In order to undertake this analysis, some representation of the park's seasons was required. Seasons can be based on many factors (eg. hydrologic, climatic, recreational use, etc.). Since project resources did not allow us to contact every park and discuss with resource management staff what appropriate seasons may be for the park, WRD staff elected to adopt primarily a hydrologic/climatic definition of the seasons which uses a process of hydrograph separation to glean seasons from stream discharge patterns. The procedure employed to make these determinations was as follows:

(1) Find the nearest USGS Hydro-Climatic Data Network (HCDN) station (U.S. Geological Survey 1992) to the park that is most representative of streamflow conditions at the park. The HCDN is basically a subset of USGS streamflow stations, including only those stations that are unaffected by artificial diversions, storage, or other disruptions of the natural channel. All HCDN stations generally have at least a 20 year period of record. Consequently, discharge patterns at these stations should reflect only hydrologic and climatic influences. For the most part, selected HCDN sites were typically within 15-20 miles of the park. In some parks where WRD staff were aware of the existence of a stream gage located within the park that would be more representative of park waters even though it wasn't an HCDN site, this gage was selected.

(2) Retrieve the daily discharge values for the selected station from the USGS Daily Values File and generate a mean annual hydrograph and a box-and-whiskers plot of daily flows by month.

(3) Interpret the plots based on our knowledge of the hydrologic regime at these parks and assign seasons.

This approach, used for the majority of parks, assumes that most water quality data at the park will be found in streams and that the discharge pattern of the selected stream is representative of the seasons for all park waterbodies. Although this assumption may be weak for certain parks, project resources did not allow a more thorough investigation. For parks where there wasn't any stream gage (HCDN or otherwise) deemed representative of park waters, precipitation records from a nearby meteorological station were obtained from the National Climatic Data Center. Plotting daily average precipitation and box-and-whiskers of monthly precipitation sums allowed WRD hydrologists to make a rough approximation of climatic seasons for use in analyzing the water quality data.

Again, it is important to note the many ways of defining "seasons" and thus the limitations of the seasonal analysis contained in this document. For certain parks it may be more useful to perform a seasonal analysis with seasons defined by recreational use patterns or some other natural or anthropogenic factor. This option is available to the park since all the water quality data analyzed in this document is contained on disk(s) accompanying this report. Digital, reproducible copies of this seasonal analysis graphic are also included on the disk(s) accompanying this report.

Contacts for Agency Codes Retrieved

This table provides a list of the organizations who have entered data into STORET. A contact name at the organization and a phone number are also supplied. The agency code in the first column is the key for identifying which stations belong to that agency. This code will appear in the first line of each station's inventory. Although the agencies listed in this table are potential partners for future water quality monitoring or management endeavors, don't be surprised if the name of the contact and/or the telephone number is out of date. This information is entered when an agency first creates a station. The agency may not update this information when the initial contact moves on or the telephone number changes. Nonetheless, it is likely that the contact or someone else at the agency may be able to provide you with project reports or other information relative to the agency's data. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Quantity of Data Retrieved by Agency Code

This table displays the period-of-record; numbers of water quality stations, longer-term stations, and stations without data; total number of water quality observations; and the number of unique water quality parameters measured by each agency within the study area and park boundary. Using this table, a park can quickly determine which agencies collect the most data in and around the park and whether they have monitored recently. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station Period of Record Tabulation

The Station Period of Record Tabulation provides a quick overview of the names of all the stations within the study area where water quality has been monitored and data entered into STORET. It also furnishes the total number of observations taken at each station and the frequency of observations between certain dates: (1) 01/01/85 until the most recent date data were measured; (2) 01/01/75 - 12/31/84; and (3) prior to 01/01/75. The station identification number, the four character park abbreviation code followed by a four digit number, provides the means to jump from a particular station in the table to the statistical and graphical analyses for this station contained in the Station-By-Station Results section. The Station Period of Record Tabulation reveals which water

quality stations were situated within the park as defined by the park's GIS boundary. The Station Period of Record Tabulation also footnotes longer-term water quality stations. Longer-term stations are those that have at least 6 parameters with an average of one or more observations per year for those parameters during a period of record extending at least two years. Note that although a station may not be flagged as longer-term, it can still harbor much important data (albeit for only a few parameters or over a very long term with just a few observations). A digital copy of this table accompanies this report on disk (See Appendices A and B).

Parameter Period of Record Tabulation

The Parameter Period of Record Tabulation provides a complete listing of every water quality parameter ever measured in the study area and entered into STORET. This table is a summation of all the water quality observations for each parameter across all stations in the study area. Like the Station Period of Record Tabulation, the total number of observations for each parameter and the frequency of observations between: (1) 01/01/85 until the most recent date data were measured; (2) 01/01/75 - 12/31/84; and (3) prior to 01/01/75 are provided. This table is handy for quickly assessing whether particular parameters have been measured in the study area. The Parameter Period of Record Tabulation also shows how many in-park (and total) water quality stations contained data for each parameter. Some administrative parameters and parameters not suitable for statistical analysis within the context of this project (as discussed in the Screening Methodologies and Procedures section of the Methodology chapter) are listed in the Parameter Period of Record Tabulation, but not in the Station-By-Station Results section. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station/Parameter Period of Record Tabulation

The Station/Parameter Period of Record Tabulation combines the information found in the Station Period of Record Tabulation and the Parameter Period of Record Tabulation. This table provides a listing of all the stations where a particular water quality parameter was measured in the study area and the data entered into STORET. The table provides the start and end dates of the period of record of each parameter at each station; the number of years of measurement (computed from the start and end dates); whether the station/parameter combination occurred within the park boundary; the total number of observations for each parameter at each station, and whether a time series (T), annual (A), and/or seasonal (S) plot was generated for the station/parameter combination in the Station-By-Station Results section. This table is very useful when you need to determine at which locations within the study area (or park) particular parameters were monitored and how much data was collected there. Some administrative parameters and parameters not suitable for statistical analysis within the context of this project (as discussed in the Screening Methodologies and Procedures section of the Methodology chapter) are listed in the Station/Parameter Period of Record Tabulation, but not in the Station-By-Station Results section. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station-By-Station Results

Probably the most voluminous portion of the document is the Station-By-Station Results. Here the results of the water quality analyses for each station are presented in sequence. The results include the station inventory; parameter inventory; EPA water quality criteria analysis; and, as applicable, time series graphics and annual and seasonal tables and box-and-whiskers graphics. Each of these products are discussed below.

Station Inventory for Station

Each station's data commences with its Station Inventory. The Station Inventory provides the descriptive attributes about each water quality monitoring station contained in STORET. This includes a variety of locational information such as a verbal description, the Federal Information Processing codes for county and state, latitude and longitude, and other items; the station type (stream, spring, estuary, etc.); monitoring agency; creation date; indices to the River Reach File; whether the station lies within the park boundary; and several other attributes. This water quality station location data is also contained on disk(s) accompanying the report (See Appendices A and B).

Parameter Inventory for Station

Following the descriptive attributes about a station is the Parameter Inventory for the station. The Parameter Inventory provides a complete inventory and descriptive summary of all the water quality parameter data for the station. This table furnishes the parameter STORET code and name; the period of record for this parameter at this station; and the descriptive statistics defined in the Statistical Definitions in the previous chapter. Three different footnotes can appear on a parameter's descriptive statistics. Two asterisks (**) in the 10th, 25th, 75th, or 90th percentile columns indicates that there was insufficient data to compute these statistics for this parameter. Percentiles were not computed unless the parameter had at least 9 observations. Two number signs (##) next to the number of observations indicates that more than 50 percent of the observations entered into the computations as values that were taken to be half the detection limit. Caution should be employed in interpreting and using statistical results when more than half the values are set to half the detection limit. The letter "p" following a numeric STORET parameter code in the Parameter Inventory indicates that a time series plot was produced for this parameter at this station. Digital, reproducible copies of the Parameter Inventory tables are contained on the disk(s) accompanying this report.

Two downloaded parameter groups, pH and bacteriological, received special treatment whenever descriptive statistics were computed in the Parameter Inventory (as well as subsequent annual and seasonal tables). Whenever pH appears in a descriptive statistics table, the entry is increased to 3 entries: (1) the original pH entry; (2) pH computed from conversion to and from $\mu eq/l\ H^+$; and (3) $\mu eq/l\ H^+$. The reason for these conversions is that pH is actually the negative logarithm of the hydrogen ion concentration. To be technically correct in computing descriptive statistics, pH values must be converted to $\mu eq/l\ H^+$ (Kunkle and Wilson 1984). Once the descriptive statistics are computed using the pH values expressed as $\mu eq/l\ H^+$, the results can be converted back to pH. The three pH entries in the descriptive statistics table will all have the same STORET code.

Whenever a bacteriological parameter appears in a descriptive statistics table, the entry is increased to 3 entries: (1) the original bacteriological entry; (2) an entry computed using the log of each measured value; and (3) an entry that simply reports the geometric mean. The reason for converting to logs and displaying the geometric mean is convention. Bacteriological water quality standards typically reference the geometric mean rather than the arithmetic. The three bacteriological entries in the descriptive statistics tables will all have the same STORET code.

EPA Water Quality Criteria Analysis for Station

The EPA Water Quality Criteria Analysis table follows the Parameter Inventory. This table presents a comparison between the station's STORET water quality data and applicable national water quality criteria for freshwater and marine aquatic organisms; drinking water; and other concerns. Comparison against applicable State water quality criteria was not feasible given project resources. Appendix F provides the relevant national EPA water quality criteria values. In most cases, the EPA water quality criteria values are single sample concentrations that can be directly compared to single sample STORET entries. There are, however, two notable exceptions to this single sample/single value comparison: ammonia and fecal-indicator bacteria. For these two parameters, criteria are either derived from or depend on the results of other chemical characteristics of the water or require a time series statistical treatment of multiple samples to determine whether the criterion has been exceeded. The EPA ammonia criterion is pH and temperature dependent. To calculate the criterion for each ammonia sample value was beyond

the scope of this project. Consequently, ammonia criteria were not included in Appendix F or the EPA Water Quality Criteria Analyses. Un-ionized ammonia criteria can be determined from formula table values included in the EPA Silver Book (Environmental Protection Agency 1995).

For the purposes of this project, fecal-indicator bacteria data were flagged as exceeding criteria when their concentrations exceeded 200, 1000, 126, and 33 (fresh)/35 (salt) colony forming units or most probable number for single samples of fecal coliform, total coliform, E. coli, and enterococci, respectively. These values represent only approximations of the criteria for primary contact recreation waters where criteria are typically expressed in terms of a geometric mean computed with no less than 5 samples during a given month. When a fecal-indicator bacterial observation exceeds a criterion in the EPA Water Quality Criteria Analysis section, the reader should refer to the corresponding geometric mean calculations in the preceding Parameter Inventory. Long-term geometric means that exceed the respective water quality criteria for multiple samples are more indicative of chronic bacteriological problems than single sample values.

Water quality observations carrying non-detection or below-detection limit remark codes (K, T, and U) required special treatment in the EPA Water Quality Criteria Analysis. As with the statistics in the Parameter Inventory, half the detection limit was the value used in the EPA Water Quality Criteria Analysis. For certain observations, however, half the detection limit may exceed a water quality criterion. For those observations it would be inappropriate to classify them as exceeding a criterion since the actual value wasn't known. Thus, it was decided that any below detection limit or non-detect observations that exceed a water quality criterion using half the detection value would be excluded from the EPA Water Quality Criteria Analysis. If non-detect or below detection limit values are excluded from the EPA Water Quality Criteria Analysis for a particular parameter, the total observations for that parameter will be footnoted with an ampersand (&). This will also explain the difference between the total observations in the Parameter Inventory and the EPA Water Quality Criteria Analysis. Non-detect or below detection limit values are included in the EPA Water Quality Criteria Analysis, however, if half the detection limit doesn't exceed the parameter's criterion.

The EPA Water Quality Criteria Analysis for each station lists the parameter; the standard type and value; the total number of observations for the parameter at this station; the number of observations that exceeded the standard value; and the proportion of observations that exceeded the standard value. Water quality observations are considered as having exceeded a criterion regardless of whether the criterion represents a maximum acceptable value or a minimum acceptable value. The table also breaks down the water quality criteria analysis on a seasonal basis to allow the reader to discern whether parameter observations tend to exceed criteria during only certain seasons or year round. Although the EPA Water Quality Criteria Analysis table is a good starting point for assessing potential water quality problems at the station, the reader is strongly encouraged to read the caveat section in the Introduction concerning drawing conclusions about water quality problems from this table. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Time Series Plots for Station

Following the EPA Water Quality Criteria analysis will be any Time Series Plots for each parameter that met the time series plot screening criterion selected for the park unit. If a time series plot is generated for a particular parameter at a station, a "p" will appear next to the STORET parameter code in the Parameter Inventory. If no time series plots are present for the particular station, the data did not meet the time series screening criterion listed in the Overview section of the Water Quality Results chapter. The x-axis on these plots is the period of record, listing only the 2-digit calendar year for clarity (i.e. 1983 is presented as 83). The y-axis is the concentration of the selected parameter in its measurement units. In general, the units for a given parameter are given either on the y-axis or in the parameter description in the subtitle of the graph. Subtitle and/or y-axis parameter descriptions may be truncated on the plots so as to not exceed the maximum number of plotting characters. Y-axis values less than zero are sometimes shown for better representation of the entire plot. The station identification code, parameter description, and parameter STORET code are presented in the main title. The footnote provides a descriptive location name. Observations on the plot are represented as squares. Lines are drawn connecting each successive observation. As mentioned previously in the Statistical Definitions section of the Methodology chapter, the interconnecting line is drawn only for ease of reading and provides no indication of what the actual parameter

values were between the two observed measurements. Digital, reproducible copies of all time series plots accompany the report on disk (See Appendices A and B).

For time series plots of pH, the original pH values are plotted. For time series plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of a time series plot for bacteriological parameters is log-linear.

Annual Analysis for Station

If more than 9 observations exist in each of at least 4 years for a particular parameter at a station, an Annual Analysis table will be generated. Entries will be made in the table for each parameter having more than 9 observations in each of at least 4 years. The Annual Analysis presents the same descriptive statistics as the Parameter Inventory table, except that it provides the statistics by year, rather than the entire period of record. Although some of the years may not contain 9 observations, these years still have an entry in the table. A parameter needs only to have 9 observations in any 4 years of its period of record to qualify for the Annual Analysis table. Like the Parameter Inventory, percentiles with fewer than 9 observations are not computed and entries computed with greater than 50 percent of the data values set to half the detection limit are flagged. Entries in the Annual Analysis table that also meet the annual analysis box-and-whisker plot screening criterion will be flagged with a "p" next to the STORET code. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Annual Box-and-Whiskers Plots for Station

Entries in the Annual Analysis table that meet the annual box-and-whisker plot screening criterion will generate Annual Box-and-Whiskers Plots. The interpretation of box-and-whiskers plots is explained in the Statistical Definitions section of the Methodology chapter. A box is generated for each year of the period of record, even if less than 9 observations were recorded in the year. The axis labeling and plot titling is the same as for the time series plots. Digital, reproducible copies of these graphics accompany the report on disk (See Appendices A and B).

For annual box-and-whiskers plots of pH, μeq/l H^+ are plotted. For annual box-and-whiskers plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of an annual box-and-whiskers plot for bacteriological parameters is log-linear.

Seasonal Analysis for Station

As explained above, a park's hydrologic seasons for seasonal water quality analysis were determined using a process of hydrograph separation and other techniques. If a parameter has more than 9 observations in each of 2 seasons with a period of record of at least 6 years and observations in at least 3 of the 6 years, a Seasonal Analysis table will be generated for the station. The Seasonal Analysis presents the same descriptive statistics as the Parameter Inventory table, except that it provides the statistics by season, rather than the entire period of record. Although certain parameters for a season at a station may not contain 9 observations, these parameters can still have an entry in the table. A parameter needs only to have 9 observations in each of 2 seasons with a period of record of at least 6 years and observations in at least 3 of the 6 years to qualify for the Seasonal Analysis table. Consequently, some of the parameters could have fewer than 9 observations in a particular season but still generate a table entry. Like the Parameter Inventory and Annual Analysis, percentiles with fewer than 9 observations are not computed and entries computed with greater than 50 percent of the data values set to half the detection limit are flagged. Entries in the Seasonal Analysis table that also meet the seasonal analysis box-and-whisker plot screening criterion will be flagged with a "p" next to the STORET code. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Seasonal Box-and-Whiskers Plots for Station

Entries in the Seasonal Analysis table that meet the seasonal box-and-whisker plot screening criterion will generate Seasonal Box-and-Whiskers Plots. The interpretation of box-and-whiskers plots is explained in the Statistical Definitions section of the Methodology chapter. A box is generated for each season of the period of record, even if less than 9 observations were recorded in the season. On the x-axis, the seasons are labeled 1 through the number of seasons defined for the park through hydrograph separation. The actual calendar dates that correspond to these numerically labeled seasons exist in the Overview section and the Seasonal Analysis tables in the Water Quality Results chapter. The axis labeling and plot titling are the same as for the time series and annual box-and-whiskers plots. Digital, reproducible copies of these graphics accompany the report on disk (See Appendices A and B).

For seasonal box-and-whiskers plots of pH, μeq/l H^+ are plotted. For seasonal box-and-whiskers plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of a seasonal box-and-whiskers plot for bacteriological parameters is log-linear.

EPA Water Quality Criteria Analysis for Entire Park Study Area

This table essentially summarizes all the individual station-by-station EPA water quality criteria analyses in the study area. (Refer to the EPA Water Quality Criteria Analysis for Station section above for more detailed information on the treatment of special cases in the EPA Water Quality Criteria Analysis for Entire Park Study Area.) This table presents a comparison between the study area's STORET water quality data and applicable national water quality criteria for freshwater and marine aquatic organisms; drinking water; and other concerns. Comparison against applicable State water quality criteria was not feasible given project resources. Appendix F provides the relevant national EPA water quality criteria values. The EPA Water Quality Criteria Analysis for the Entire Park Study Area lists the parameter; the standard type and value; the total number of observations for the parameter at this station; the number of observations that exceeded the standard value; and the proportion of observations that exceeded the standard value. Water quality observations are considered as having exceeded a criterion regardless of whether the criterion represents a maximum acceptable value or a minimum acceptable value. The table also breaks down the water quality criteria analysis on a seasonal basis to allow the reader to discern whether parameter observations tend to exceed criteria during only certain seasons or year round. Although the EPA Water Quality Criteria Analysis for the Entire Park Study Area is a good starting point for assessing potential water quality problems at the park, the reader is strongly encouraged to read the caveat section in the Introduction before drawing conclusions about water quality problems from this table. A digital, reproducible copy of this table accompanies the report on disk (See Appendices A and B).

NPS Servicewide Inventory and Monitoring Program
Level I Water Quality Inventory Data Evaluation and Analysis (IDEA)

One of the objectives of this Baseline Water Quality Data Inventory and Analysis project is to perform an IDEA - an Inventory Data Evaluation and Analysis - to determine the presence and/or absence of Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups in the park's study area. The Strategic Plan for Conducting Baseline Natural Resource Inventories in the National Park Service (National Park Service 1993) identified the basic water quality parameters displayed in Table I as the parameters that all parks must have for "key" waterbodies (determined on the basis of size, uniqueness, threats, etc.) within park boundaries. Since these parameters can be measured in different ways and with different units, there are multiple STORET codes associated with each parameter; hence the concept of parameter groups. The Strategic Plan distinguishes between those parameter groups required for all parks and parameter groups required only on a case-by-case basis.

The IDEA basically compares the parameters listed in the Parameter Period of Record Tabulation and Station/Parameter Period of Record Tabulation with the "Level I" Servicewide Inventory and Monitoring water quality parameter groups, listed in Table I and in Appendix G, and notes, not only the presence or absence of each parameter group, but the total number of observations for each parameter present in the group; the number of

observations between certain time periods; and the total number of stations within the study area at which the parameter was measured. The total number of different (unique) stations measuring parameters for the group is in parentheses on each parameter group's summary line.

The first page of the IDEA lists the missing Servicewide Inventory and Monitoring Program "Level I" groups. If a parameter group appears on this list, no data for any of the parameters defining the group (See Appendix G) was retrieved for it within the study area. So-called non-priority parameter groups may appear in the missing list. Non-priority parameters are park-specific parameters (case-by-case) which may not be applicable to your park. Consequently, if you believe a particular parameter, not included in IDEA (See Appendix G), to be important for your park, you will have to consult the Parameter and Station/Parameter Period of Record Tabulations to determine the presence or absence of this parameter for the park. Although considered a "Level I" parameter, biological data, obtained through rapid bioassessment or other means, is not considered in this report which deals specifically with surface water chemistry. Following the Missing Level I Group list is the Present Level I Group list which displays the summary results for each Servicewide Inventory and Monitoring "Level I" water quality parameter group that was found.

Table I. Basic "Level I" Water Quality Parameters Identified as Required and Optional By the Servicewide Inventory and Monitoring Program for "Key" Park Waterbodies

Required Parameter Groups:
(1) Alkalinity
(2) pH
(3) Conductivity
(4) Dissolved Oxygen
(5) Rapid Bioassessment Baseline (EPA/State protocols, involving fish and macroinvertebrates)
(6) Temperature
(7) Flow

Case-By-Case Parameters Groups:
(8) Toxic Elements
(9) Clarity/Turbidity
(10) Nitrate/Nitrogen
(11) Phosphate/Phosphorus
(12) Chlorophyll
(13) Sulfates
(14) Bacteria

The last page of the IDEA summarizes the information from the Missing and Present Level I Group lists. This page provides information on the temporal and spatial distributions of the data. Included in this table are the total number of observations for each parameter group; the number of observations since January 1, 1985; the percent of the total observations since January 1, 1985; the number of stations measuring each parameter group; the percent of the total number of stations with data measuring the parameter group; the number of observations per station with data; the period-of-record for this parameter group; and the average number of observations per year of the period-of-record.

In interpreting the results of the IDEA, the reader should first consult the Missing Level I Group list. For the parameter groups listed, there was no baseline water quality data within the study area entered in STORET. Consequently, these parameter groups could be a higher priority for data collection. It is important, however, to realize that data within these parameter groups may have been already collected but not entered into STORET. The resources for this project did not enable us to pursue thorough literature and file cabinet reviews to dredge up

every last iota of data. If data exists for certain Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups in a park's file cabinet, it is the park's responsibility to factor that data into their IDEA. Consequently, the listing of a parameter group on the Missing "Level I" Group list is not a WRD endorsement to launch a study to collect these data. The IDEA is intended to simply note that no data exist for these parameter groups in STORET for the park. It is the park's responsibility to ascertain whether such data has already been collected by the park or other entities before embarking on a new study. In fact, in the future the WRD will require that any park study plan proposing to collect baseline water quality data show that they have consulted their Baseline Water Quality Data Inventory and Analysis report and searched in other locations (file cabinets, published literature, etc.) for the data they propose to collect. A similar interpretation springs from the Present "Level I" Group list. Insufficient data density in certain time periods for particular parameter groups is not necessarily cause for launching a new inventory and/or monitoring program. The park should still consult with other potential sources of data. Again, the IDEA is designed to provide only a quick check on data in STORET for the Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups.

Water Quality Observations Outside STORET Edit Criteria for Park

STORET data entered after November 1983 were subjected to rudimentary edit/bounds checking for 190 common parameters (See the STORET Edit Criteria in Appendix C). None of the data entered into STORET prior to that time has been subjected to edit/bounds checking. Moreover, to maintain exact comparability with USGS WATSTORE data, WATSTORE data entered into STORET has never been subjected to the EPA edit/bounds checking. During the pilot test phase of this project, obviously incorrect data was identified from both USGS and other agency data in STORET. As a consequence, all data downloaded from STORET was filtered through the STORET edit criteria to identify parameter observation values that fall outside any edit criterion ranges. This section documents the station name, parameter, date, time, parameter value, agency, and STORET station name of every observation that fell outside the range of an edit criterion. Not all data falling outside an edit criterion are necessarily incorrect. Such data may represent unique or special conditions. Consequently, every observation falling outside a STORET edit criterion was scrutinized to determine, in our best professional judgement, whether the value was in the realm of possibility or obviously incorrect. Water quality observations that appeared to be obviously incorrect are marked with an "X" in the Disposition column of this table. These values were not retrieved or included in any of the inventory tables or graphs. Water quality values outside a STORET edit criterion but within the realm of possibility were retained and included in inventory tables and graphs. The Water Quality Observations Outside STORET Edit Criteria for Park table documents all values that were outside an edit criterion range. This documentation is also necessitated by the fact that agencies can override the STORET edit criteria for individual observations. Although the edit criteria eliminate some potentially "bad" data from the report, the probability of other incorrect data, for both the 190 parameters that are edit/bound checked and all the other STORET parameters that aren't error checked, is high. Readers should consult the Caveat section in the Introduction for guidelines on the use and interpretation of STORET data. The responsibility for correcting these observations rests with the collecting agency.

WATER QUALITY RESULTS

OVERVIEW FOR CUGA

Study Area Boundary Description

The study area includes the park and all areas within at least 3 miles upstream of the park unit boundary and at least 1 mile downstream.

	Study Area	Park
GIS Estimated Acreage:	118960	20377
# STORET Stations:	97	42
# Stations With No Data:	0	0
# Stations With No Stat. Analysis:	0	0
# Longer Term Stations:	32	19
Date of STORET Retrieval:	03/04/98	03/04/98
Period of Record:	08/06/53-09/24/97	05/07/78-09/24/97
# Parameters Measured:	328	76
# Water Quality Observations:	123211	68876
# Industrial/Municipal Facilities:	20	3
# Drinking Water Intakes:	6	0
# Water Gages:	5	0
# Water Impoundments:	3	0
# Total Plots:	40	0
# Time Series:	21	0
# Annual:	1	0
# Seasonal:	18	0

Hydrologic Definition of Seasons:

1. July 1 - October 31
2. November 1 - January 31
3. February 1 - March 31
4. April 1 - June 30

Time Series Plot Criteria:

To be included in the time series plots, a station/parameter combination must have at least 8 years and at least 30 observations.

Annual Analysis Criteria:

To be included in the annual box-and-whisker plots, a station/parameter combination must have at least 9 observations in each of at least 8 years.

To be included in the annual analysis tables, a station/parameter combination must have at least 9 observations in each of at least 4 years.

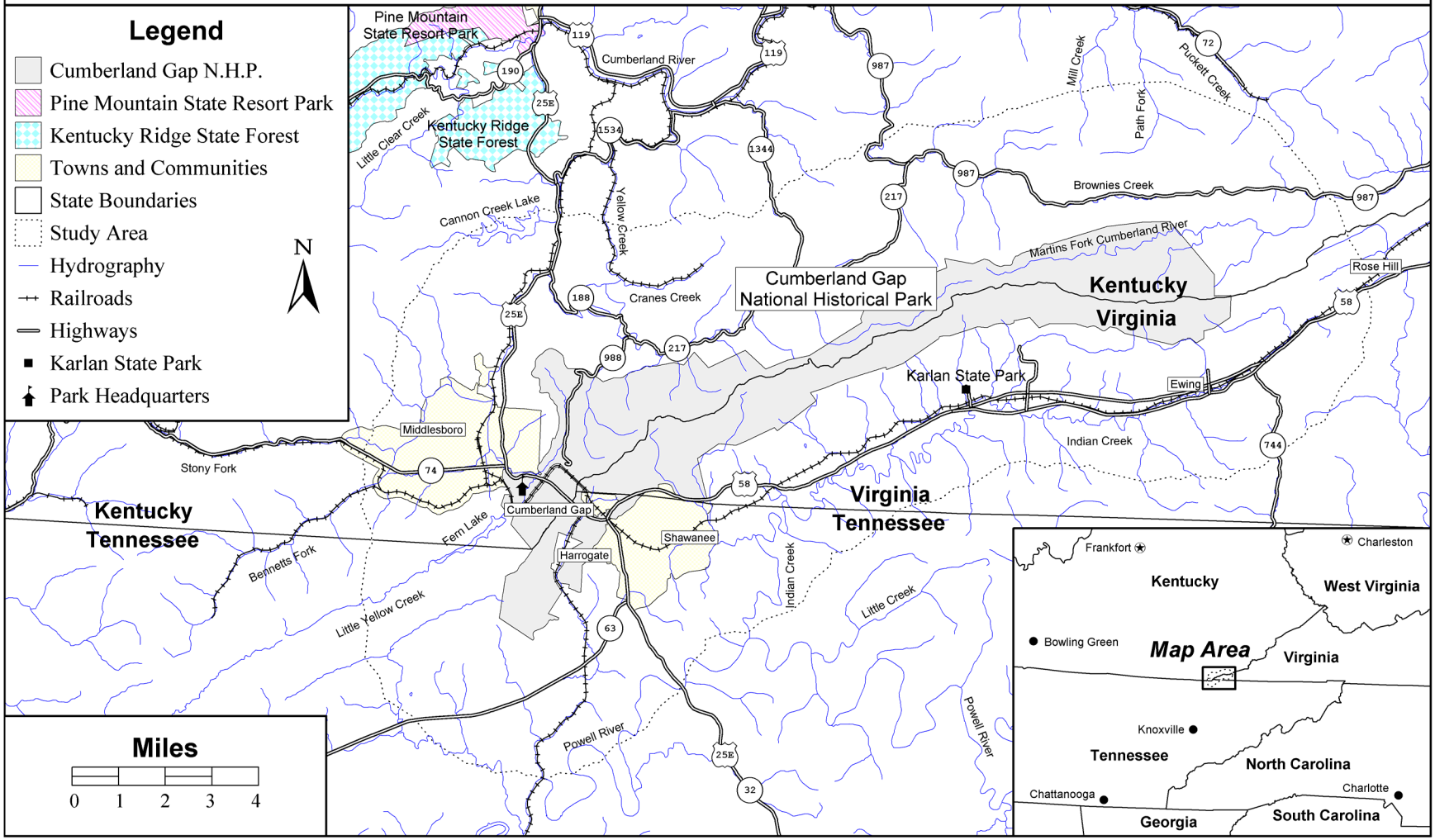
Seasonal Analysis Criteria:

To be included in the seasonal box-and-whisker plots, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 8 years and observations in at least 3 of the 8 years.

To be included in the seasonal analysis tables, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years.

Cumberland Gap National Historical Park

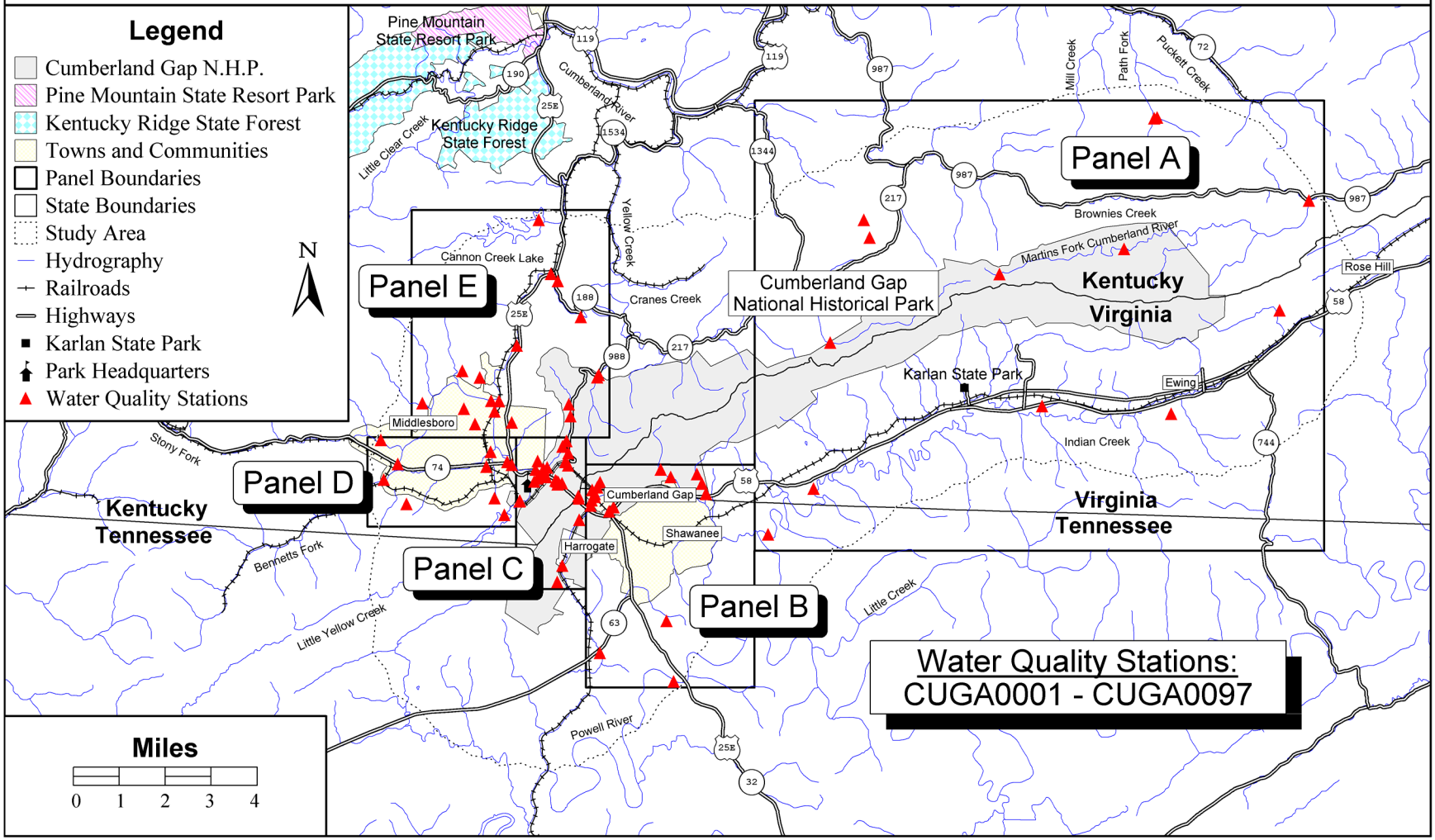
Regional Location Map



Cumberland Gap National Historical Park

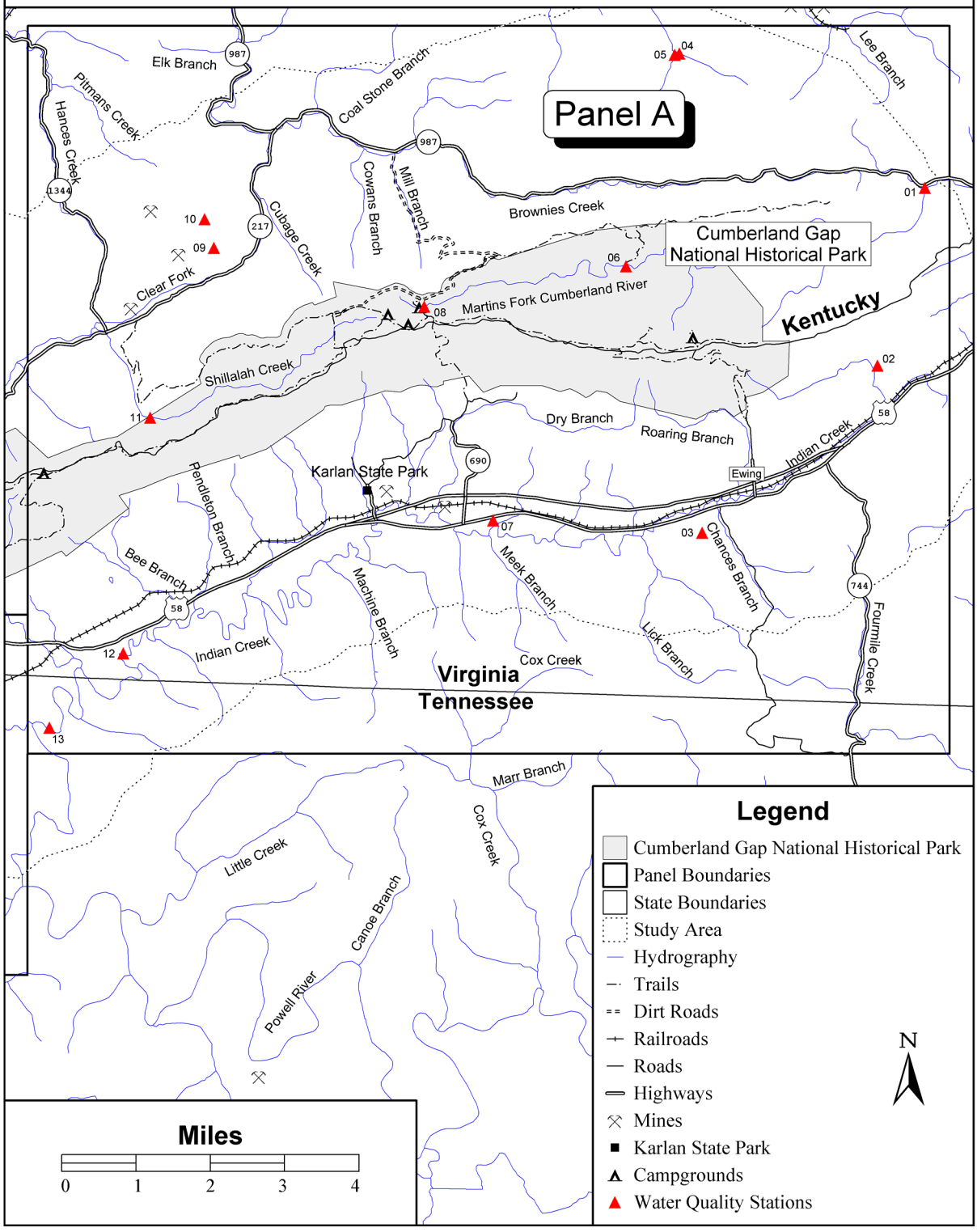
Water Quality Monitoring Locations

Graphic Panel Index



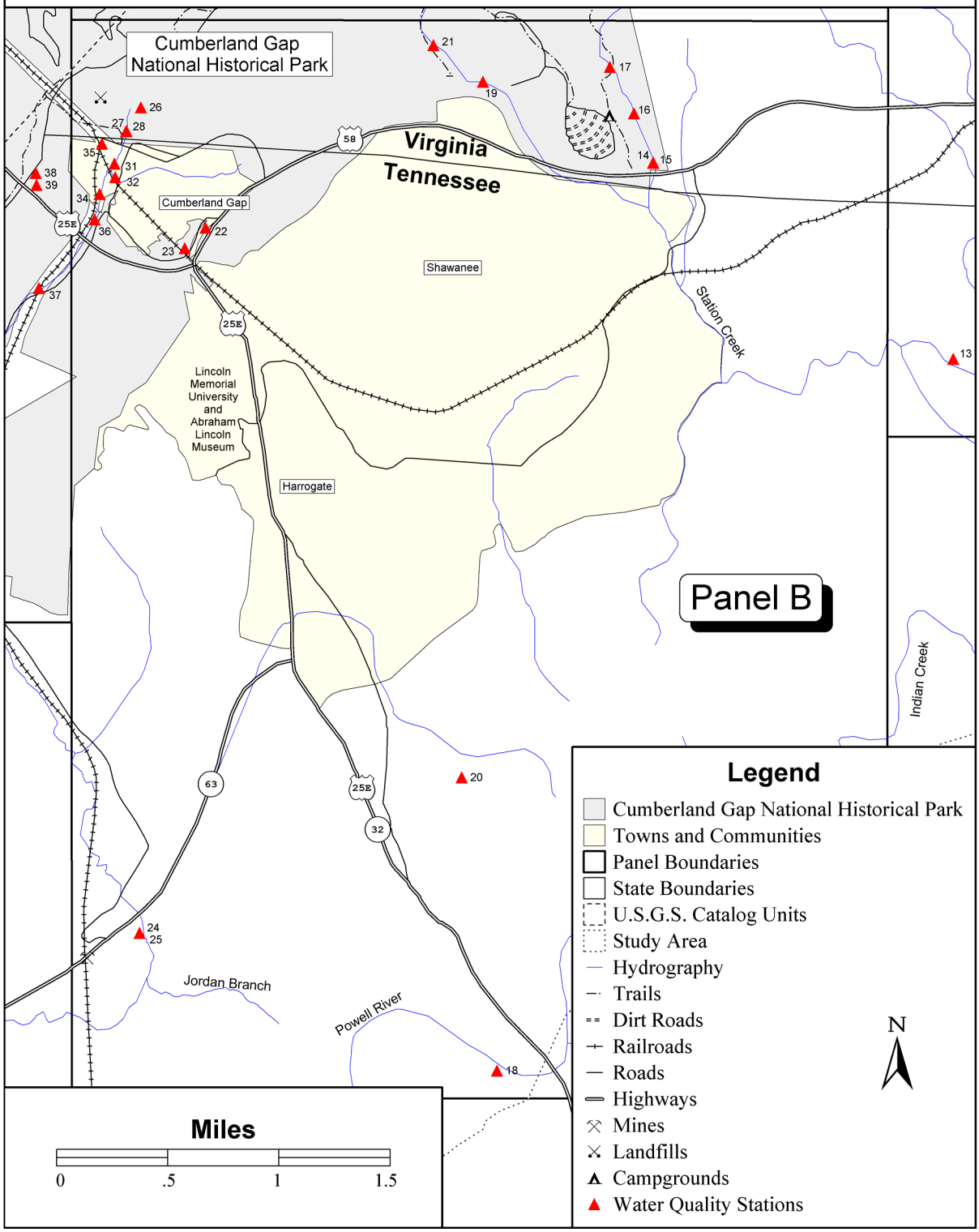
Cumberland Gap National Historical Park

Water Quality Monitoring Locations



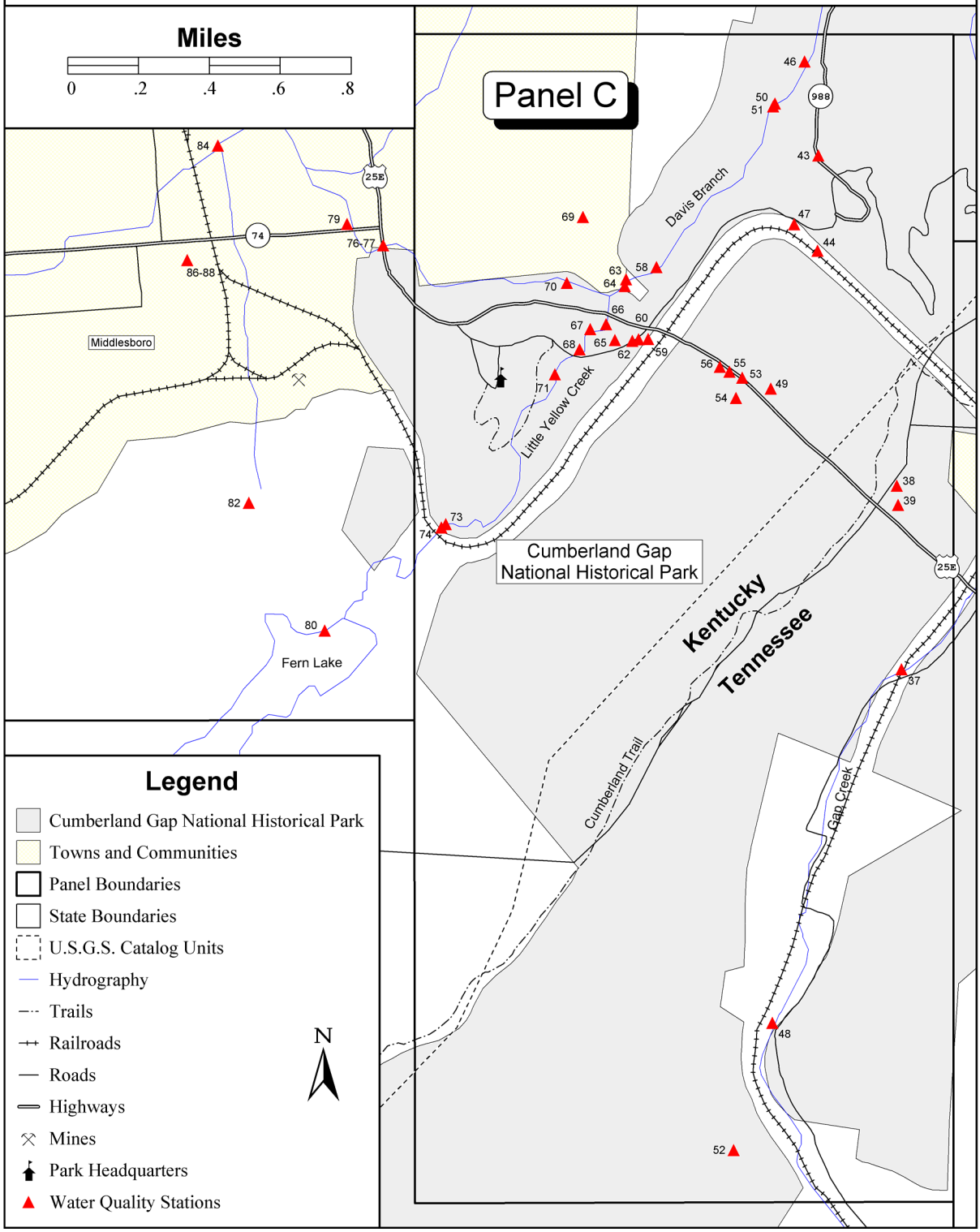
Cumberland Gap National Historical Park

Water Quality Monitoring Locations



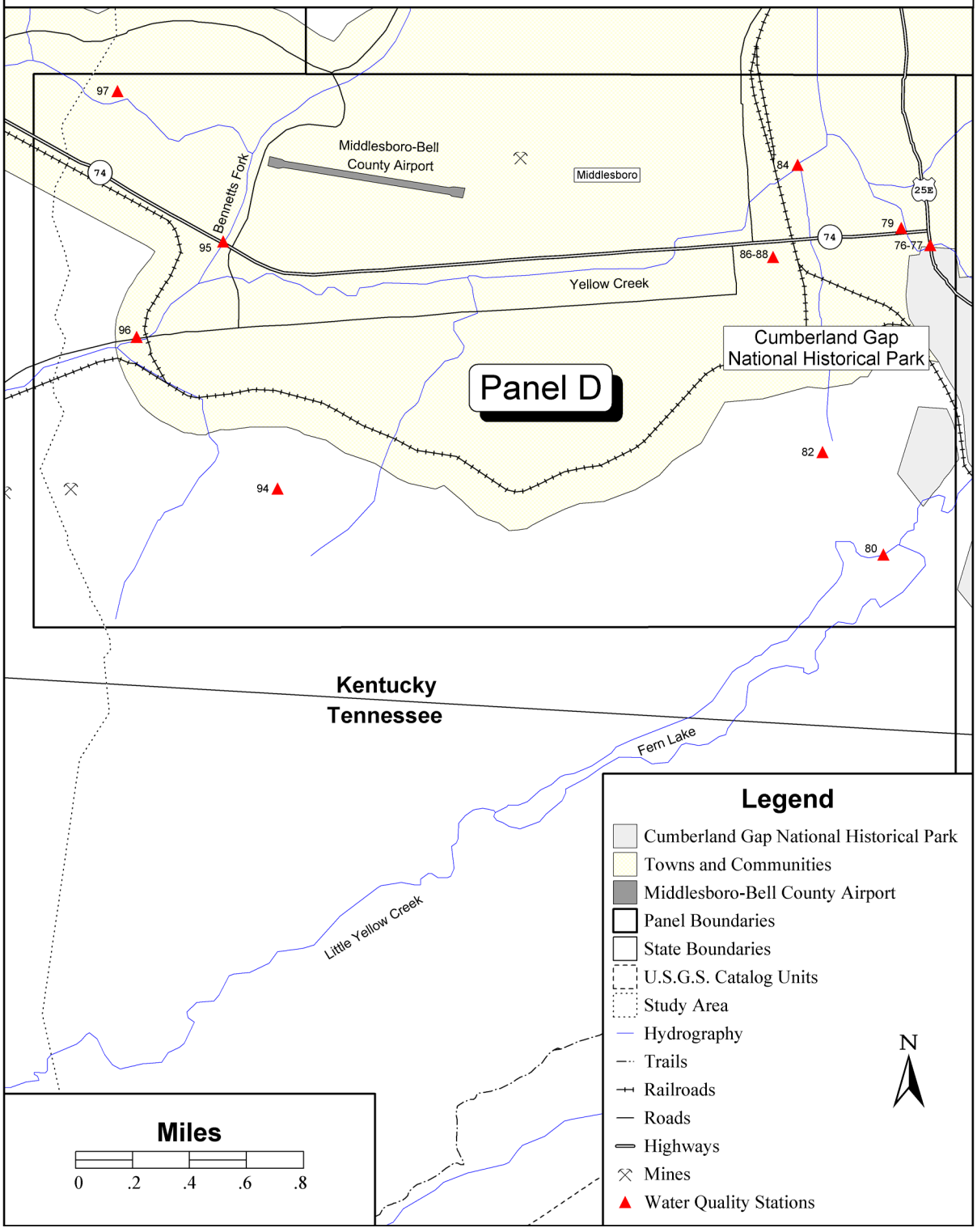
Cumberland Gap National Historical Park

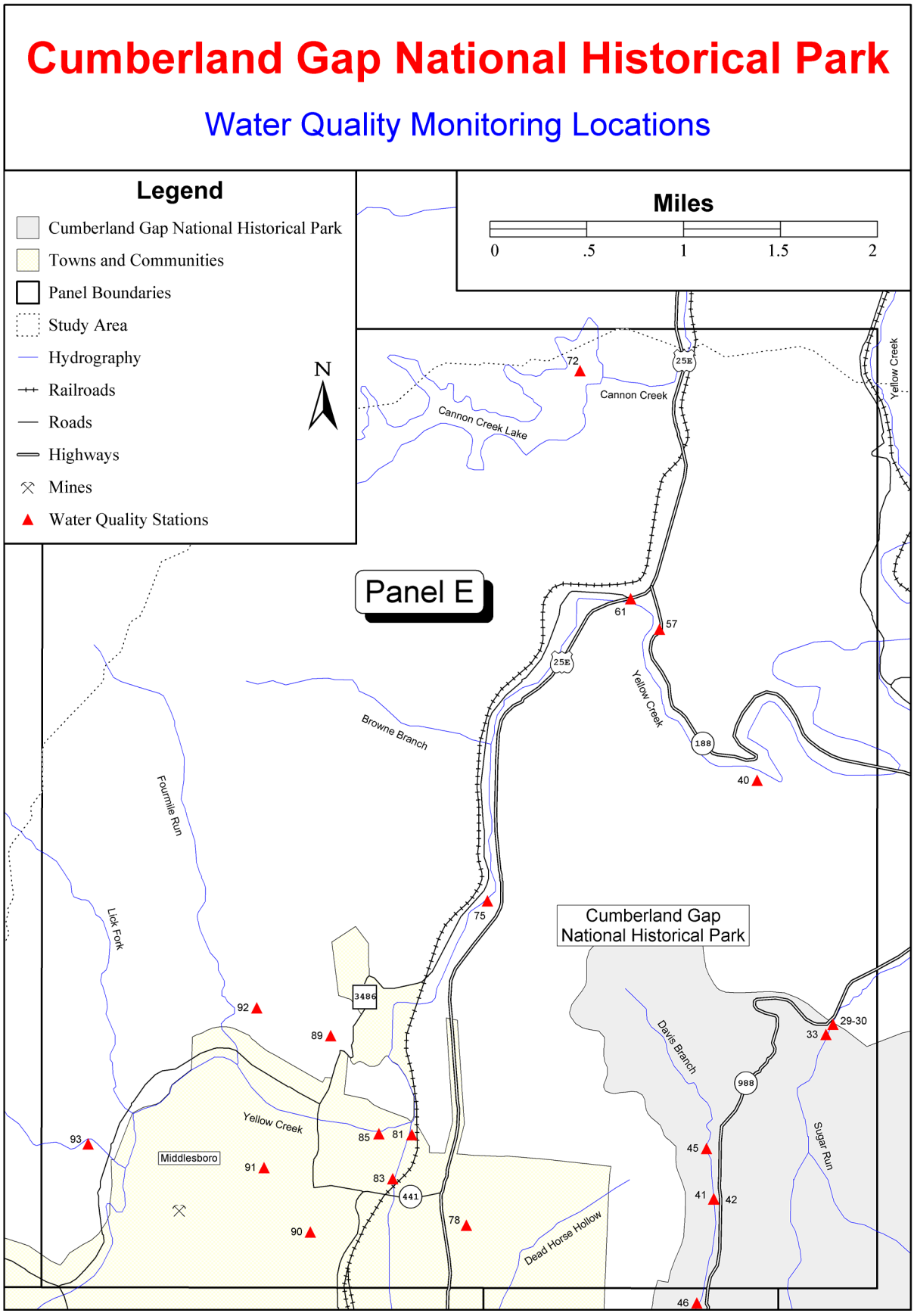
Water Quality Monitoring Locations



Cumberland Gap National Historical Park

Water Quality Monitoring Locations

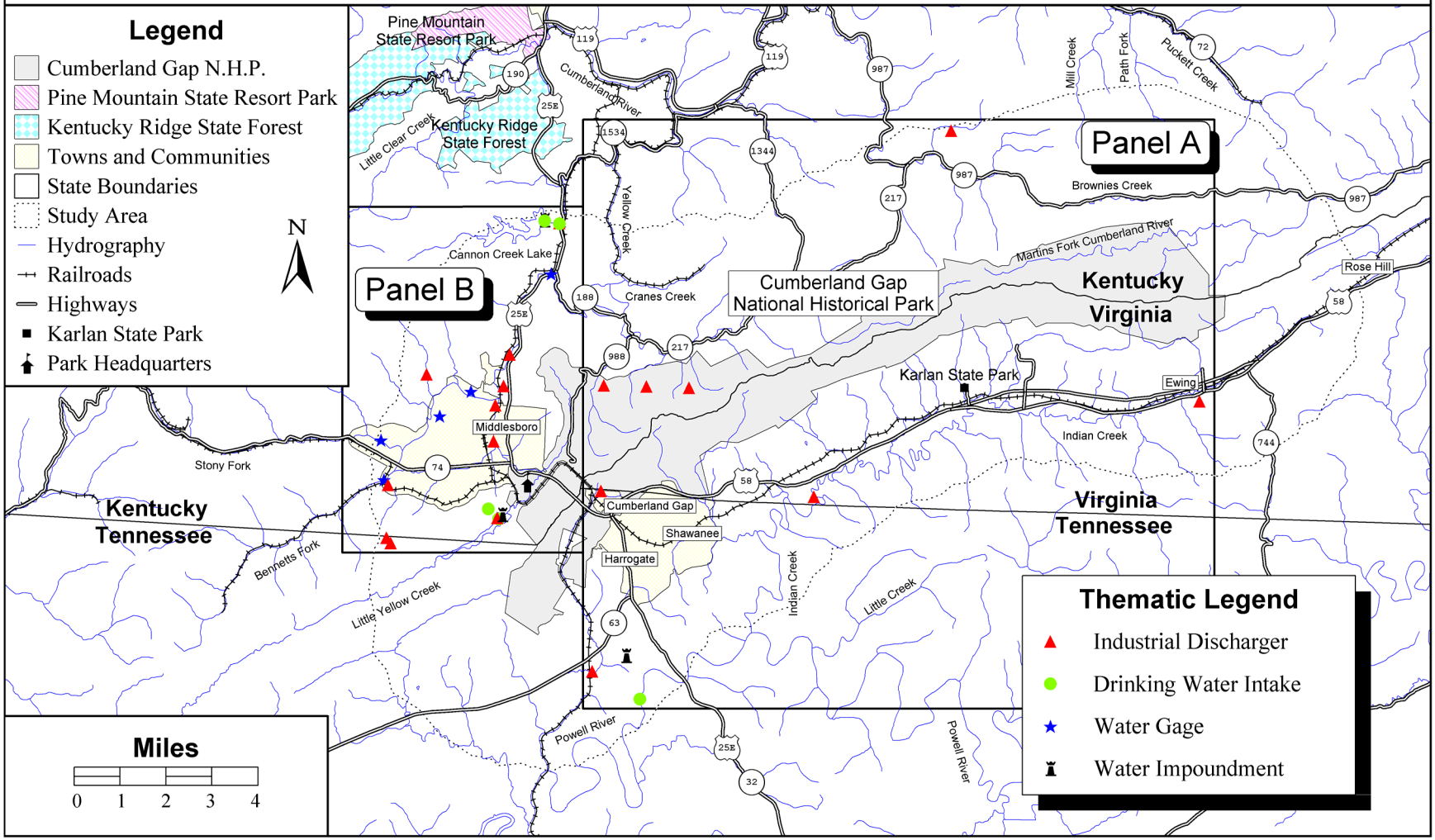



Cumberland Gap National Historical Park
Water Quality Monitoring Locations
Legend
Cumberland Gap National Historical Park
Towns and Communities
Panel Boundaries
Study Area
Hydrography
Railroads
Roads
Highways
Mines
Water Quality Stations
N
Miles
0
.5
1
1.5
2
Panel E
Cumberland Gap National Historical Park
Cannon Creek Lake
Cannon Creek
Yellow Creek
Browne Branch
Fourmile Run
Lick Fork
Yellow Creek
Davis Branch
Sugar Run
Dead Horse Hollow
Middlesboro
25E
188
3486
441
988
72
61
57
40
75
92
89
93
91
85
81
83
78
90
45
41
42
33
29-30
46

Cumberland Gap National Historical Park

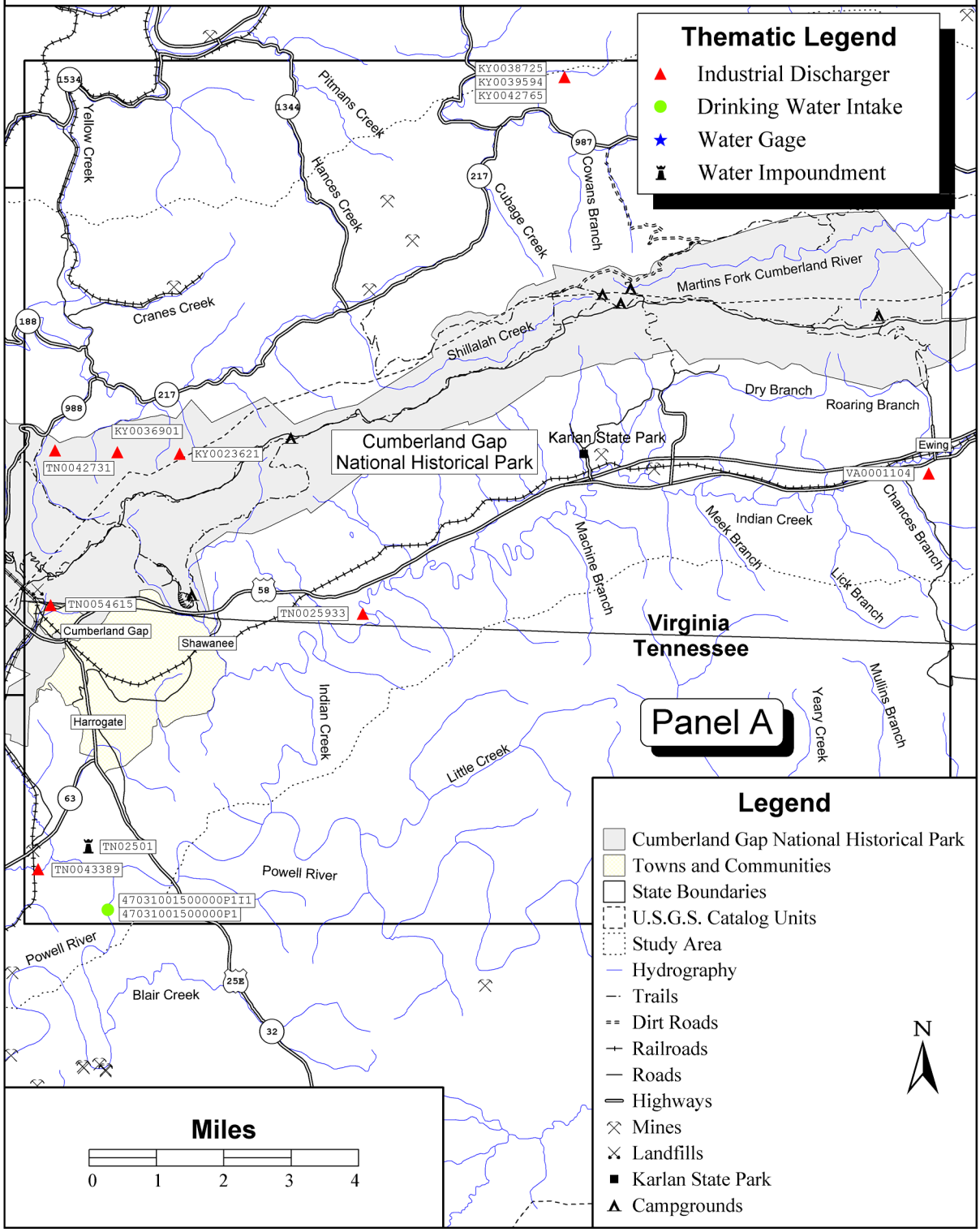
Dischargers, Drinking Intakes, Water Gages, & Water Impoundments

Graphic Panel Index



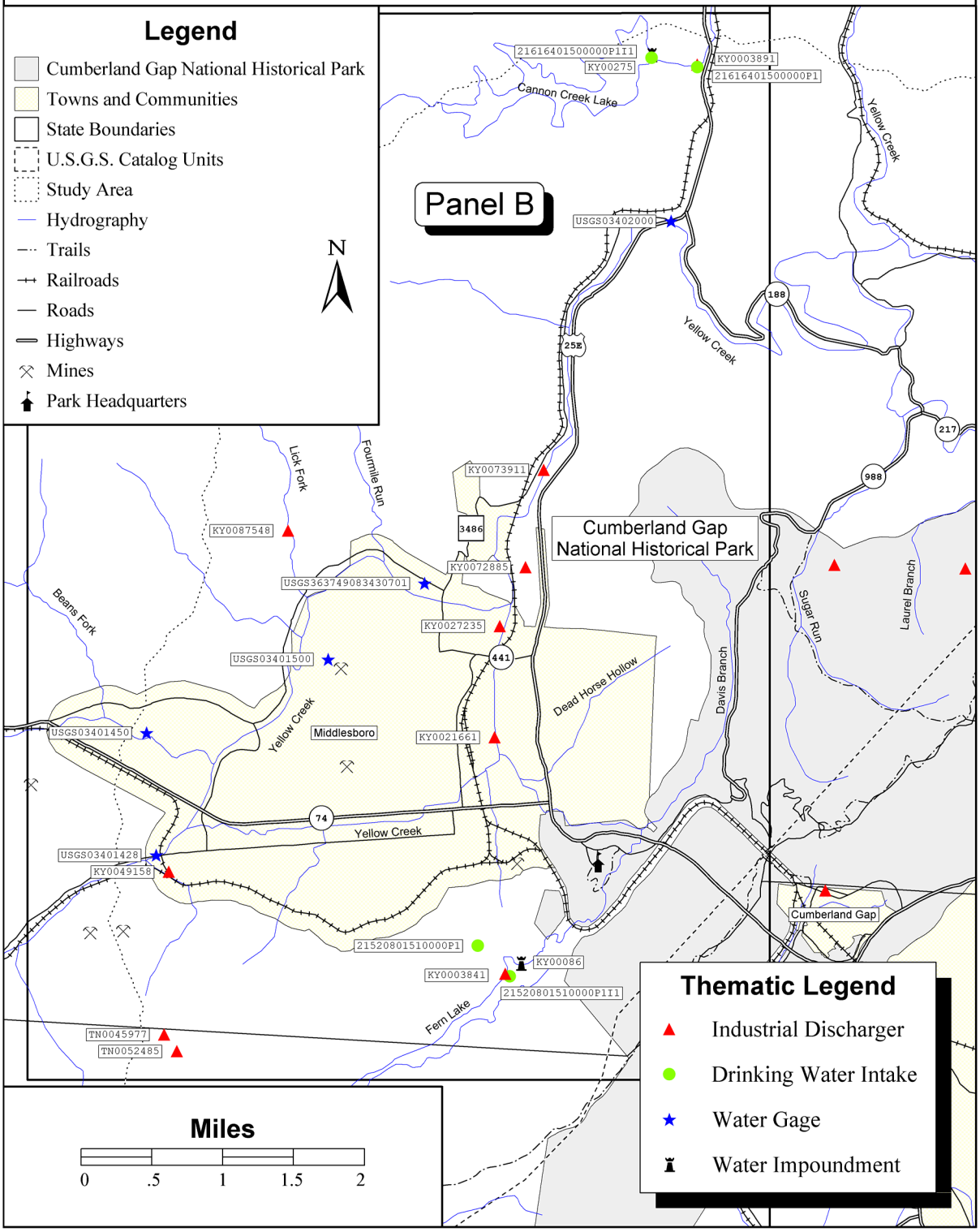
Cumberland Gap National Historical Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



Cumberland Gap National Historical Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



Industrial Facility Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Within the CUGA Study Area

Industrial Facility Discharges

Site ID	Station/Facility Name	Address	City	Facility Receiving Water Name
KY0003841	KY WATER SERVICE MIDDLESBORO	201 N MAIN ST	SOMERSET	FERN LAKE
KY0003891	PINEVILLE WTP	PO BOX 277	PINEVILLE	CUMBERLAND RIVER
KY0021661	TEXACO MIDDLESBORO	429 WILDERNESS RD	MIDDLESBORO	UNKNOWN
KY0023621	MOUNTAIN DRIVE COAL CO COLMAR	P O BOX 1427	MIDDLESBORO	YELLOW CR FROM TR
KY0027235	MIDDLESBORO SEWERAGE COMMISSIO	CITY HALL	MIDDLESBORO	YELLOW CR
KY0036901	BAILEY HILL MINING CORP	.....	.....	CLEAN F
KY0038725	BROWNIES CR COL WHIPPLE TIPPLE	.....	BALKAN	CUMBERLAND C
KY0039594	BROWNIES CR COLLIERIES	.....	BALKAN	HEN WALDER B
KY0042765	BROWNIE CREEK COLLIERIES PRP#1	BALKAN RD	.....	TOMS C
KY0049158	APPOLO FUELS TIPPLE #3	KY 186	MIDDLESBORO	YELLOW C
KY0072885	MIDDLESBORO WWTP	C/O MIDDLESBORO SEWER COM	MIDDLESBORO	YELLOW CRK
KY0073911	OLD FASHIONED DAIRY BAR	P O BOX 67	MIDDLESBORO	YELLOW CREEK
KY0087548	CASTLEFORD HGTS SUBD	C/O CLEARWATER DISPOSAL	MIDDLESBORO	LICK FORK / YELLOW CRK
TN0025933	S A M COAL CORP MATCH	P.O. BOX 1908	MIDDLESBORO	YELLOW CR
TN0042731	APPOLO FUELS AREA #3	.....	.....	RECVG STRM YELLOW C
TN0043389	MAGNUM MINING GAP CREEK	.....	ARTHUR	POWELL R
TN0045977	WHITE OAK COAL CORPORATION	P.O. BOX 1908	MIDDLESBORO	BENNETTS FORK
TN0052485	WHITE OAK COAL SM1	PO BOX 1908	PRUDEN	LANGLEY BR
TN0054615	CUMBERLAND GAP STP	.....	CUMBERLAND GAP	TR TO POWELL R
VA0001104	KENTUCKY VA STONE CO INC EWING	.....	EWING	UNNAMED TRIB

Drinking Water Intakes

Site ID	Station/Facility Name	City	Population Served	Avg. Daily Production (Gal./Day)
21520801510000P1	TREATMENT PLANT	MIDDLESBORO	10500	0000.00
21520801510000P1I1	FERN LAKE	MIDDLESBORO	10500	0000.00
21616401500000P1	TREATMENT PLANT	PINEVILLE	6900	0000.00
21616401500000P1I1	IMPOUNDMENT	PINEVILLE	6900	0000.00
47031001500000P1	TREATMENT PLANT	HARROGATE	2350	0000.00
47031001500000P1I1	POWELL RIVER	HARROGATE	2350	0000.00

Water Gages

Site ID	Station Name	Site Type	Drainage Area (Square Miles)	Begin Year	End Year
USGS03401500	YELLOW CREEK BYPASS	Stream	3530.00		
USGS03402000	YELLOW CR NR MIDDLESBORO,KY.	Stream	6060.00	1941	1993
USGS03401428	BENNETTS FORK AT MIDDLESBORO, KY	Stream	13.00	1986	1989
USGS03401450	STONY FORK NR. MOUTH AT MIDDLESBORO	Stream		1987	1989
USGS363749083430701	GEORGE CRUTCHFIELD	Well			

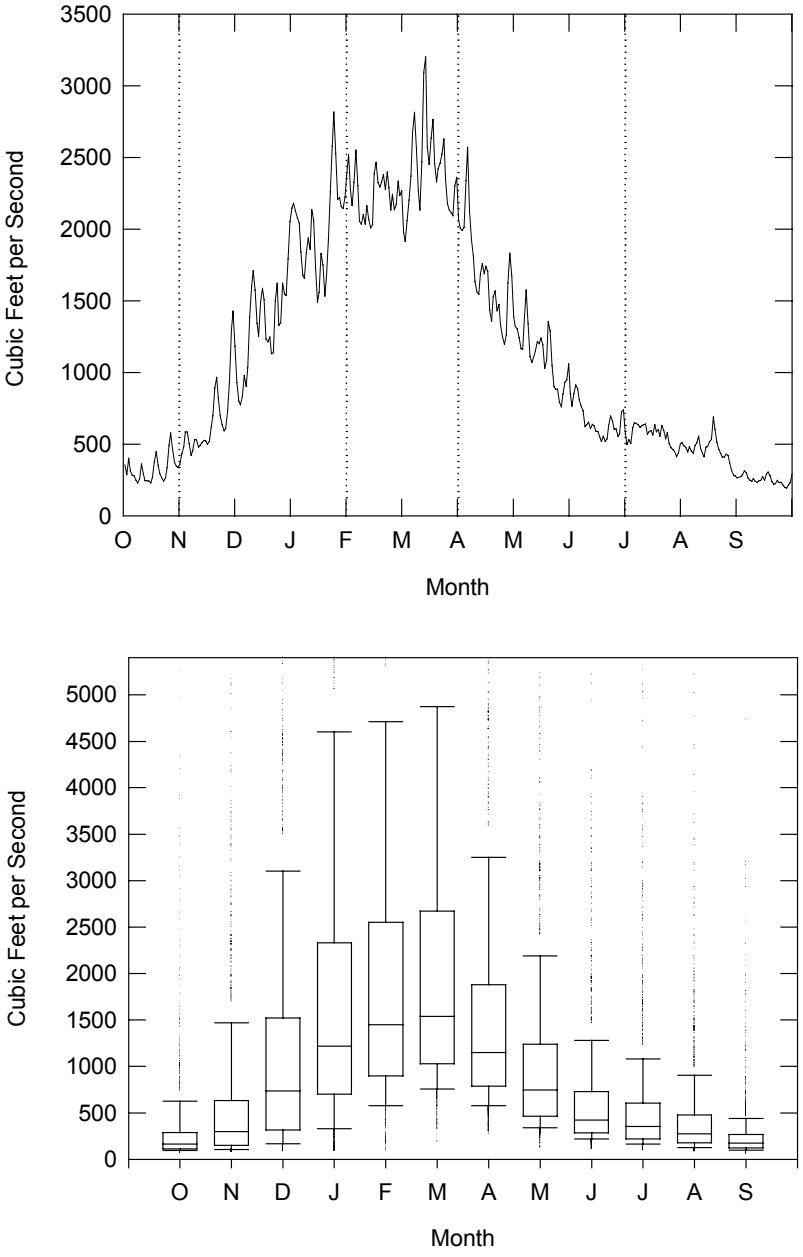
Industrial Facility Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Within the CUGA Study Area

Water Impoundments

Site ID	Impoundment Name	Owner	Primary Purpose	Type of Dam	Downstream Hazard	Year Completed
KY00086	FERN LAKE DAM	ARTHUR ABSHIRE	Supply	Earth	High	1890
KY00275	CANNON CREEK DAM	COMMONWEALTH OF KENTUCKY	Supply	Earth	High	1972
TN02501	ARTHUR DAM	JAMES SIGMOND	Other	Earth	High	1977

REPRESENTATIVE MEAN ANNUAL HYDROGRAPH FOR SEASONAL ANALYSIS

CUMBERLAND GAP NATIONAL HISTORICAL PARK
Powell River near Arthur, TN
03532000, 63 year record



Representative mean annual hydrograph (top) and distribution of daily flows by month (bottom) for hydrologic season determination. Box and whiskers represent a five number summary; bottom whisker cap is 10th percentile, bottom of box is 25th percentile, internal line is median, top of box is 75th percentile, and top whisker is 90th percentile. Hydrologic seasons for Cumberland Gap National Historical Park are: Jul. 1 to Oct. 31, Nov. 1 to Jan. 31, Feb. 1 to Mar. 31, and Apr. 1 to Jun. 30.

CONTACTS FOR AGENCY CODES RETRIEVED FOR CUGA

AGENCY	PRIMARY CONTACT NAME	ORGANIZATION	PHONE NUMBER(S)	
131TVAC	WINTERS, KATHY	TENN VALLEY AUTHORITY	(615)751-3752	
112WRD	BRIGGS, JOHN	US GEOLOGICAL SURVEY	(703)648-5624	
11NPSWRD	TUCKER, DEAN	NATIONAL PARK SERVICE	(970)225-3516	(970)225-3518
21TNECO	BROACH, JOY	TN DEPT OF ENVIRONMENTAL	(615)532-0701	
21VASWCB	POLLOCK, VERA	VA DEPT OF ENVIRONMENTAL	(804)698-4566	
1114PEST	HENRY,BRUCE	USEPA REGION 4	(404)562-9246	
21KY	BECK, GARY	KY DEPT NAT RES & ENV PRO	(502)564-3410	
22KYOSM2	TRIMBLE, BOB	KY DPT NAT RES & ENV PROT	(502)564-2356	

QUANTITY OF DATA RETRIEVED FOR CUGA BY AGENCY CODE

WITHIN THE ENTIRE STUDY AREA (S.A.) AND JUST WITHIN THE PARK

Agency	Organization	Period of Record		Water Quality Stations		Longer Term[1] Stations		No Data Stations		Water Quality Observations		Water Quality Parameters	
		Study Area	/ Park Only	S.A.	/ Park	S.A.	/ Park	S.A.	/ Park	S.A.	/ Park	S.A.	/ Park
131TVAC	TENN VALLEY AUTHORITY	06/22/67-06/05/89	No Data in Park	2	0	1	0	0	0	892	0	48	0
112WRD	US GEOLOGICAL SURVEY	08/06/53-08/18/94	No Data in Park	21	0	3	0	0	0	4509	0	128	0
11NPSWRD	NATIONAL PARK SERVICE	05/07/78-09/24/97	05/07/78-09/24/97	60	42	27	19	0	0	115223	68876	77	76
21TNECO	TN DEPT OF ENVIRONMENTAL	08/11/97-08/11/97	No Data in Park	1	0	0	0	0	0	51	0	24	0
21VASWCB	VA DEPT OF ENVIRONMENTAL	03/30/70-07/29/76	No Data in Park	1	0	1	0	0	0	1114	0	35	0
1114PEST	USEPA REGION 4	04/29/81-11/18/82	No Data in Park	3	0	0	0	1	0	187	0	92	0
21KY	KY DEPT NAT RES & ENV PRO	05/05/82-10/10/90	No Data in Park	7	0	0	0	0	0	1130	0	119	0
22KYOSM2	KY DPT NAT RES & ENV PROT	09/04/80-02/26/81	No Data in Park	2	0	0	0	0	0	105	0	20	0
Totals		08/06/53-09/24/97	05/07/78-09/24/97	97	42	32	19	1	0	123211	68876	328	76

[1]Station With At Least 6 Parameters Having An Average of 1 Or More Observations Per Year During a Period of Record Extending At Least 2 Years.

Station Period of Record Tabulation
From 08/06/53 To 09/24/97

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75
CUGA0001	MARTINS F NR ALVA	No	32	0	0	32
CUGA0002	VALE537R	No	13	0	13	0
CUGA0003	VALE535R	No	13	0	13	0
CUGA0004	LICK BRANCH, UPSTREAM OF CULVERT NEAR PATH FORK	No	51	0	51	0
CUGA0005	PATH FORK CREEK, JUST UPSTREAM OF LICK BRANCH	No	54	0	54	0
CUGA0006[1]	MARTINS FORK: DOWNSTREAM LIMIT OF STUDY AREA	Yes	369	369	0	0
CUGA0007	VALE534R	No	14	0	14	0
CUGA0008[1]	MARTINS FORK: ADJACENT TO PICNIC AREA	Yes	446	446	0	0
CUGA0009	ARROW SPRING	No	27	0	27	0
CUGA0010	SHARPS BRANCH ABOVE MOUTH OF ARROW SPRING	No	27	0	27	0
CUGA0011[1]	SHILLALAH CREEK: AT PARK BOUNDARY	Yes	396	396	0	0
CUGA0012[1]	S. OF RT. 58 AT NASH MILL	No	1114	0	333	781
CUGA0013	INDIAN CREEK NEAR GREERS CHAPEL ROAD BUGS ONLY	No	51	51	0	0
CUGA0014	STATION CREEK AT US 58	Yes	216	216	0	0
CUGA0015[1]	STATION CREEK: AT INTERSECTION WITH US 58	Yes	1191	1191	0	0
CUGA0016	STATION CREEK - 0.25 MILES NORTH OF US 58	Yes	216	216	0	0
CUGA0017[1]	STATION CREEK: NORTH OF US 58	Yes	414	414	0	0
CUGA0018	SOUTH WEST OF RIVER VIEW	No	12	12	0	0
CUGA0019	LEWIS HOLLOW DRAINAGE AT HIGHWAY 58	Yes	154	154	0	0
CUGA0020	TNCL563R	No	12	0	12	0
CUGA0021[1]	LEWIS HOLLOW: UPSTREAM FROM US 58	Yes	1001	1001	0	0
CUGA0022[1]	DRAINAGE DITCH: SOUTH OF 25E AND US 58	No	1975	1975	0	0
CUGA0023	DRAINAGE DITCH; CUMBERLAND DRIVE	Yes	34	34	0	0
CUGA0024[1]		No	880	0	581	299
CUGA0025	GAP CREEK NEAR ARTHUR, TN	No	490	0	490	0
CUGA0026[1]	CUDJO CAVE	Yes	161	161	0	0
CUGA0027	IRON FURNACE	Yes	49	49	0	0
CUGA0028	GAP CREEK AT IRON FURNACE	Yes	216	216	0	0
CUGA0029	SUGAR RUN NEAR HIGHWAY 988	Yes	216	216	0	0
CUGA0030	SUGAR RUN: AT HWY 988 AND PICNIC AREA	Yes	2128	2128	0	0
CUGA0031[1]	GAP CREEK: WITHIN TOWN OF CUMBERLAND GAP	No	7714	7714	0	0
CUGA0032[1]	GAP CREEK: TRIBUTARY (US 58)	No	5176	5176	0	0
CUGA0033[1]	DARK RIDGE CREEK: NEAR SUGAR RUN	Yes	2319	2319	0	0
CUGA0034	GAP CREEK - 0.25 MILES SOUTH OF IRON FURNACE	No	216	216	0	0
CUGA0035[1]	GAP CREEK TRIBUTARY WITHIN TOWN OF CUGA	No	7872	7872	0	0
CUGA0036[1]	GAP CREEK: SOUTH OF TRIBUTARY	No	2840	2840	0	0
CUGA0037[1]	GAP CREEK:0.3 MILES UPSTREAM FROM PARK BOUNDARY	No	7974	7974	0	0
CUGA0038	TUNNEL - TENNESSEE SIDE	Yes	44	44	0	0
CUGA0039	CAVERN AT CONSTRUCTION SITE	Yes	1427	1427	0	0
CUGA0040	YELLOW CREEK OFF KY 188	No	97	0	97	0
CUGA0041	DAVIS BRANCH; 0.5 MILE NORTH OF UNNAMED STREAM	Yes	1873	1873	0	0
CUGA0042	DAVIS BRANCH	Yes	216	216	0	0
CUGA0043[1]	DRAINAGE DITCH: HWY 988 AND US 25E	Yes	1824	1824	0	0
CUGA0044	MIDDLESBORO TANNERY CO.	No	37	0	0	37
CUGA0045[1]	DAVIS BRANCH: UPPER REACHES	Yes	4276	4276	0	0
CUGA0046	DAVIS BRANCH: NORTH OF UNNAMED STREAM	Yes	1922	1922	0	0
CUGA0047[1]	DRAINAGE DITCH: RAILROAD TUNNEL	No	7579	7579	0	0
CUGA0048	GAP CREEK - 0.25 MILES SOUTH OF TIPRELL	No	216	216	0	0
CUGA0049	TUNNEL CREEK: 0.75 MILES E. OF LITTLE YELLOW CR.	Yes	142	142	0	0
CUGA0050	DAVIS BRANCH AT CONFLUENCE WITH UNNAMED STREAM	Yes	225	225	0	0
CUGA0051	DAVIS BRANCH:AT CONFLUENCE OF UNNAMED STREAM	Yes	2013	2013	0	0
CUGA0052	TNCL501R	Yes	12	0	12	0
CUGA0053	TUNNEL CREEK - NORTH TUNNEL DRAINAGE	Yes	1266	1266	0	0
CUGA0054	TUNNEL CREEK - BELOW DAM 2	Yes	592	592	0	0
CUGA0055[1]	TUNNEL - KENTUCKY SIDE	Yes	1255	1255	0	0
CUGA0056[1]	TUNNEL CREEK - MIDSTREAM	Yes	2434	2434	0	0
CUGA0057	AMERICAN ASSOC.	No	14	0	0	14
CUGA0058[1]	DAVIS BRANCH: UPSTREAM OF LITTLE YELLOW CREEK	Yes	8012	8012	0	0
CUGA0059	TUNNEL CREEK: SOUTHBOUND TUNNEL DRAINAGE	No	44	44	0	0
CUGA0060	SEDIMENT BASIN AT TUNNEL CREEK	Yes	95	95	0	0
CUGA0061[1]	YELLOW CR NR MIDDLESBORO,KY.	No	2225	533	508	1184
CUGA0062	SEDIMENT BASIN - WEST SIDE AT TUNNEL CREEK	Yes	139	139	0	0
CUGA0063	DAVIS BRANCH NORTH OF LITTLE YELLOW CREEK	No	216	216	0	0
CUGA0064	DAVIS B AT MIDDLESBORO	No	25	0	0	25
CUGA0065[1]	TUNNEL CREEK:NEAR LITTLE YELLOW CREEK CONFLUENCE	Yes	8732	8732	0	0
CUGA0066[1]	LITTLE YELLOW CREEK: DOWNSTREAM OF TUNNEL CREEK	Yes	7902	7902	0	0
CUGA0067[1]	LITTLE YELLOW CREEK: UPSTREAM OF TUNNEL CREEK	Yes	7830	7830	0	0
CUGA0068	LITTLE YELLOW CREEK - SOUTH OF TUNNEL CREEK	Yes	207	207	0	0
CUGA0069	LITTLE YELLOW CREEK ABOVE US 25E BRIDGE	No	96	96	0	0
CUGA0070[1]	LITTLE YELLOW CREEK: 0.4 MILES FROM STATION YCA	Yes	2736	2736	0	0
CUGA0071[1]	DRAINAGE DITCH - STORAGE AREA	Yes	1139	1139	0	0

Station Period of Record Tabulation
From 08/06/53 To 09/24/97

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75
CUGA0072	CANNON CREEK LAKE NEAR FERNDALE	No	729	417	312	0
CUGA0073[1]	LITTLE YELLOW CREEK - UPSTREAM	Yes	2821	2821	0	0
CUGA0074	LITTLE YELLOW CREEK AT PARK BOUNDARY	Yes	216	216	0	0
CUGA0075	YELLOW CREEK BETWEEN US 25E AND L AND N RAILROAD	No	96	96	0	0
CUGA0076	LITTLE YELLOW CREEK AT US 25 EAST	No	207	207	0	0
CUGA0077[1]	LITTLE YELLOW CREEK: AT PARK BOUNDARY	No	4252	4252	0	0
CUGA0078	STELLA GOINS	No	14	0	0	14
CUGA0079	L YELLOW C AT MIDDLESBORO	No	80	0	0	80
CUGA0080	L YELLOW C NR MIDDLESBORO	No	40	0	0	40
CUGA0081	YELLOW C AT MIDDLESBORO	No	33	0	0	33
CUGA0082	KYBE548R	No	14	0	14	0
CUGA0083	YELLOW CR AT MIDDLESBORO UPSTREAM FR. SEWAGE	No	12	0	0	12
CUGA0084	YELLOW C AT MIDDLESBORO	No	22	0	0	22
CUGA0085	YELLOW C. BYPASS AT MOUTH AT MIDDLESBORO	No	53	0	0	53
CUGA0086	MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR	No	90	0	90	0
CUGA0087	MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR	No	97	0	97	0
CUGA0088	MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR	No	0	0	0	0
CUGA0089	LEE HATTFIELD	No	14	0	0	14
CUGA0090	YELLOW CREEK AT KY 441 BRIDGE	No	58	0	58	0
CUGA0091	GRACE RAINES	No	14	0	0	14
CUGA0092	J.W. OWEN	No	23	0	0	23
CUGA0093	JACK RAINES	No	14	0	0	14
CUGA0094	HUBERT BARNWELL	No	14	0	0	14
CUGA0095	BENNETTS FORK ABV STONY FORK NR. MIDDLESBORO	No	57	0	0	57
CUGA0096[1]	BENNETTS FORK AT MIDDLESBORO, KY	No	513	513	0	0
CUGA0097[1]	STONY FORK NR. MOUTH AT MIDDLESBORO	No	783	743	0	40

[1]Longer Term Station With At Least 6 Parameters Having An Average of 1 Or More Observations Per Year During a Period of Record Extending At Least 2 Years.

Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Parameter Code	Name	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	118	2	50	66	4	0
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	109	2	99	8	6	0
00004	STREAM WIDTH (FEET)	1	0	1	0	1	0
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	74	0	16	58	1	0
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	2515	2507	8	0	47	33
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3056	2729	185	142	70	32
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	4	0	4	0	2	0
00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	257	216	41	0	4	0
00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	264	216	48	0	4	0
00041	WEATHER (WMO CODE 4501)	68	0	16	52	1	0
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	4	0	4	0	2	0
00060	FLOW, STREAM, MEAN DAILY CFS	84	0	0	84	8	0
00061	FLOW, STREAM, INSTANTANEOUS CFS	2523	2404	102	17	45	29
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION	2	0	2	0	1	0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	39	1	27	11	4	0
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	40	0	0	40	11	0
00078	TRANSPARENCY, SECCHI DISC (METERS)	6	3	3	0	1	0
00080	COLOR (PLATINUM-COBALT UNITS)	2589	2500	32	57	59	33
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	16	0	16	0	1	0
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	4	0	0	4	3	0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	2633	2577	56	0	45	31
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	374	143	104	127	34	1
00098	SAMPLING STATION LOCATION VERTICAL (METERS)	77	77	0	0	1	0
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	2504	2504	0	0	42	33
00204	DEPTH IN METERS AT WHICH 1% SURFACE LIGHT REMAINS	6	3	3	0	1	0
00205	DEPTH, MAXIMUM, OF LAKE OR RESERVOIR (METERS)	6	3	3	0	1	0
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	2484	2484	0	0	40	31
00300	OXYGEN, DISSOLVED MG/L	254	80	102	72	15	0
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	14	0	0	14	7	0
00304	BOD, 2 DAY, 20 DEG C MG/L	7	0	0	7	1	0
00310	BOD, 5 DAY, 20 DEG C MG/L	47	2	34	11	7	0
00335	COD, .025N K2CR2O7 MG/L	41	2	31	8	6	0
00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	3	2	1	0	3	0
00400	PH (STANDARD UNITS)	354	80	122	152	34	1
00403	PH, LAB, STANDARD UNITS SU	1999	1994	3	2	48	33
00405	CARBON DIOXIDE (MG/L AS CO2)	14	0	3	11	4	0
00406	PH, FIELD, STANDARD UNITS SU	2487	2487	0	0	40	31
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	116	6	54	56	30	1
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	24	0	16	8	1	0
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	2503	2503	0	0	42	33
00435	ACIDITY, TOTAL (MG/L AS CACO3)	2509	2503	6	0	44	33
00440	BICARBONATE ION (MG/L AS HCO3)	2076	1984	0	92	59	31
00445	CARBONATE ION (MG/L AS CO3)	78	2	0	76	17	2
00500	RESIDUE, TOTAL (MG/L)	44	0	16	28	2	0
00505	RESIDUE, TOTAL VOLATILE (MG/L)	35	0	16	19	1	0
00510	RESIDUE, TOTAL FIXED (MG/L)	35	0	16	19	1	0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	9	1	0	8	2	0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	2578	2505	53	20	52	33
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	35	0	16	19	1	0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	35	0	16	19	1	0
00545	RESIDUE, SETTLEABLE (ML/L)	30	0	0	30	1	0
00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	3	2	1	0	3	0
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	1409	1409	0	0	37	28
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	37	0	29	8	2	0
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	90	8	51	31	11	0
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	3	2	1	0	3	0
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	2548	2502	15	31	44	33
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	2510	2503	0	7	43	33
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	46	0	15	31	2	0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	48	5	20	23	6	0
00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	3	2	1	0	3	0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	43	8	35	0	9	0
00635	NITROGEN, AMMONIA&ORG., TOTAL 1 DET (MG/L AS N)	3	3	0	0	1	0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	2	0	0	2	2	0
00665	PHOSPHORUS, TOTAL (MG/L AS P)	52	8	35	9	9	0
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	2540	2506	27	7	45	33
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10	5	5	0	5	0
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	419	419	0	0	39	29
00690	CARBON, TOTAL (MG/L AS C)	2	2	0	0	1	0
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	17	13	4	0	12	5
00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	3	2	1	0	3	0

Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Parameter Code	Name	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	4	2	2	0	4	0
00746	SULFIDE, DISSOLVED (MG/L AS S)	4	2	2	0	4	0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	2613	2506	15	92	67	33
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	93	0	1	92	19	0
00915	CALCIUM, DISSOLVED (MG/L AS CA)	2532	2504	1	27	48	33
00916	CALCIUM, TOTAL (MG/L AS CA)	41	2	32	7	8	0
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	2536	2503	6	27	53	33
00927	MAGNESIUM, TOTAL (MG/L AS MG)	42	2	33	7	8	0
00929	SODIUM, TOTAL (MG/L AS NA)	43	2	33	8	8	0
00930	SODIUM, DISSOLVED (MG/L AS NA)	2519	2502	7	10	52	34
00931	SODIUM ADSORPTION RATIO	7	0	1	6	2	0
00932	SODIUM, PERCENT	10	0	1	9	3	0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	2513	2502	1	10	46	33
00937	POTASSIUM, TOTAL MG/L AS K)	41	2	31	8	6	0
00940	CHLORIDE,TOTAL IN WATER MG/L	142	2	38	102	27	0
00941	CHLORIDE, DISSOLVED IN WATER MG/L	2503	2503	0	0	42	33
00945	SULFATE, TOTAL (MG/L AS SO4)	144	2	42	100	27	0
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2505	2503	2	0	44	33
00950	FLUORIDE, DISSOLVED (MG/L AS F)	2534	2488	3	43	58	33
00951	FLUORIDE, TOTAL (MG/L AS F)	29	0	29	0	2	0
00955	SILICA, DISSOLVED (MG/L AS SI02)	70	0	30	40	8	0
00956	SILICA, TOTAL (MG/L AS SI02)	8	0	0	8	1	0
01000	ARSENIC, DISSOLVED (UG/L AS AS)	481	478	0	3	38	28
01002	ARSENIC, TOTAL (UG/L AS AS)	20	5	8	7	9	0
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	5	2	3	0	5	0
01005	BARIUM, DISSOLVED (UG/L AS BA)	582	582	0	0	37	29
01007	BARIUM, TOTAL (UG/L AS BA)	7	2	5	0	7	0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	19	15	4	0	15	5
01020	BORON, DISSOLVED (UG/L AS B)	2481	2481	0	0	42	33
01025	CADMIUM, DISSOLVED (UG/L AS CD)	555	550	2	3	41	29
01027	CADMIUM, TOTAL (UG/L AS CD)	26	5	9	12	9	0
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	5	2	3	0	5	0
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	5	2	3	0	5	0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2505	2503	2	0	44	33
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	3	0	0	3	2	0
01034	CHROMIUM, TOTAL (UG/L AS CR)	37	5	10	22	10	0
01035	COBALT, DISSOLVED (UG/L AS CO)	1677	1674	0	3	41	30
01037	COBALT, TOTAL (UG/L AS CO)	2	0	2	0	2	0
01040	COPPER, DISSOLVED (UG/L AS CU)	2505	2503	2	0	44	33
01042	COPPER, TOTAL (UG/L AS CU)	40	5	10	25	10	0
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	5	2	3	0	5	0
01044	IRON, SUSPENDED (UG/L AS FE)	7	0	7	0	1	0
01045	IRON, TOTAL (UG/L AS FE)	74	5	44	25	17	0
01046	IRON, DISSOLVED (UG/L AS FE)	2556	2503	42	11	49	33
01047	IRON, FERROUS (UG/L AS FE)	8	0	0	8	1	0
01049	LEAD, DISSOLVED (UG/L AS PB)	2508	2503	2	3	46	33
01051	LEAD, TOTAL (UG/L AS PB)	31	5	10	16	9	0
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	5	2	3	0	5	0
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	3	2	1	0	3	0
01054	MANGANESE, SUSPENDED (UG/L AS MN)	7	0	7	0	1	0
01055	MANGANESE, TOTAL (UG/L AS MN)	2611	2505	46	60	63	33
01056	MANGANESE, DISSOLVED (UG/L AS MN)	2557	2500	47	10	55	34
01059	THALLIUM, TOTAL (UG/L AS TL)	2	0	2	0	2	0
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	923	923	0	0	38	30
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	2	0	2	0	2	0
01064	TELLURIUM, TOTAL IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2	0
01065	NICKEL, DISSOLVED (UG/L AS NI)	2505	2494	5	6	43	33
01067	NICKEL, TOTAL (UG/L AS NI)	6	2	4	0	6	0
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	3	2	1	0	3	0
01077	SILVER, TOTAL (UG/L AS AG)	20	15	5	0	16	5
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	734	734	0	0	35	27
01082	STRONTIUM, TOTAL (UG/L AS SR)	2	0	2	0	2	0
01085	VANADIUM, DISSOLVED (UG/L AS V)	921	915	6	0	44	31
01087	VANADIUM, TOTAL (UG/L AS V)	2	0	2	0	2	0
01090	ZINC, DISSOLVED (UG/L AS ZN)	2503	2503	0	0	42	33
01092	ZINC, TOTAL (UG/L AS ZN)	41	5	10	26	10	0
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	5	2	3	0	5	0
01097	ANTIMONY, TOTAL (UG/L AS SB)	15	13	2	0	11	5
01102	TIN, TOTAL (UG/L AS SN)	2	0	2	0	2	0
01105	ALUMINUM, TOTAL (UG/L AS AL)	2519	2504	4	11	49	33
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	2511	2502	8	1	51	34

Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Parameter Code	Name	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	3	2	1	0	3	0
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	711	711	0	0	34	26
01130	LITHIUM, DISSOLVED (UG/L AS LI)	714	714	0	0	34	26
01140	SILICON, DISSOLVED (UG/L AS SI)	1679	1679	0	0	39	30
01145	SELENIUM, DISSOLVED (UG/L AS SE)	2	0	2	0	2	0
01147	SELENIUM, TOTAL (UG/L AS SE)	20	15	5	0	16	5
01150	TITANIUM, DISSOLVED (UG/L AS TI)	2486	2486	0	0	42	33
01152	TITANIUM, TOTAL (UG/L AS TI)	2	0	2	0	2	0
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	3	2	1	0	3	0
01203	YTTRIUM, TOTAL (UG/L AS Y)	2	0	2	0	2	0
22703	URANIUM, NATURAL, DISSOLVED	6	0	6	0	6	1
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	25	0	25	0	2	0
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	15	0	0	15	2	0
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	8	0	0	8	1	0
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	90	1	48	41	6	0
31648	E. COLI - MTEC-MF N0/100ML	287	287	0	0	12	8
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	2	0	2	0	2	0
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	287	287	0	0	12	8
32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	5	2	3	0	1	0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	5	2	2	1	5	0
34200	ACENAPHTHYLENE TOTWUG/L	2	0	2	0	2	0
34205	ACENAPHTHENE TOTWUG/L	2	0	2	0	2	0
34220	ANTHRACENE TOTWUG/L	2	0	2	0	2	0
34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	2	0	2	0	2	0
34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	2	0	2	0	2	0
34247	BENZO-A-PYRENE TOTWUG/L	2	0	2	0	2	0
34257	B-BHC-BETA DRY WGTBOTUG/KG	2	2	0	0	2	0
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	2	2	0	0	2	0
34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	2	0	2	0	2	0
34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	2	0	2	0	2	0
34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	2	0	2	0	2	0
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	6	2	4	0	6	0
34320	CHRYSENE TOTWUG/L	2	0	2	0	2	0
34336	DIETHYL PHTHALATE TOTWUG/L	6	2	4	0	6	0
34341	DIMETHYL PHTHALATE TOTWUG/L	6	2	4	0	6	0
34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	2	0	2	0	2	0
34354	ENDOSULFAN SULFATE DRY WGTBOTUG/KG	2	2	0	0	2	0
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	2	2	0	0	2	0
34364	ENDOSULFAN, ALPHA DRY WGTBOTUG/KG	2	2	0	0	2	0
34369	ENDRIN ALDEHYDE DRY WGTBOTUG/KG	2	2	0	0	2	0
34376	FLUORANTHENE TOTWUG/L	2	0	2	0	2	0
34381	FLUORENE TOTWUG/L	2	0	2	0	2	0
34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	2	0	2	0	2	0
34396	HEXACHLOROETHANE TOTWUG/L	2	0	2	0	2	0
34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	2	0	2	0	2	0
34408	ISOPHORONE TOTWUG/L	2	0	2	0	2	0
34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	2	0	2	0	2	0
34433	N-NITROSODIPHENYLAMINE TOTWUG/L	2	0	2	0	2	0
34447	NITROBENZENE TOTWUG/L	2	0	2	0	2	0
34452	PARACHLOROMETA CRESOL TOTWUG/L	2	0	2	0	2	0
34461	PHENANTHRENE TOTWUG/L	2	0	2	0	2	0
34469	PYRENE TOTWUG/L	2	0	2	0	2	0
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	2	0	2	0	2	0
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	2	0	2	0	2	0
34536	1,2-DICHLOROBENZENE TOTWUG/L	2	0	2	0	2	0
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	2	0	2	0	2	0
34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	2	0	2	0	2	0
34566	1,3-DICHLOROBENZENE TOTWUG/L	2	0	2	0	2	0
34571	1,4-DICHLOROBENZENE TOTWUG/L	2	0	2	0	2	0
34581	2-CHLORONAPHTHALENE TOTWUG/L	2	0	2	0	2	0
34586	2-CHLOROPHENOL TOTWUG/L	2	0	2	0	2	0
34591	2-NITROPHENOL TOTWUG/L	2	0	2	0	2	0
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	6	2	4	0	6	0
34601	2,4-DICHLOROPHENOL TOTWUG/L	2	0	2	0	2	0
34606	2,4-DIMETHYLPHENOL TOTWUG/L	2	0	2	0	2	0
34611	2,4-DINITROTOLUENE TOTWUG/L	2	0	2	0	2	0
34616	2,4-DINITROPHENOL TOTWUG/L	2	0	2	0	2	0
34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	2	0	2	0	2	0
34626	2,6-DINITROTOLUENE TOTWUG/L	2	0	2	0	2	0
34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	2	0	2	0	2	0
34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	2	0	2	0	2	0

Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Parameter Code	Name	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	2	0	2	0	2	0
34646	4-NITROPHENOL TOTWUG/L	2	0	2	0	2	0
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	2	0	2	0	2	0
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	2	0	2	0	2	0
34696	NAPHTHALENE TOTWUG/L	2	0	2	0	2	0
34721	2,3,4,6-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	2	2	0	0	2	0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	25	0	0	25	8	0
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	2	0	2	0	2	0
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	5	2	3	0	5	0
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	5	2	3	0	5	0
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	5	2	3	0	5	0
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	5	2	3	0	5	0
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	5	2	3	0	5	0
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	6	2	4	0	6	0
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	6	2	4	0	6	0
39117	PHTHLATE ESTERS IN WATER MG/L	2	0	2	0	2	0
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2	0
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	5	2	3	0	5	0
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	5	2	3	0	5	0
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	5	2	3	0	5	0
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	5	2	3	0	5	0
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	5	2	3	0	5	0
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	5	2	3	0	5	0
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	5	2	3	0	5	0
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2	0
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	2	0	2	0	2	0
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	2	2	0	0	2	0
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	5	2	3	0	5	0
46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	23	0	16	7	1	0
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	2412	2412	0	0	42	33
47006	BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	2	0	2	0	2	0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	1	0	1	0	1	0
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	4	0	4	0	4	1
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	6	0	6	0	6	1
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	3	0	3	0	3	0
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	287	287	0	0	12	8
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	287	287	0	0	12	8
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	287	287	0	0	12	8
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	287	287	0	0	12	8
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	287	287	0	0	12	8
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	108	2	42	64	14	0
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	9	0	1	8	4	0
70302	SOLIDS, DISSOLVED-TONS PER DAY	40	0	15	25	4	0
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	47	0	18	29	5	0
70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	3	2	1	0	3	0
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	108	107	1	0	3	0
70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	1	0	1	0	1	0
70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	1	0	1	0	1	0
70335	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 1.00MM	8	8	0	0	2	0
70336	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 2.00MM	7	7	0	0	2	0
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	64	63	1	0	3	0
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	64	63	1	0	3	0
70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	52	51	1	0	3	0
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	64	63	1	0	3	0
70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	51	50	1	0	3	0
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	44	44	0	0	2	0
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	40	40	0	0	2	0
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	30	30	0	0	2	0
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	12	12	0	0	2	0
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	5	5	0	0	2	0
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	2524	2486	15	23	43	33
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	38	0	15	23	1	0
70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	4	2	2	0	4	0

Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Parameter Code	Name	Total Obs	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	287	287	0	0	12	8
71825	ACIDITY, TOTAL (MG/L AS H)	3	0	0	3	1	0
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	73	0	0	73	13	0
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	3	0	0	3	2	0
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	12	0	0	12	4	0
71885	IRON (UG/L AS FE)	64	0	0	64	14	0
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	4	0	1	3	1	0
71890	MERCURY, DISSOLVED (UG/L AS HG)	906	904	2	0	40	30
71900	MERCURY, TOTAL (UG/L AS HG)	30	2	8	20	6	0
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	3	2	1	0	3	0
74010	IRON, TOTAL (MG/L AS FE)	2503	2501	2	0	44	33
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	287	287	0	0	12	8
80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	3	2	1	0	3	0
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	252	186	66	0	3	0
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	47	0	47	0	1	0
80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	1	0	1	0	1	0
80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	2	0	2	0	1	0
80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	2	0	2	0	1	0
80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	2	0	2	0	1	0
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	2	0	2	0	1	0
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	2	0	2	0	1	0
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	2	0	2	0	1	0
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	2	0	2	0	1	0
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	2	0	2	0	1	0
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	2	0	2	0	1	0
80181	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	2	2	0	0	1	0
80182	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	2	2	0	0	1	0
80183	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	2	2	0	0	1	0
80184	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	2	2	0	0	1	0
80185	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	2	2	0	0	1	0
80186	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	2	2	0	0	1	0
80187	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	2	2	0	0	1	0
80188	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	2	2	0	0	1	0
80189	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	1	1	0	0	1	0
82031	COAL IN BOTTOM MATERIAL DRY WEIGHT GRAMS/KG	1	0	1	0	1	0
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	2311	2311	0	0	40	31
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	4	2	2	0	4	0
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	2479	2479	0	0	42	33
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	6	0	6	0	6	1
82398	SAMPLING METHOD (CODES)	79	79	0	0	3	0
82556	2,3,4,5-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	2	2	0	0	2	0
82557	ENDRIN KEYTONE IN BOTTOM DEPOSITS SEDDRYWGTMG/KG	2	2	0	0	2	0
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	9	0	0	9	8	0
84001	AQUIFER NAME CODE (SEE USGS CATALOG)	9	0	0	9	8	0

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0012	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/30/70-07/29/76	6	74	
CUGA0018	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/05/89-06/05/89	0	2	
CUGA0024	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/22/67-12/08/76	9	27	
CUGA0025	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	10/20/75-09/08/76	0	15	
CUGA0004	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	09/04/80-02/26/81	0	3	
CUGA0005	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	09/04/80-02/26/81	0	3	
CUGA0018	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	06/05/89-06/05/89	0	2	
CUGA0024	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	06/22/67-12/08/76	9	27	
CUGA0025	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	10/20/75-09/08/76	0	15	
CUGA0072	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	05/05/82-10/06/82	0	59	
CUGA0061	No	00004	STREAM WIDTH (FEET)	08/27/81-08/27/81	0	1	
CUGA0012	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/30/70-07/29/76	6	74	
CUGA0004	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	09/04/80-02/26/81	0	3	
CUGA0005	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	09/04/80-02/26/81	0	3	
CUGA0006	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	01/07/92-04/08/96	4	9	
CUGA0013	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/11/97-08/11/97	0	3	
CUGA0015	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/04/92-08/12/96	4	21	
CUGA0022	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-01/13/92	1	44	
CUGA0031	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-03/03/97	6	175	
CUGA0032	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/24/90-08/23/93	2	50	
CUGA0035	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/23/96	6	178	
CUGA0036	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-08/10/92	2	60	
CUGA0037	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-12/30/91	1	40	
CUGA0047	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/24/97	7	182	
CUGA0059	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-09/24/97	7	199	
CUGA0066	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/19/90-08/10/92	2	60	
CUGA0077	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/18/90-03/03/97	6	92	
CUGA0086	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/29/81-04/29/81	0	1	
CUGA0087	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/29/81-04/29/81	0	1	
CUGA0001	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/61-09/11/61	0	1	
CUGA0002	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	0	1	
CUGA0003	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	0	1	
CUGA0004	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/04/80-02/26/81	0	3	
CUGA0005	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/91-10/15/93	2	8	
CUGA0007	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/91-12/18/95	4	9	
CUGA0011	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/07/92-12/18/95	3	8	
CUGA0012	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	6	67	
CUGA0013	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/97-08/11/97	0	1	
CUGA0015	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-12/18/95	3	9	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0018	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/05/89-06/05/89	0	2	
CUGA0019	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/96-05/21/97	0	4	
CUGA0020	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/78-05/17/78	0	1	
CUGA0021	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-08/12/96	4	21	
CUGA0022	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/92-03/03/97	5	43	
CUGA0024	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/67-12/08/76	9	27	
CUGA0025	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/75-09/08/76	0	15	
CUGA0026	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/93-10/03/95	2	3	
CUGA0027	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-01/13/92	1	44	
CUGA0031	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	6	175	
CUGA0032	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	6	114	
CUGA0033	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/24/90-08/23/93	2	50	
CUGA0035	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	6	178	
CUGA0036	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-08/10/92	2	60	
CUGA0037	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/01/91-03/03/97	5	40	
CUGA0044	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/53-09/08/58	5	2	
CUGA0045	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	1	40	
CUGA0047	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	6	171	
CUGA0049	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	1	42	
CUGA0052	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/78-05/07/78	0	1	
CUGA0053	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/06/94-05/21/97	2	28	
CUGA0056	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-07/27/92	2	51	
CUGA0057	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/64-03/18/64	0	1	
CUGA0058	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	7	182	
CUGA0059	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/24/91-10/24/91	0	1	
CUGA0061	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	29	214	
CUGA0062	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/30/91-12/30/91	0	1	
CUGA0065	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	7	196	
CUGA0066	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	6	177	
CUGA0070	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/90-03/23/93	2	24	
CUGA0072	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/05/82-10/10/90	8	133	
CUGA0073	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-08/10/92	2	59	
CUGA0077	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	6	92	
CUGA0078	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/03/65-11/03/65	0	1	
CUGA0079	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/65-10/20/65	0	1	
CUGA0081	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/65-10/21/65	0	1	
CUGA0082	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/78-06/18/78	0	1	
CUGA0087	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/82-11/09/82	0	2	
CUGA0089	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	0	1	
CUGA0091	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	0	1	
CUGA0092	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/64-06/10/64	0	1	
CUGA0093	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	0	1	
CUGA0094	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/15/64-05/15/64	0	1	
CUGA0095	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/65-11/23/65	0	2	
CUGA0096	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/13/85-10/05/89	3	40	
CUGA0097	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/14/86-10/05/89	2	44	
CUGA0004	No	00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	09/04/80-10/02/80	0	2	
CUGA0005	No	00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	09/04/80-10/02/80	0	2	
CUGA0025	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/75-09/08/76	0	15	
CUGA0061	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/02/81-08/18/94	12	109	
CUGA0096	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	11/13/85-10/05/89	3	58	
CUGA0097	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/14/86-10/05/89	2	75	
CUGA0025	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/20/75-09/08/76	0	15	
CUGA0061	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/07/79-08/18/94	15	116	
CUGA0096	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	11/13/85-10/05/89	3	58	
CUGA0097	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/14/86-10/05/89	2	75	
CUGA0012	No	00041	WEATHER (WMO CODE 4501)	03/30/70-07/29/76	6	68	
CUGA0004	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/02/80-10/02/80	0	1	
CUGA0005	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/04/80-02/26/81	0	3	
CUGA0001	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/11/61-09/11/61	0	1	
CUGA0061	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	7	71	

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Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0079	No	00060	FLOW, STREAM, MEAN DAILY CFS	02/24/65-10/20/65	0	3	
CUGA0081	No	00060	FLOW, STREAM, MEAN DAILY CFS	04/28/65-07/21/65	0	2	
CUGA0083	No	00060	FLOW, STREAM, MEAN DAILY CFS	07/21/65-07/21/65	0	1	
CUGA0085	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/26/64-09/18/64	0	2	
CUGA0095	No	00060	FLOW, STREAM, MEAN DAILY CFS	10/21/65-11/23/65	0	2	
CUGA0097	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/26/64-09/17/64	0	2	
CUGA0004	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/02/80-10/02/80	0	1	
CUGA0005	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/04/80-02/26/81	0	3	
CUGA0006	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/03/91-10/15/93	2	7	
CUGA0008	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/03/91-10/15/93	2	7	
CUGA0011	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/07/92-10/15/93	1	6	
CUGA0015	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-08/12/96	4	13	
CUGA0017	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-12/04/95	3	7	
CUGA0019	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/09/96-05/21/97	0	3	
CUGA0021	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-08/12/96	4	15	
CUGA0022	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	02/03/92-08/12/96	4	32	
CUGA0024	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/67-12/08/76	9	25	
CUGA0025	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/20/75-06/09/76	0	10	
CUGA0030	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/13/92	1	44	
CUGA0031	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	6	154	
CUGA0032	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	6	109	
CUGA0033	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/24/90-08/23/93	2	50	
CUGA0035	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	6	161	
CUGA0036	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/10/92	2	60	
CUGA0037	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	7	160	
CUGA0038	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	07/06/93-06/27/94	0	10	
CUGA0041	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/91-08/12/96	4	28	
CUGA0045	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	3	85	
CUGA0046	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	1	40	
CUGA0047	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	6	155	
CUGA0049	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/06/94-05/21/97	2	2	
CUGA0056	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	7	158	
CUGA0059	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/24/91-10/24/91	0	1	
CUGA0061	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	23	163	
CUGA0062	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/30/91-12/30/91	0	1	
CUGA0065	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	7	182	
CUGA0066	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	7	153	
CUGA0067	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	6	142	
CUGA0070	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-08/10/92	2	59	
CUGA0077	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	3	86	
CUGA0096	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	3	58	
CUGA0097	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/14/86-10/05/89	2	74	
CUGA0061	No	00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION	09/19/80-08/27/81	0	2	
CUGA0012	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/17/71-07/13/71	0	3	
CUGA0013	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	08/11/97-08/11/97	0	1	
CUGA0024	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	06/22/67-12/08/76	9	23	
CUGA0025	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/20/75-09/08/76	0	12	
CUGA0001	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	09/11/61-09/11/61	0	1	
CUGA0061	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	08/26/64-11/23/65	1	16	
CUGA0064	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/22/64	0	2	
CUGA0079	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-10/20/65	1	4	
CUGA0080	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/18/64	0	3	
CUGA0081	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	07/21/65-10/21/65	0	2	
CUGA0083	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	07/21/65-07/21/65	0	1	
CUGA0084	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-05/27/64	0	1	
CUGA0085	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/18/64	0	3	
CUGA0095	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-11/23/65	1	4	
CUGA0097	No	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/17/64	0	3	
CUGA0072	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	05/05/82-10/10/90	8	6	
CUGA0001	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	01/07/92-04/08/96	4	9	

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Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0015	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-08/12/96	4	21	
CUGA0022	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/10/96-03/10/96	0	1	
CUGA0024	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/22/67-12/08/76	9	24	
CUGA0025	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/20/75-09/08/76	0	13	
CUGA0026	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-01/13/92	1	44	
CUGA0031	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	6	174	
CUGA0032	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/24/90-08/23/93	2	50	
CUGA0035	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	6	178	
CUGA0036	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-08/10/92	2	60	
CUGA0037	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	02/22/93-12/19/94	1	33	
CUGA0041	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/01/91-03/03/97	5	40	
CUGA0044	No	00080	COLOR (PLATINUM-COBALT UNITS)	08/06/53-08/06/53	0	1	
CUGA0045	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	1	40	
CUGA0047	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	7	182	
CUGA0059	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/16/91-01/13/92	0	2	
CUGA0061	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	8	23	S
CUGA0062	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/17/91-01/13/92	0	3	
CUGA0064	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/22/64	0	2	
CUGA0065	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-08/10/92	2	59	
CUGA0077	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	6	92	
CUGA0079	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-10/20/65	1	4	
CUGA0080	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/18/64	0	3	
CUGA0081	No	00080	COLOR (PLATINUM-COBALT UNITS)	07/21/65-10/21/65	0	2	
CUGA0083	No	00080	COLOR (PLATINUM-COBALT UNITS)	07/21/65-07/21/65	0	1	
CUGA0084	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-05/27/64	0	1	
CUGA0085	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/18/64	0	3	
CUGA0086	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/26/82-10/26/82	0	1	
CUGA0087	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/26/82-10/26/82	0	2	
CUGA0092	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/10/64-06/10/64	0	1	
CUGA0095	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-11/23/65	1	4	
CUGA0097	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/17/64	0	3	
CUGA0024	No	00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	10/20/75-12/08/76	1	16	
CUGA0001	No	00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	09/11/61-09/11/61	0	1	
CUGA0079	No	00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	05/27/64-09/22/64	0	2	
CUGA0085	No	00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	05/27/64-05/27/64	0	1	
CUGA0006	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/03/91-12/18/95	4	9	
CUGA0011	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/07/92-12/18/95	3	8	
CUGA0013	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/11/97-08/11/97	0	1	
CUGA0015	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-12/18/95	3	9	
CUGA0018	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/05/89-06/05/89	0	2	
CUGA0019	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-08/12/96	4	21	
CUGA0022	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/03/92-03/03/97	5	43	
CUGA0026	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/06/93-10/03/95	2	3	
CUGA0027	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM 25C)	06/19/90-01/13/92	1	44	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0031	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	6	174	
CUGA0032	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	6	114	
CUGA0033	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/24/90-08/23/93	2	50	
CUGA0035	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	6	178	
CUGA0036	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-08/10/92	2	60	
CUGA0037	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	1	40	
CUGA0047	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/06/94-05/21/97	2	28	
CUGA0056	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	7	182	
CUGA0059	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/24/91-10/24/91	0	1	
CUGA0062	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/30/91-12/30/91	0	1	
CUGA0065	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	7	196	
CUGA0066	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	6	177	
CUGA0070	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/10/90-03/23/93	2	24	
CUGA0072	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/05/82-10/10/90	8	133	T
CUGA0073	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-08/10/92	2	59	
CUGA0077	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	6	92	
CUGA0096	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/26/86-04/14/87	0	4	
CUGA0097	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/26/86-09/19/87	0	8	
CUGA0001	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/61-09/11/61	0	1	
CUGA0002	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	0	1	
CUGA0003	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	0	1	
CUGA0004	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/04/80-02/26/81	0	3	
CUGA0005	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/04/80-02/26/81	0	3	
CUGA0007	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	0	1	
CUGA0020	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/17/78-05/17/78	0	1	
CUGA0024	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/67-12/08/76	9	24	
CUGA0025	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/20/75-09/08/76	0	13	
CUGA0040	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/82-05/18/82	0	1	
CUGA0044	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/06/53-09/08/58	5	2	
CUGA0052	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/07/78-05/07/78	0	1	
CUGA0057	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/64-03/18/64	0	1	
CUGA0061	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	30	222	T,A,S
CUGA0064	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/22/64	0	2	
CUGA0069	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/05/85-06/05/85	0	1	
CUGA0075	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/05/85-06/05/85	0	1	
CUGA0078	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/03/65-11/03/65	0	1	
CUGA0079	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/20/65	1	5	
CUGA0080	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/18/64	0	3	
CUGA0081	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/28/65-10/21/65	0	3	
CUGA0082	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/18/78-06/18/78	0	1	
CUGA0083	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/21/65-07/21/65	0	1	
CUGA0084	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-05/27/64	0	1	
CUGA0085	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/18/64	0	3	
CUGA0089	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	0	1	
CUGA0090	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/82-05/18/82	0	1	
CUGA0091	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	0	1	
CUGA0092	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/64-06/10/64	0	1	
CUGA0093	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	0	1	
CUGA0094	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/15/64-05/15/64	0	1	
CUGA0095	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-11/23/65	1	4	
CUGA0096	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/22/85-10/05/89	3	34	
CUGA0097	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	25	33	S
CUGA0072	No	00098	SAMPLING STATION LOCATION VERTICAL (METERS)	05/08/90-10/10/90	0	77	
CUGA0006	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-12/18/95	3	9	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0019	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-08/12/96	4	21	
CUGA0022	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-01/13/92	1	44	
CUGA0031	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	6	175	
CUGA0032	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/24/90-08/23/93	2	50	
CUGA0035	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	6	178	
CUGA0036	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-08/10/92	2	60	
CUGA0037	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	1	40	
CUGA0047	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	7	182	
CUGA0059	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	7	199	
CUGA0066	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-08/10/92	2	60	
CUGA0077	No	00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	6	92	
CUGA0072	No	00204	DEPTH IN METERS AT WHICH 1% SURFACE LIGHT REMAINS	05/05/82-10/10/90	8	6	
CUGA0072	No	00205	DEPTH, MAXIMUM, OF LAKE OR RESERVOIR (METERS)	05/05/82-10/10/90	8	6	
CUGA0006	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/03/91-12/18/95	4	9	
CUGA0011	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/07/92-12/18/95	3	8	
CUGA0015	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-08/12/96	4	21	
CUGA0022	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/03/92-03/03/97	5	43	
CUGA0026	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/06/93-10/03/95	2	3	
CUGA0027	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-01/13/92	1	44	
CUGA0031	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	6	175	
CUGA0032	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	6	114	
CUGA0033	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/24/90-08/23/93	2	50	
CUGA0035	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	6	178	
CUGA0036	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-08/10/92	2	60	
CUGA0037	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	1	40	
CUGA0047	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/06/94-05/21/97	2	28	
CUGA0056	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	7	182	
CUGA0059	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/24/91-10/24/91	0	1	
CUGA0062	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/30/91-12/30/91	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0065	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	7	195	
CUGA0066	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	7	178	
CUGA0067	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	6	177	
CUGA0070	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-08/10/92	2	59	
CUGA0077	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	6	92	
CUGA0001	No	00300	OXYGEN, DISSOLVED MG/L	09/11/61-09/11/61	0	1	
CUGA0004	No	00300	OXYGEN, DISSOLVED MG/L	09/04/80-10/02/80	0	2	
CUGA0005	No	00300	OXYGEN, DISSOLVED MG/L	09/04/80-09/04/80	0	1	
CUGA0012	No	00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	6	64	
CUGA0013	No	00300	OXYGEN, DISSOLVED MG/L	08/11/97-08/11/97	0	1	
CUGA0018	No	00300	OXYGEN, DISSOLVED MG/L	06/05/89-06/05/89	0	2	
CUGA0024	No	00300	OXYGEN, DISSOLVED MG/L	06/22/67-12/08/76	9	24	
CUGA0025	No	00300	OXYGEN, DISSOLVED MG/L	10/20/75-09/08/76	0	13	
CUGA0061	No	00300	OXYGEN, DISSOLVED MG/L	05/27/64-10/21/65	1	4	
CUGA0072	No	00300	OXYGEN, DISSOLVED MG/L	05/05/82-10/10/90	8	133	T
CUGA0079	No	00300	OXYGEN, DISSOLVED MG/L	05/27/64-10/20/65	1	4	
CUGA0080	No	00300	OXYGEN, DISSOLVED MG/L	09/22/64-09/22/64	0	1	
CUGA0081	No	00300	OXYGEN, DISSOLVED MG/L	10/21/65-10/21/65	0	1	
CUGA0085	No	00300	OXYGEN, DISSOLVED MG/L	05/27/64-09/22/64	0	2	
CUGA0095	No	00300	OXYGEN, DISSOLVED MG/L	10/21/65-10/21/65	0	1	
CUGA0001	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	09/11/61-09/11/61	0	1	
CUGA0061	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-10/21/65	1	4	
CUGA0079	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-10/20/65	1	4	
CUGA0080	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	09/22/64-09/22/64	0	1	
CUGA0081	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/21/65-10/21/65	0	1	
CUGA0085	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-09/22/64	0	2	
CUGA0095	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/21/65-10/21/65	0	1	
CUGA0024	No	00304	BOD, 2 DAY, 20 DEG C MG/L	06/22/67-02/13/68	0	7	
CUGA0012	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/30/70-04/07/71	1	3	
CUGA0024	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/22/67-12/08/76	9	26	
CUGA0025	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/17/75-09/08/76	0	14	
CUGA0040	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/05/85-06/05/85	0	1	
CUGA0090	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/18/82-05/18/82	0	1	
CUGA0024	No	00335	COD, .025N K2CR2O7 MG/L	06/22/67-12/08/76	9	24	
CUGA0025	No	00335	COD, .025N K2CR2O7 MG/L	10/20/75-09/08/76	0	13	
CUGA0040	No	00335	COD, .025N K2CR2O7 MG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	00335	COD, .025N K2CR2O7 MG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	00335	COD, .025N K2CR2O7 MG/L	06/05/85-06/05/85	0	1	
CUGA0090	No	00335	COD, .025N K2CR2O7 MG/L	05/18/82-05/18/82	0	1	
CUGA0040	No	00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	06/05/85-06/05/85	0	1	
CUGA0001	No	00400	PH (STANDARD UNITS)	09/11/61-09/11/61	0	1	
CUGA0002	No	00400	PH (STANDARD UNITS)	06/17/78-06/17/78	0	1	
CUGA0003	No	00400	PH (STANDARD UNITS)	06/17/78-06/17/78	0	1	
CUGA0004	No	00400	PH (STANDARD UNITS)	09/04/80-02/26/81	0	3	
CUGA0005	No	00400	PH (STANDARD UNITS)	09/04/80-02/26/81	0	3	
CUGA0007	No	00400	PH (STANDARD UNITS)	06/17/78-06/17/78	0	1	
CUGA0012	No	00400	PH (STANDARD UNITS)	03/30/70-07/29/76	6	68	
CUGA0013	No	00400	PH (STANDARD UNITS)	08/11/97-08/11/97	0	1	
CUGA0018	No	00400	PH (STANDARD UNITS)	06/05/89-06/05/89	0	2	
CUGA0020	No	00400	PH (STANDARD UNITS)	05/17/78-05/17/78	0	1	
CUGA0024	No	00400	PH (STANDARD UNITS)	06/22/67-12/08/76	9	24	
CUGA0025	No	00400	PH (STANDARD UNITS)	10/20/75-09/08/76	0	13	
CUGA0044	No	00400	PH (STANDARD UNITS)	08/06/53-09/08/58	5	2	
CUGA0052	Yes	00400	PH (STANDARD UNITS)	05/07/78-05/07/78	0	1	
CUGA0057	No	00400	PH (STANDARD UNITS)	03/18/64-03/18/64	0	1	
CUGA0061	No	00400	PH (STANDARD UNITS)	05/27/64-03/26/81	16	66	T,S
CUGA0064	No	00400	PH (STANDARD UNITS)	05/27/64-09/22/64	0	2	
CUGA0072	No	00400	PH (STANDARD UNITS)	05/05/82-10/10/90	8	133	T
CUGA0078	No	00400	PH (STANDARD UNITS)	11/03/65-11/03/65	0	1	
CUGA0079	No	00400	PH (STANDARD UNITS)	05/27/64-10/20/65	1	4	
CUGA0080	No	00400	PH (STANDARD UNITS)	05/27/64-09/18/64	0	3	
CUGA0081	No	00400	PH (STANDARD UNITS)	07/21/65-10/21/65	0	2	
CUGA0082	No	00400	PH (STANDARD UNITS)	06/18/78-06/18/78	0	1	
CUGA0083	No	00400	PH (STANDARD UNITS)	07/21/65-07/21/65	0	1	
CUGA0084	No	00400	PH (STANDARD UNITS)	05/27/64-05/27/64	0	1	
CUGA0085	No	00400	PH (STANDARD UNITS)	05/27/64-09/18/64	0	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0087	No	00400	PH (STANDARD UNITS)	11/09/82-11/09/82	0	2	
CUGA0089	No	00400	PH (STANDARD UNITS)	05/20/64-05/20/64	0	1	
CUGA0091	No	00400	PH (STANDARD UNITS)	05/20/64-05/20/64	0	1	
CUGA0092	No	00400	PH (STANDARD UNITS)	06/10/64-06/10/64	0	1	
CUGA0093	No	00400	PH (STANDARD UNITS)	05/20/64-05/20/64	0	1	
CUGA0094	No	00400	PH (STANDARD UNITS)	05/15/64-05/15/64	0	1	
CUGA0095	No	00400	PH (STANDARD UNITS)	05/27/64-11/23/65	1	4	
CUGA0097	No	00400	PH (STANDARD UNITS)	05/27/64-09/17/64	0	3	
CUGA0006	Yes	00403	PH, LAB, STANDARD UNITS SU	01/07/92-10/15/93	1	7	
CUGA0008	Yes	00403	PH, LAB, STANDARD UNITS SU	01/07/92-04/08/96	4	9	
CUGA0011	Yes	00403	PH, LAB, STANDARD UNITS SU	01/07/92-04/08/96	4	9	
CUGA0012	No	00403	PH, LAB, STANDARD UNITS SU	03/30/70-05/18/70	0	2	
CUGA0015	Yes	00403	PH, LAB, STANDARD UNITS SU	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00403	PH, LAB, STANDARD UNITS SU	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00403	PH, LAB, STANDARD UNITS SU	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00403	PH, LAB, STANDARD UNITS SU	05/04/92-08/12/96	4	21	
CUGA0022	No	00403	PH, LAB, STANDARD UNITS SU	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00403	PH, LAB, STANDARD UNITS SU	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00403	PH, LAB, STANDARD UNITS SU	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00403	PH, LAB, STANDARD UNITS SU	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00403	PH, LAB, STANDARD UNITS SU	04/10/91-01/13/92	0	19	
CUGA0031	No	00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	5	147	
CUGA0032	No	00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	5	91	
CUGA0033	Yes	00403	PH, LAB, STANDARD UNITS SU	04/10/91-08/23/93	2	39	
CUGA0035	No	00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	5	150	
CUGA0036	No	00403	PH, LAB, STANDARD UNITS SU	04/10/91-08/10/92	1	36	
CUGA0037	No	00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	6	153	
CUGA0038	Yes	00403	PH, LAB, STANDARD UNITS SU	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00403	PH, LAB, STANDARD UNITS SU	02/22/93-12/19/94	1	33	
CUGA0040	No	00403	PH, LAB, STANDARD UNITS SU	05/18/82-05/18/82	0	1	
CUGA0041	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	0	17	
CUGA0043	Yes	00403	PH, LAB, STANDARD UNITS SU	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-03/03/97	5	64	
CUGA0046	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	0	17	
CUGA0047	No	00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	5	147	
CUGA0049	Yes	00403	PH, LAB, STANDARD UNITS SU	12/01/91-12/01/91	0	1	
CUGA0051	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	0	19	
CUGA0053	Yes	00403	PH, LAB, STANDARD UNITS SU	05/06/91-07/27/92	1	27	
CUGA0054	Yes	00403	PH, LAB, STANDARD UNITS SU	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00403	PH, LAB, STANDARD UNITS SU	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-07/27/92	1	27	
CUGA0058	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	6	154	
CUGA0059	No	00403	PH, LAB, STANDARD UNITS SU	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00403	PH, LAB, STANDARD UNITS SU	12/16/91-01/13/92	0	2	
CUGA0061	No	00403	PH, LAB, STANDARD UNITS SU	03/26/81-03/26/81	0	1	
CUGA0062	Yes	00403	PH, LAB, STANDARD UNITS SU	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	6	170	
CUGA0066	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	6	151	
CUGA0067	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	5	150	
CUGA0069	No	00403	PH, LAB, STANDARD UNITS SU	06/05/85-06/05/85	0	1	
CUGA0070	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-08/10/92	1	36	
CUGA0071	Yes	00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/23/93	1	13	
CUGA0073	Yes	00403	PH, LAB, STANDARD UNITS SU	04/11/91-08/10/92	1	37	
CUGA0075	No	00403	PH, LAB, STANDARD UNITS SU	06/05/85-06/05/85	0	1	
CUGA0077	No	00403	PH, LAB, STANDARD UNITS SU	04/11/91-03/03/97	5	68	
CUGA0090	No	00403	PH, LAB, STANDARD UNITS SU	05/18/82-05/18/82	0	1	
CUGA0061	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-05/09/80	15	10	
CUGA0079	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/22/64-09/22/64	0	1	
CUGA0084	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-05/27/64	0	1	
CUGA0095	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-11/23/65	1	2	
CUGA0006	Yes	00406	PH, FIELD, STANDARD UNITS SU	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00406	PH, FIELD, STANDARD UNITS SU	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00406	PH, FIELD, STANDARD UNITS SU	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/04/92-08/12/96	4	21	
CUGA0022	No	00406	PH, FIELD, STANDARD UNITS SU	02/03/92-03/03/97	5	43	
CUGA0026	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/06/93-10/03/95	2	3	
CUGA0027	Yes	00406	PH, FIELD, STANDARD UNITS SU	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-01/13/92	1	44	
CUGA0031	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	6	174	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0032	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	6	114	
CUGA0033	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/24/90-08/23/93	2	50	
CUGA0035	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	6	178	
CUGA0036	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-08/10/92	2	60	
CUGA0037	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00406	PH, FIELD, STANDARD UNITS SU	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00406	PH, FIELD, STANDARD UNITS SU	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	1	40	
CUGA0047	No	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00406	PH, FIELD, STANDARD UNITS SU	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/06/94-05/21/97	2	28	
CUGA0056	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	7	182	
CUGA0059	No	00406	PH, FIELD, STANDARD UNITS SU	10/24/91-10/24/91	0	1	
CUGA0062	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/30/91-12/30/91	0	1	
CUGA0065	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	7	197	
CUGA0066	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	6	177	
CUGA0070	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00406	PH, FIELD, STANDARD UNITS SU	12/10/90-03/23/93	2	23	
CUGA0073	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/90-08/10/92	2	59	
CUGA0077	No	00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	6	92	
CUGA0001	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/11/61-09/11/61	0	1	
CUGA0002	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	0	1	
CUGA0003	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	0	1	
CUGA0004	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	0	3	
CUGA0005	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	0	3	
CUGA0007	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	0	1	
CUGA0012	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/30/70-05/18/70	0	2	
CUGA0013	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/11/97-08/11/97	0	1	
CUGA0020	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/17/78-05/17/78	0	1	
CUGA0024	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/67-12/08/76	9	24	
CUGA0025	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/20/75-09/08/76	0	13	
CUGA0040	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0052	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/78-05/07/78	0	1	
CUGA0061	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-03/26/81	16	32	T
CUGA0064	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/22/64	0	2	
CUGA0069	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	0	1	
CUGA0072	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/09/90-10/10/90	0	3	
CUGA0075	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	0	1	
CUGA0079	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-02/24/65	0	3	
CUGA0080	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0081	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	0	1	
CUGA0082	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/78-06/18/78	0	1	
CUGA0083	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	0	1	
CUGA0084	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-05/27/64	0	1	
CUGA0085	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0086	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/26/82-10/26/82	0	2	
CUGA0087	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/26/82-10/26/82	0	2	
CUGA0090	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0095	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-11/23/65	1	3	
CUGA0097	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/17/64	0	3	
CUGA0024	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	06/22/67-12/08/76	9	24	
CUGA0006	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-08/12/96	4	21	
CUGA0022	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-01/13/92	1	44	
CUGA0031	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	6	175	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0032	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/24/90-08/23/93	2	50	
CUGA0035	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0036	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-08/10/92	2	60	
CUGA0037	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	1	40	
CUGA0047	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	7	182	
CUGA0059	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-08/10/92	2	60	
CUGA0077	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	6	92	
CUGA0004	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	0	3	
CUGA0005	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	4	21	
CUGA0022	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-01/13/92	1	44	
CUGA0031	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	6	175	
CUGA0032	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/24/90-08/23/93	2	50	
CUGA0035	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0036	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	2	60	
CUGA0037	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	40	
CUGA0047	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	182	
CUGA0059	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-08/10/92	2	60	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0077	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	6	92	
CUGA0001	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/03/91-05/03/92	1	3	
CUGA0008	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/03/91-10/15/93	2	7	
CUGA0011	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	01/07/92-10/15/93	1	4	
CUGA0015	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-11/28/94	2	14	
CUGA0017	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-12/05/93	1	5	
CUGA0021	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-11/28/94	2	14	
CUGA0022	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/03/92-11/28/94	2	34	
CUGA0026	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	07/06/93-09/12/94	1	2	
CUGA0027	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/13/92	1	44	
CUGA0031	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	127	
CUGA0032	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	3	91	
CUGA0033	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/24/90-08/23/93	2	49	
CUGA0035	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	131	
CUGA0036	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-08/10/92	2	59	
CUGA0037	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	129	
CUGA0038	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/01/91-11/28/94	2	31	
CUGA0044	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/06/53-09/08/58	5	2	
CUGA0045	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	3	90	
CUGA0046	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	1	40	
CUGA0047	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	4	125	
CUGA0049	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/06/94-12/06/94	0	1	
CUGA0056	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-07/27/92	2	51	
CUGA0057	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/18/64-03/18/64	0	1	
CUGA0058	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	131	
CUGA0059	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/16/91-01/13/92	0	2	
CUGA0061	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	8	59	T,S
CUGA0062	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/17/91-01/13/92	0	3	
CUGA0064	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/22/64	0	2	
CUGA0065	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	4	144	
CUGA0066	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	131	
CUGA0067	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	4	131	
CUGA0070	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-08/10/92	2	57	
CUGA0071	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-08/10/92	2	59	
CUGA0077	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	3	89	
CUGA0078	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/03/65-11/03/65	0	1	
CUGA0079	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-10/20/65	1	4	
CUGA0080	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/18/64	0	3	
CUGA0081	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/21/65-10/21/65	0	2	
CUGA0083	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/21/65-07/21/65	0	1	
CUGA0084	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-05/27/64	0	1	
CUGA0085	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/18/64	0	3	
CUGA0089	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	0	1	
CUGA0091	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	0	1	
CUGA0092	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/10/64-06/10/64	0	1	
CUGA0093	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	0	1	
CUGA0094	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/15/64-05/15/64	0	1	
CUGA0095	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-11/23/65	1	4	
CUGA0097	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/17/64	0	3	
CUGA0001	No	00445	CARBONATE ION (MG/L AS CO3)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00445	CARBONATE ION (MG/L AS CO3)	05/03/92-05/03/92	0	1	
CUGA0011	Yes	00445	CARBONATE ION (MG/L AS CO3)	05/03/92-05/03/92	0	1	
CUGA0044	No	00445	CARBONATE ION (MG/L AS CO3)	08/06/53-09/08/58	5	2	
CUGA0057	No	00445	CARBONATE ION (MG/L AS CO3)	03/18/64-03/18/64	0	1	
CUGA0061	No	00445	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	8	59	T,S
CUGA0078	No	00445	CARBONATE ION (MG/L AS CO3)	11/03/65-11/03/65	0	1	
CUGA0079	No	00445	CARBONATE ION (MG/L AS CO3)	02/24/65-10/20/65	0	2	
CUGA0081	No	00445	CARBONATE ION (MG/L AS CO3)	07/21/65-10/21/65	0	2	
CUGA0083	No	00445	CARBONATE ION (MG/L AS CO3)	07/21/65-07/21/65	0	1	
CUGA0084	No	00445	CARBONATE ION (MG/L AS CO3)	05/27/64-05/27/64	0	1	
CUGA0089	No	00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0091	No	00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	0	1	
CUGA0092	No	00445	CARBONATE ION (MG/L AS CO3)	06/10/64-06/10/64	0	1	
CUGA0093	No	00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	0	1	
CUGA0094	No	00445	CARBONATE ION (MG/L AS CO3)	05/15/64-05/15/64	0	1	
CUGA0095	No	00445	CARBONATE ION (MG/L AS CO3)	10/21/65-10/21/65	0	1	
CUGA0012	No	00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	6	36	
CUGA0024	No	00500	RESIDUE, TOTAL (MG/L)	06/22/67-04/25/68	0	8	
CUGA0012	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	6	35	
CUGA0012	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	6	35	
CUGA0013	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	08/11/97-08/11/97	0	1	
CUGA0024	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/22/67-04/25/68	0	8	
CUGA0004	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/80-02/26/81	0	3	
CUGA0005	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/07/92-04/08/96	4	9	
CUGA0012	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	36	
CUGA0013	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/11/97-08/11/97	0	1	
CUGA0015	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-08/12/96	4	21	
CUGA0022	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/10/96-03/10/96	0	1	
CUGA0024	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/20/75-12/08/76	1	16	
CUGA0025	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/20/75-09/08/76	0	13	
CUGA0026	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-01/13/92	1	44	
CUGA0031	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	6	174	
CUGA0032	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/24/90-08/23/93	2	50	
CUGA0035	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	6	178	
CUGA0036	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-08/10/92	2	60	
CUGA0037	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/22/93-12/19/94	1	34	
CUGA0040	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	1	40	
CUGA0047	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	7	182	
CUGA0059	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	7	199	
CUGA0066	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	6	178	
CUGA0069	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-08/10/92	2	59	
CUGA0075	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/05/85-06/05/85	0	1	
CUGA0077	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	6	92	
CUGA0090	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/82-05/18/82	0	1	
CUGA0012	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	35	
CUGA0012	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	35	
CUGA0012	No	00545	RESIDUE, SETTLEABLE (ML/L)	06/08/70-04/09/73	2	30	
CUGA0040	No	00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	06/05/85-06/05/85	0	1	
CUGA0006	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/03/91-05/03/92	1	3	
CUGA0008	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/03/91-04/17/93	2	4	
CUGA0011	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	01/07/92-10/16/92	0	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0015	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-06/29/92	0	2	
CUGA0017	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-06/29/92	0	2	
CUGA0021	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-02/23/94	1	4	
CUGA0022	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	02/03/92-11/13/92	0	15	
CUGA0030	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-01/13/92	1	44	
CUGA0031	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-01/10/94	3	68	
CUGA0032	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-06/14/93	2	67	
CUGA0033	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/24/90-08/10/92	1	46	
CUGA0035	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	4	87	
CUGA0036	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-08/10/92	2	59	
CUGA0037	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	4	81	
CUGA0038	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/12/93-12/12/93	0	1	
CUGA0041	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/01/91-08/10/92	0	12	
CUGA0045	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/05/93	3	66	
CUGA0046	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	1	40	
CUGA0047	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-11/01/94	4	74	
CUGA0049	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/08/91-06/15/92	0	13	
CUGA0056	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	3	77	
CUGA0059	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	4	110	
CUGA0066	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	3	86	
CUGA0067	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-10/07/93	3	72	
CUGA0070	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-08/10/92	2	57	
CUGA0071	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/10/90-06/15/92	1	23	
CUGA0073	Yes	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-08/10/92	2	59	
CUGA0077	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-06/14/93	2	64	
CUGA0024	No	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	06/22/67-12/08/76	9	24	
CUGA0025	No	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10/20/75-09/08/76	0	13	
CUGA0012	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	6	38	
CUGA0013	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/11/97-08/11/97	0	3	
CUGA0024	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/22/67-12/08/76	9	24	
CUGA0025	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/20/75-09/08/76	0	13	
CUGA0040	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0069	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/05/85-06/05/85	0	1	
CUGA0072	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/05/82-10/10/90	8	6	
CUGA0075	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/05/85-06/05/85	0	1	
CUGA0086	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/81-04/29/81	0	1	
CUGA0087	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/81-04/29/81	0	1	
CUGA0090	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0040	No	00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	10/06/83-10/06/83	0	1	
CUGA0069	No	00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	06/05/85-06/05/85	0	1	
CUGA0075	No	00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	06/05/85-06/05/85	0	1	
CUGA0006	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/07/92-04/08/96	4	9	
CUGA0012	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	6	38	
CUGA0015	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-08/12/96	4	21	
CUGA0022	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/10/96-03/10/96	0	1	
CUGA0024	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/22/67-04/25/68	0	8	
CUGA0026	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-01/13/92	1	44	
CUGA0031	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	6	175	
CUGA0032	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	6	114	
CUGA0033	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/24/90-08/23/93	2	50	
CUGA0035	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	6	178	
CUGA0036	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-08/10/92	2	60	
CUGA0037	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/22/93-12/19/94	1	34	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0041	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	1	40	
CUGA0047	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	7	182	
CUGA0059	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-08/10/92	2	60	
CUGA0077	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	6	92	
CUGA0006	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-08/12/96	4	21	
CUGA0022	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-01/13/92	1	44	
CUGA0031	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	6	175	
CUGA0032	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/24/90-08/23/93	2	50	
CUGA0035	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	6	178	
CUGA0036	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-08/10/92	2	60	
CUGA0037	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	1	40	
CUGA0047	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	7	182	
CUGA0059	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/16/91-01/13/92	0	2	
CUGA0061	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/27/64-03/12/73	8	7	
CUGA0062	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-08/10/92	2	60	
CUGA0077	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	6	92	
CUGA0012	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	6	38	
CUGA0024	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/22/67-04/25/68	0	8	
CUGA0012	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	6	38	
CUGA0040	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0069	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/05/85-06/05/85	0	1	
CUGA0072	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/05/82-10/10/90	8	6	
CUGA0075	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/05/85-06/05/85	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0090	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0040	No	00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	06/05/85-06/05/85	0	1	
CUGA0013	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/11/97-08/11/97	0	3	
CUGA0024	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/20/75-12/08/76	1	16	
CUGA0025	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/20/75-09/08/76	0	13	
CUGA0040	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0061	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/18/80-07/18/80	0	1	
CUGA0069	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/05/85-06/05/85	0	1	
CUGA0072	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/05/82-10/10/90	8	6	
CUGA0075	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/05/85-06/05/85	0	1	
CUGA0090	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/82-05/18/82	0	1	
CUGA0013	No	00635	NITROGEN, AMMONIA&ORG., TOTAL 1 DET (MG/L AS N)	08/11/97-08/11/97	0	3	
CUGA0079	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/20/65-10/20/65	0	1	
CUGA0081	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/21/65-10/21/65	0	1	
CUGA0013	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/11/97-08/11/97	0	3	
CUGA0024	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/22/67-12/08/76	9	24	
CUGA0025	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/20/75-09/08/76	0	13	
CUGA0040	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/18/82-05/18/82	0	1	
CUGA0061	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/72-07/18/80	7	2	
CUGA0069	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/05/85-06/05/85	0	1	
CUGA0072	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/05/82-10/10/90	8	6	
CUGA0075	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/05/85-06/05/85	0	1	
CUGA0090	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/18/82-05/18/82	0	1	
CUGA0006	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-08/12/96	4	21	
CUGA0022	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/10/96-03/10/96	0	1	
CUGA0024	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/22/67-12/08/76	9	22	
CUGA0025	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/20/75-09/08/76	0	10	
CUGA0026	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-01/13/92	1	44	
CUGA0031	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	6	175	
CUGA0032	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/24/90-08/23/93	2	50	
CUGA0035	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	6	178	
CUGA0036	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-08/10/92	2	60	
CUGA0037	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	1	40	
CUGA0047	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	7	182	
CUGA0059	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/10/90-03/23/93	2	24	
CUGA0072	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/05/82-10/10/90	8	5	
CUGA0073	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-08/10/92	2	60	
CUGA0077	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	6	92	
CUGA0040	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/18/82-05/18/82	0	1	
CUGA0069	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/05/85-06/05/85	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0072	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/05/82-10/10/90	8	6	
CUGA0075	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/05/85-06/05/85	0	1	
CUGA0090	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/18/82-05/18/82	0	1	
CUGA0006	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	0	2	
CUGA0008	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	0	2	
CUGA0011	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	0	2	
CUGA0015	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	4	18	
CUGA0017	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-12/05/93	1	4	
CUGA0021	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	4	18	
CUGA0022	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/20/92-08/12/96	4	22	
CUGA0026	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-01/13/92	1	5	
CUGA0031	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	27	
CUGA0032	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-08/12/96	5	12	
CUGA0033	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/25/91-06/29/92	1	6	
CUGA0035	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	28	
CUGA0036	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-06/29/92	1	6	
CUGA0037	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	27	
CUGA0039	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/05/93-11/28/94	0	10	
CUGA0041	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	0	3	
CUGA0043	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	4	19	
CUGA0045	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-12/05/93	3	12	
CUGA0046	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	0	3	
CUGA0047	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-08/12/96	5	27	
CUGA0051	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	0	3	
CUGA0053	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/28/91-06/15/92	0	3	
CUGA0054	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-06/15/92	0	2	
CUGA0055	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/15/95-03/06/96	1	5	
CUGA0056	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-06/15/92	1	5	
CUGA0058	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	28	
CUGA0060	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-01/13/92	0	1	
CUGA0062	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-01/13/92	0	1	
CUGA0065	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	28	
CUGA0066	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	29	
CUGA0067	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	6	29	
CUGA0069	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-06/29/92	1	7	
CUGA0071	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/26/91-03/23/93	1	3	
CUGA0073	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-06/29/92	1	7	
CUGA0075	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/05/85-06/05/85	0	1	
CUGA0077	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-03/23/93	2	11	
CUGA0013	No	00690	CARBON, TOTAL (MG/L AS C)	08/11/97-08/11/97	0	2	
CUGA0019	Yes	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	0	2	
CUGA0022	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	0	1	
CUGA0031	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	0	1	
CUGA0037	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	0	2	
CUGA0043	Yes	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	0	1	
CUGA0045	Yes	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	0	1	
CUGA0058	Yes	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	0	2	
CUGA0061	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	07/18/80-07/18/80	0	1	
CUGA0065	Yes	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	0	2	
CUGA0077	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	0	1	
CUGA0086	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/18/82-11/18/82	0	1	
CUGA0087	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/09/82-11/09/82	0	2	
CUGA0040	No	00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0040	No	00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	06/05/85-06/05/85	0	1	
CUGA0090	No	00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	05/18/82-05/18/82	0	1	
CUGA0040	No	00746	SULFIDE, DISSOLVED (MG/L AS S)	05/18/82-05/18/82	0	1	
CUGA0069	No	00746	SULFIDE, DISSOLVED (MG/L AS S)	06/05/85-06/05/85	0	1	
CUGA0075	No	00746	SULFIDE, DISSOLVED (MG/L AS S)	06/05/85-06/05/85	0	1	
CUGA0090	No	00746	SULFIDE, DISSOLVED (MG/L AS S)	05/18/82-05/18/82	0	1	
CUGA0001	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/07/92-04/08/96	4	9	
CUGA0013	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/11/97-08/11/97	0	1	
CUGA0015	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	4	26	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0017	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	4	21	
CUGA0022	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/10/96-03/10/96	0	1	
CUGA0025	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/20/75-09/08/76	0	12	
CUGA0026	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-01/13/92	1	44	
CUGA0031	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	6	175	
CUGA0032	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/24/90-08/23/93	2	50	
CUGA0035	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0036	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	2	60	
CUGA0037	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/22/93-12/19/94	1	34	
CUGA0040	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/01/91-03/03/97	5	40	
CUGA0044	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/06/53-09/08/58	5	2	
CUGA0045	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	40	
CUGA0047	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-07/27/92	2	51	
CUGA0057	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/18/64-03/18/64	0	1	
CUGA0058	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	182	
CUGA0059	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/16/91-01/13/92	0	2	
CUGA0061	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	16	60	T,S
CUGA0062	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/17/91-01/13/92	0	3	
CUGA0064	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/22/64	0	2	
CUGA0065	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	6	178	
CUGA0069	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-08/10/92	2	60	
CUGA0075	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	0	1	
CUGA0077	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	6	92	
CUGA0078	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/03/65-11/03/65	0	1	
CUGA0079	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-10/20/65	1	4	
CUGA0080	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0081	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/21/65-10/21/65	0	2	
CUGA0083	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	0	1	
CUGA0084	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-05/27/64	0	1	
CUGA0085	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0089	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0090	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0091	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0092	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/10/64-06/10/64	0	1	
CUGA0093	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0094	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/15/64-05/15/64	0	1	
CUGA0095	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-11/23/65	1	4	
CUGA0097	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/17/64	0	3	
CUGA0001	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	09/11/61-09/11/61	0	1	
CUGA0044	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/06/53-09/08/58	5	2	
CUGA0057	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/18/64-03/18/64	0	1	
CUGA0061	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	16	60	T,S
CUGA0064	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/22/64	0	2	
CUGA0078	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/03/65-11/03/65	0	1	
CUGA0079	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-10/20/65	1	4	
CUGA0080	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0081	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/21/65-10/21/65	0	2	
CUGA0083	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/21/65-07/21/65	0	1	
CUGA0084	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-05/27/64	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0085	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/18/64	0	3	
CUGA0089	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0091	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0092	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/10/64-06/10/64	0	1	
CUGA0093	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	0	1	
CUGA0094	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/15/64-05/15/64	0	1	
CUGA0095	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-11/23/65	1	4	
CUGA0097	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/17/64	0	3	
CUGA0001	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-08/12/96	4	21	
CUGA0022	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-01/13/92	1	44	
CUGA0031	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	6	175	
CUGA0032	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/24/90-08/23/93	2	50	
CUGA0035	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	6	178	
CUGA0036	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-08/10/92	2	60	
CUGA0037	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/01/91-03/03/97	5	40	
CUGA0044	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/06/53-08/06/53	0	1	
CUGA0045	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	1	40	
CUGA0047	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	7	182	
CUGA0059	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/16/91-01/13/92	0	2	
CUGA0061	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	16	23	S
CUGA0062	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	7	199	
CUGA0066	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-08/10/92	2	60	
CUGA0077	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	6	92	
CUGA0079	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-05/27/64	0	1	
CUGA0085	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-05/27/64	0	1	
CUGA0092	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/10/64-06/10/64	0	1	
CUGA0024	No	00916	CALCIUM, TOTAL (MG/L AS CA)	06/22/67-12/08/76	9	23	
CUGA0025	No	00916	CALCIUM, TOTAL (MG/L AS CA)	10/20/75-09/08/76	0	12	
CUGA0040	No	00916	CALCIUM, TOTAL (MG/L AS CA)	05/18/82-05/18/82	0	1	
CUGA0069	No	00916	CALCIUM, TOTAL (MG/L AS CA)	06/05/85-06/05/85	0	1	
CUGA0075	No	00916	CALCIUM, TOTAL (MG/L AS CA)	06/05/85-06/05/85	0	1	
CUGA0086	No	00916	CALCIUM, TOTAL (MG/L AS CA)	04/29/81-04/29/81	0	1	
CUGA0087	No	00916	CALCIUM, TOTAL (MG/L AS CA)	04/29/81-04/29/81	0	1	
CUGA0090	No	00916	CALCIUM, TOTAL (MG/L AS CA)	05/18/82-05/18/82	0	1	
CUGA0001	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/11/61-09/11/61	0	1	
CUGA0002	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	0	1	
CUGA0003	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	0	1	
CUGA0006	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/03/91-10/15/93	2	8	
CUGA0007	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-08/12/96	4	26	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0017	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/09/96-05/21/97	0	4	
CUGA0020	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/17/78-05/17/78	0	1	
CUGA0021	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-08/12/96	4	21	
CUGA0022	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-01/13/92	1	44	
CUGA0031	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	6	175	
CUGA0032	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/24/90-08/23/93	2	50	
CUGA0035	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	6	178	
CUGA0036	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-08/10/92	2	60	
CUGA0037	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/01/91-03/03/97	5	40	
CUGA0044	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/06/53-08/06/53	0	1	
CUGA0045	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	1	40	
CUGA0047	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	7	182	
CUGA0059	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/16/91-01/13/92	0	2	
CUGA0061	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	16	23	S
CUGA0062	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-08/10/92	2	60	
CUGA0077	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	6	92	
CUGA0079	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-05/27/64	0	1	
CUGA0082	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/78-06/18/78	0	1	
CUGA0085	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-05/27/64	0	1	
CUGA0092	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/64-06/10/64	0	1	
CUGA0024	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/22/67-12/08/76	9	23	
CUGA0025	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	10/20/75-09/08/76	0	13	
CUGA0040	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	05/18/82-05/18/82	0	1	
CUGA0069	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/05/85-06/05/85	0	1	
CUGA0075	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/05/85-06/05/85	0	1	
CUGA0086	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	04/29/81-04/29/81	0	1	
CUGA0087	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	04/29/81-04/29/81	0	1	
CUGA0090	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	05/18/82-05/18/82	0	1	
CUGA0024	No	00929	SODIUM, TOTAL (MG/L AS NA)	06/22/67-12/08/76	9	24	
CUGA0025	No	00929	SODIUM, TOTAL (MG/L AS NA)	10/20/75-09/08/76	0	13	
CUGA0040	No	00929	SODIUM, TOTAL (MG/L AS NA)	05/18/82-05/18/82	0	1	
CUGA0069	No	00929	SODIUM, TOTAL (MG/L AS NA)	06/05/85-06/05/85	0	1	
CUGA0075	No	00929	SODIUM, TOTAL (MG/L AS NA)	06/05/85-06/05/85	0	1	
CUGA0086	No	00929	SODIUM, TOTAL (MG/L AS NA)	04/29/81-04/29/81	0	1	
CUGA0087	No	00929	SODIUM, TOTAL (MG/L AS NA)	04/29/81-04/29/81	0	1	
CUGA0090	No	00929	SODIUM, TOTAL (MG/L AS NA)	05/18/82-05/18/82	0	1	
CUGA0001	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/11/61-09/11/61	0	1	
CUGA0002	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	0	1	
CUGA0003	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	0	1	
CUGA0006	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/03/91-10/15/93	2	8	
CUGA0007	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/09/96-05/21/97	0	4	
CUGA0020	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/17/78-05/17/78	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0021	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-08/12/96	4	21	
CUGA0022	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-01/13/92	1	44	
CUGA0031	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	6	175	
CUGA0032	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/24/90-08/23/93	2	50	
CUGA0035	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	6	178	
CUGA0036	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-08/10/92	2	60	
CUGA0037	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/01/91-03/03/97	5	39	
CUGA0044	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/06/53-08/06/53	0	1	
CUGA0045	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	1	40	
CUGA0047	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	1	42	
CUGA0052	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/07/78-05/07/78	0	1	
CUGA0053	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	7	182	
CUGA0059	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/16/91-01/13/92	0	2	
CUGA0061	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/64-07/18/80	15	8	
CUGA0062	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-08/10/92	2	60	
CUGA0077	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	6	92	
CUGA0082	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/78-06/18/78	0	1	
CUGA0092	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/64-06/10/64	0	1	
CUGA0001	No	00931	SODIUM ADSORPTION RATIO	09/11/61-09/11/61	0	1	
CUGA0061	No	00931	SODIUM ADSORPTION RATIO	10/02/67-07/18/80	12	6	
CUGA0001	No	00932	SODIUM, PERCENT	09/11/61-09/11/61	0	1	
CUGA0061	No	00932	SODIUM, PERCENT	08/26/64-07/18/80	15	8	
CUGA0084	No	00932	SODIUM, PERCENT	05/27/64-05/27/64	0	1	
CUGA0001	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-08/12/96	4	21	
CUGA0022	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-01/13/92	1	44	
CUGA0031	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	6	175	
CUGA0032	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/24/90-08/23/93	2	50	
CUGA0035	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	6	178	
CUGA0036	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-08/10/92	2	60	
CUGA0037	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/01/91-03/03/97	5	39	
CUGA0044	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/06/53-08/06/53	0	1	
CUGA0045	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	1	40	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0047	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	7	182	
CUGA0059	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/16/91-01/13/92	0	2	
CUGA0061	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/64-07/18/80	15	8	
CUGA0062	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-08/10/92	2	60	
CUGA0077	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	6	92	
CUGA0092	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/64-06/10/64	0	1	
CUGA0024	No	00937	POTASSIUM, TOTAL MG/L AS K)	06/22/67-12/08/76	9	24	
CUGA0025	No	00937	POTASSIUM, TOTAL MG/L AS K)	10/20/75-09/08/76	0	13	
CUGA0040	No	00937	POTASSIUM, TOTAL MG/L AS K)	05/18/82-05/18/82	0	1	
CUGA0069	No	00937	POTASSIUM, TOTAL MG/L AS K)	06/05/85-06/05/85	0	1	
CUGA0075	No	00937	POTASSIUM, TOTAL MG/L AS K)	06/05/85-06/05/85	0	1	
CUGA0090	No	00937	POTASSIUM, TOTAL MG/L AS K)	05/18/82-05/18/82	0	1	
CUGA0001	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/11/61-09/11/61	0	1	
CUGA0004	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/04/80-02/26/81	0	3	
CUGA0005	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/04/80-02/26/81	0	3	
CUGA0024	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/67-12/08/76	9	24	
CUGA0025	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/20/75-09/08/76	0	13	
CUGA0040	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/18/82-05/18/82	0	1	
CUGA0044	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/06/53-09/08/58	5	2	
CUGA0057	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/18/64-03/18/64	0	1	
CUGA0061	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	16	60	T,S
CUGA0064	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/22/64	0	2	
CUGA0069	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/05/85-06/05/85	0	1	
CUGA0078	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/03/65-11/03/65	0	1	
CUGA0079	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-10/20/65	1	5	
CUGA0080	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/18/64	0	3	
CUGA0081	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/28/65-10/21/65	0	3	
CUGA0083	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/21/65-07/21/65	0	1	
CUGA0084	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-05/27/64	0	1	
CUGA0085	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/18/64	0	3	
CUGA0089	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	0	1	
CUGA0090	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/18/82-05/18/82	0	1	
CUGA0091	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	0	1	
CUGA0092	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/10/64-06/10/64	0	1	
CUGA0093	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	0	1	
CUGA0094	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/15/64-05/15/64	0	1	
CUGA0095	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-11/23/65	1	4	
CUGA0097	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/17/64	0	3	
CUGA0006	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-08/12/96	4	21	
CUGA0022	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-01/13/92	1	44	
CUGA0031	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	6	175	
CUGA0032	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/24/90-08/23/93	2	50	
CUGA0035	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	6	178	
CUGA0036	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-08/10/92	2	60	
CUGA0037	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/09/92-03/09/92	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0039	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/22/93-12/19/94	1	34	
CUGA0041	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	1	40	
CUGA0047	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	7	182	
CUGA0059	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-08/10/92	2	60	
CUGA0077	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	6	92	
CUGA0001	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/11/61-09/11/61	0	1	
CUGA0004	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/80-10/02/80	0	2	
CUGA0005	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/80-10/02/80	0	2	
CUGA0024	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/67-12/08/76	9	24	
CUGA0025	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/20/75-09/08/76	0	13	
CUGA0040	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/82-05/18/82	0	1	
CUGA0044	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/06/53-09/08/58	5	2	
CUGA0057	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/18/64-03/18/64	0	1	
CUGA0061	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	16	66	T,S
CUGA0064	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/22/64	0	2	
CUGA0069	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/05/85-06/05/85	0	1	
CUGA0075	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/05/85-06/05/85	0	1	
CUGA0078	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/03/65-11/03/65	0	1	
CUGA0079	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-10/20/65	1	4	
CUGA0080	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/18/64	0	3	
CUGA0081	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/21/65-10/21/65	0	2	
CUGA0083	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/21/65-07/21/65	0	1	
CUGA0084	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-05/27/64	0	1	
CUGA0085	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/18/64	0	3	
CUGA0089	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	0	1	
CUGA0090	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/82-05/18/82	0	1	
CUGA0091	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	0	1	
CUGA0092	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/64-06/10/64	0	1	
CUGA0093	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	0	1	
CUGA0094	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/15/64-05/15/64	0	1	
CUGA0095	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-11/23/65	1	4	
CUGA0097	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/17/64	0	3	
CUGA0004	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/26/81-02/26/81	0	1	
CUGA0005	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/26/81-02/26/81	0	1	
CUGA0006	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-08/12/96	4	21	
CUGA0022	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-01/13/92	1	44	
CUGA0031	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	6	175	
CUGA0032	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/24/90-08/23/93	2	50	
CUGA0035	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	6	178	
CUGA0036	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-08/10/92	2	60	
CUGA0037	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/22/93-12/19/94	1	34	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0041	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	1	40	
CUGA0047	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	7	182	
CUGA0059	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-08/10/92	2	60	
CUGA0077	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	6	92	
CUGA0001	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/11/61-09/11/61	0	1	
CUGA0006	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/21/97-05/21/97	0	1	
CUGA0021	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-08/12/96	4	21	
CUGA0022	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/92-08/12/96	4	42	
CUGA0023	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/13/92	1	44	
CUGA0031	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	6	174	
CUGA0032	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/24/90-08/23/93	2	50	
CUGA0035	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	6	178	
CUGA0036	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-08/10/92	2	60	
CUGA0037	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	7	178	
CUGA0038	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/22/93-12/19/94	1	34	
CUGA0040	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/01/91-08/12/96	4	39	
CUGA0044	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/06/53-09/08/58	5	2	
CUGA0045	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	3	91	
CUGA0046	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	1	40	
CUGA0047	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-07/27/92	2	51	
CUGA0057	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/18/64-03/18/64	0	1	
CUGA0058	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	7	179	
CUGA0059	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/16/91-01/13/92	0	2	
CUGA0061	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	16	31	T,S
CUGA0062	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	7	195	
CUGA0066	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	6	178	
CUGA0069	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-08/10/92	2	60	
CUGA0075	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/05/85-06/05/85	0	1	
CUGA0077	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	3	91	
CUGA0078	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/03/65-11/03/65	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0079	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-02/24/65	0	2	
CUGA0085	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-05/27/64	0	1	
CUGA0089	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	0	1	
CUGA0090	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/82-05/18/82	0	1	
CUGA0091	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	0	1	
CUGA0092	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/10/64-06/10/64	0	1	
CUGA0093	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	0	1	
CUGA0094	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/15/64-05/15/64	0	1	
CUGA0024	No	00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/75-12/08/76	1	16	
CUGA0025	No	00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/75-09/08/76	0	13	
CUGA0001	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/11/61-09/11/61	0	1	
CUGA0024	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/75-12/08/76	1	16	
CUGA0025	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/75-09/08/76	0	13	
CUGA0044	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/06/53-08/06/53	0	1	
CUGA0061	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	16	36	T,S
CUGA0079	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-05/27/64	0	1	
CUGA0085	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-05/27/64	0	1	
CUGA0092	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/64-06/10/64	0	1	
CUGA0024	No	00956	SILICA, TOTAL (MG/L AS SI02)	06/22/67-04/25/68	0	8	
CUGA0006	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	0	3	
CUGA0008	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	0	3	
CUGA0011	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	0	3	
CUGA0015	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-08/12/96	4	17	
CUGA0017	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-12/05/93	1	5	
CUGA0021	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-08/12/96	4	17	
CUGA0022	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/20/92-08/12/96	4	20	
CUGA0026	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	11/07/95-11/07/95	0	1	
CUGA0030	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-01/13/92	1	10	
CUGA0031	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0032	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	16	
CUGA0033	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/24/90-06/29/92	1	7	
CUGA0035	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0036	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-06/29/92	2	11	
CUGA0037	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0039	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/05/93-11/28/94	0	9	
CUGA0041	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/16/91	1	6	
CUGA0043	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/29/92-08/12/96	4	18	
CUGA0045	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/05/93	3	17	
CUGA0046	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/17/91	1	6	
CUGA0047	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	6	29	
CUGA0051	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/17/91	1	7	
CUGA0053	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	0	2	
CUGA0054	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/10/95-03/06/96	0	3	
CUGA0056	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-01/13/92	1	9	
CUGA0058	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0060	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	0	2	
CUGA0061	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/26/64-09/18/64	0	2	
CUGA0062	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	6	31	
CUGA0066	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0067	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6	31	
CUGA0070	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-06/29/92	2	9	
CUGA0071	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/24/90-04/26/91	0	3	
CUGA0073	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-06/29/92	2	9	
CUGA0077	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-12/17/92	2	15	
CUGA0084	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/27/64-05/27/64	0	1	
CUGA0012	No	01002	ARSENIC, TOTAL (UG/L AS AS)	02/28/71-07/29/76	5	10	
CUGA0013	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/11/97-08/11/97	0	3	
CUGA0040	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/18/82-05/18/82	0	1	
CUGA0061	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/18/80-07/18/80	0	1	
CUGA0069	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/05/85-06/05/85	0	1	
CUGA0075	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/05/85-06/05/85	0	1	
CUGA0086	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/29/81-04/29/81	0	1	
CUGA0087	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/29/81-04/29/81	0	1	
CUGA0090	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/18/82-05/18/82	0	1	
CUGA0009	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0006	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	0	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0008	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	0	3	
CUGA0011	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	0	3	
CUGA0015	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-08/12/96	4	19	
CUGA0017	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-12/05/93	1	5	
CUGA0021	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-08/12/96	4	19	
CUGA0022	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/20/92-08/12/96	4	23	
CUGA0026	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-01/13/92	1	12	
CUGA0031	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0032	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	20	
CUGA0033	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/24/90-06/29/92	1	9	
CUGA0035	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0036	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-06/29/92	2	13	
CUGA0037	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0039	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/05/93-11/28/94	0	10	
CUGA0041	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/16/91	1	8	
CUGA0043	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/29/92-08/12/96	4	21	
CUGA0045	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/05/93	3	21	
CUGA0046	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/17/91	1	8	
CUGA0047	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	6	36	
CUGA0051	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/17/91	1	9	
CUGA0053	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	02/15/95-03/06/96	1	4	
CUGA0056	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-01/13/92	1	11	
CUGA0058	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0060	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	6	40	
CUGA0066	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0067	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	6	38	
CUGA0070	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-06/29/92	2	11	
CUGA0071	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/24/90-03/23/93	2	4	
CUGA0073	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-06/29/92	2	11	
CUGA0077	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-03/23/93	2	19	
CUGA0040	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/18/82-05/18/82	0	1	
CUGA0061	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/18/80-07/18/80	0	1	
CUGA0069	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/05/85-06/05/85	0	1	
CUGA0075	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/05/85-06/05/85	0	1	
CUGA0086	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/29/81-04/29/81	0	1	
CUGA0087	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/29/81-04/29/81	0	1	
CUGA0090	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/18/82-05/18/82	0	1	
CUGA0019	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	0	2	
CUGA0022	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	0	1	
CUGA0031	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	0	1	
CUGA0037	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	0	2	
CUGA0040	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/18/82-05/18/82	0	1	
CUGA0043	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	0	1	
CUGA0045	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	0	1	
CUGA0058	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	0	2	
CUGA0065	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	0	2	
CUGA0069	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/05/85-06/05/85	0	1	
CUGA0075	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/05/85-06/05/85	0	1	
CUGA0077	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	0	1	
CUGA0086	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	04/29/81-04/29/81	0	1	
CUGA0087	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	04/29/81-04/29/81	0	1	
CUGA0090	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/18/82-05/18/82	0	1	
CUGA0006	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01020	BORON, DISSOLVED (UG/L AS B)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/21/97-05/21/97	0	1	
CUGA0021	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-08/12/96	4	21	
CUGA0022	No	01020	BORON, DISSOLVED (UG/L AS B)	02/03/92-08/12/96	4	42	
CUGA0023	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01020	BORON, DISSOLVED (UG/L AS B)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/13/92	1	44	
CUGA0031	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	6	174	
CUGA0032	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	6	115	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0033	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/24/90-08/23/93	2	50	
CUGA0035	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	6	177	
CUGA0036	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-08/10/92	2	60	
CUGA0037	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	7	178	
CUGA0038	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01020	BORON, DISSOLVED (UG/L AS B)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/01/91-08/12/96	4	39	
CUGA0045	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	3	91	
CUGA0046	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	1	40	
CUGA0047	No	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	6	171	
CUGA0049	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01020	BORON, DISSOLVED (UG/L AS B)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	7	179	
CUGA0059	No	01020	BORON, DISSOLVED (UG/L AS B)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	7	194	
CUGA0066	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	6	176	
CUGA0070	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-08/10/92	2	60	
CUGA0077	No	01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	3	91	
CUGA0006	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	0	3	
CUGA0008	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	0	3	
CUGA0011	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	0	3	
CUGA0015	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/04/92-08/12/96	4	19	
CUGA0017	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/04/92-12/05/93	1	5	
CUGA0021	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/29/92-08/12/96	4	18	
CUGA0022	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/20/92-08/12/96	4	22	
CUGA0026	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-01/13/92	1	12	
CUGA0031	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	34	
CUGA0032	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	19	
CUGA0033	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/24/90-06/29/92	1	9	
CUGA0035	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	35	
CUGA0036	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-06/29/92	2	13	
CUGA0037	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	35	
CUGA0039	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/05/93-11/28/94	0	9	
CUGA0040	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/16/91	1	8	
CUGA0043	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/29/92-08/12/96	4	20	
CUGA0045	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/05/93	3	20	
CUGA0046	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/17/91	1	8	
CUGA0047	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	6	33	
CUGA0051	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/17/91	1	9	
CUGA0053	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	02/15/95-03/06/96	1	4	
CUGA0056	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-01/13/92	1	11	
CUGA0058	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	35	
CUGA0060	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/16/91-01/13/92	0	2	
CUGA0061	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/26/64-09/18/64	0	2	
CUGA0062	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	6	37	
CUGA0066	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	35	
CUGA0067	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	6	35	
CUGA0070	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-06/29/92	2	11	
CUGA0071	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/24/90-03/23/93	2	4	
CUGA0073	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-06/29/92	2	11	
CUGA0077	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-03/23/93	2	18	
CUGA0084	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/27/64-05/27/64	0	1	
CUGA0090	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/82-05/18/82	0	1	
CUGA0012	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/05/70-07/29/76	5	16	
CUGA0013	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/11/97-08/11/97	0	3	
CUGA0040	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/18/82-05/18/82	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0061	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/18/80-07/18/80	0	1	
CUGA0069	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/05/85-06/05/85	0	1	
CUGA0075	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/05/85-06/05/85	0	1	
CUGA0086	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/29/81-04/29/81	0	1	
CUGA0087	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/29/81-04/29/81	0	1	
CUGA0090	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/18/82-05/18/82	0	1	
CUGA0009	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0009	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0006	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-08/12/96	4	21	
CUGA0022	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-01/13/92	1	44	
CUGA0031	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	6	175	
CUGA0032	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/24/90-08/23/93	2	50	
CUGA0035	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	6	178	
CUGA0036	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-08/10/92	2	60	
CUGA0037	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/22/93-12/19/94	1	34	
CUGA0040	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	1	40	
CUGA0047	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	7	182	
CUGA0059	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-08/10/92	2	60	
CUGA0077	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	6	92	
CUGA0090	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/18/82-05/18/82	0	1	
CUGA0061	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	08/26/64-09/18/64	0	2	
CUGA0084	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/27/64-05/27/64	0	1	
CUGA0012	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/30/70-07/29/76	6	23	
CUGA0013	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/11/97-08/11/97	0	3	
CUGA0040	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/82-05/18/82	0	1	
CUGA0061	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/26/64-07/18/80	15	4	
CUGA0069	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/05/85-06/05/85	0	1	
CUGA0075	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/05/85-06/05/85	0	1	
CUGA0084	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/27/64-05/27/64	0	1	
CUGA0086	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/29/81-04/29/81	0	1	
CUGA0087	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/29/81-04/29/81	0	1	
CUGA0090	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/82-05/18/82	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0006	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	03/03/91-10/15/93	2	8	
CUGA0011	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	01/07/92-10/15/93	1	7	
CUGA0015	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-03/23/93	0	7	
CUGA0017	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-01/11/93	0	5	
CUGA0021	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-03/23/93	0	7	
CUGA0022	No	01035	COBALT, DISSOLVED (UG/L AS CO)	02/03/92-03/23/93	1	26	
CUGA0026	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	07/06/93-07/06/93	0	1	
CUGA0027	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-01/13/92	1	44	
CUGA0031	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	3	95	
CUGA0032	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	3	92	
CUGA0033	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/24/90-08/23/93	2	50	
CUGA0035	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	3	99	
CUGA0036	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-08/10/92	2	60	
CUGA0037	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	3	97	
CUGA0038	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	02/22/93-07/06/93	0	2	
CUGA0041	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/01/91-03/23/93	1	24	
CUGA0045	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	3	89	
CUGA0046	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	1	40	
CUGA0047	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	3	92	
CUGA0049	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	10/08/91-06/15/92	0	13	
CUGA0056	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	3	99	
CUGA0059	No	01035	COBALT, DISSOLVED (UG/L AS CO)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/16/91-01/13/92	0	2	
CUGA0061	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/26/64-09/18/64	0	2	
CUGA0062	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	3	110	
CUGA0066	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	3	98	
CUGA0067	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	3	98	
CUGA0070	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-08/10/92	2	60	
CUGA0077	No	01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	3	90	
CUGA0084	No	01035	COBALT, DISSOLVED (UG/L AS CO)	05/27/64-05/27/64	0	1	
CUGA0086	No	01037	COBALT, TOTAL (UG/L AS CO)	04/29/81-04/29/81	0	1	
CUGA0087	No	01037	COBALT, TOTAL (UG/L AS CO)	04/29/81-04/29/81	0	1	
CUGA0006	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-08/12/96	4	21	
CUGA0022	No	01040	COPPER, DISSOLVED (UG/L AS CU)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-01/13/92	1	44	
CUGA0031	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	6	175	
CUGA0032	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/24/90-08/23/93	2	50	
CUGA0035	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	6	178	
CUGA0036	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-08/10/92	2	60	
CUGA0037	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	02/22/93-12/19/94	1	34	
CUGA0040	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	1	40	
CUGA0047	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	05/06/91-07/27/92	1	28	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0054	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	7	182	
CUGA0059	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-08/10/92	2	60	
CUGA0077	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	6	92	
CUGA0090	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/82-05/18/82	0	1	
CUGA0012	No	01042	COPPER, TOTAL (UG/L AS CU)	03/30/70-07/29/76	6	23	
CUGA0013	No	01042	COPPER, TOTAL (UG/L AS CU)	08/11/97-08/11/97	0	3	
CUGA0024	No	01042	COPPER, TOTAL (UG/L AS CU)	06/22/67-04/25/68	0	7	
CUGA0040	No	01042	COPPER, TOTAL (UG/L AS CU)	05/18/82-05/18/82	0	1	
CUGA0061	No	01042	COPPER, TOTAL (UG/L AS CU)	07/18/80-07/18/80	0	1	
CUGA0069	No	01042	COPPER, TOTAL (UG/L AS CU)	06/05/85-06/05/85	0	1	
CUGA0075	No	01042	COPPER, TOTAL (UG/L AS CU)	06/05/85-06/05/85	0	1	
CUGA0086	No	01042	COPPER, TOTAL (UG/L AS CU)	04/29/81-04/29/81	0	1	
CUGA0087	No	01042	COPPER, TOTAL (UG/L AS CU)	04/29/81-04/29/81	0	1	
CUGA0090	No	01042	COPPER, TOTAL (UG/L AS CU)	05/18/82-05/18/82	0	1	
CUGA0009	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0061	No	01044	IRON, SUSPENDED (UG/L AS FE)	06/07/79-03/26/81	1	7	
CUGA0004	No	01045	IRON, TOTAL (UG/L AS FE)	09/04/80-02/26/81	0	3	
CUGA0005	No	01045	IRON, TOTAL (UG/L AS FE)	09/04/80-02/26/81	0	3	
CUGA0012	No	01045	IRON, TOTAL (UG/L AS FE)	11/05/70-04/07/71	0	2	
CUGA0013	No	01045	IRON, TOTAL (UG/L AS FE)	08/11/97-08/11/97	0	3	
CUGA0024	No	01045	IRON, TOTAL (UG/L AS FE)	06/22/67-12/08/76	9	23	
CUGA0025	No	01045	IRON, TOTAL (UG/L AS FE)	10/20/75-09/08/76	0	13	
CUGA0040	No	01045	IRON, TOTAL (UG/L AS FE)	05/18/82-05/18/82	0	1	
CUGA0061	No	01045	IRON, TOTAL (UG/L AS FE)	03/12/73-03/26/81	8	8	
CUGA0064	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	0	2	
CUGA0069	No	01045	IRON, TOTAL (UG/L AS FE)	06/05/85-06/05/85	0	1	
CUGA0075	No	01045	IRON, TOTAL (UG/L AS FE)	06/05/85-06/05/85	0	1	
CUGA0079	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	0	2	
CUGA0080	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/18/64	0	3	
CUGA0085	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/18/64	0	3	
CUGA0090	No	01045	IRON, TOTAL (UG/L AS FE)	05/18/82-05/18/82	0	1	
CUGA0095	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	0	2	
CUGA0097	No	01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/17/64	0	3	
CUGA0004	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/04/80-02/26/81	0	3	
CUGA0005	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-08/12/96	4	21	
CUGA0022	No	01046	IRON, DISSOLVED (UG/L AS FE)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/10/96-03/10/96	0	1	
CUGA0024	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/26/67-12/08/76	9	21	
CUGA0025	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/20/75-09/08/76	0	12	
CUGA0026	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-01/13/92	1	44	
CUGA0031	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	6	175	
CUGA0032	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/24/90-08/23/93	2	50	
CUGA0035	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	6	178	
CUGA0036	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-08/10/92	2	60	
CUGA0037	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	02/22/93-12/19/94	1	34	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0040	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	1	40	
CUGA0047	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	7	182	
CUGA0059	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/16/91-01/13/92	0	2	
CUGA0061	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/11/66-03/26/81	14	12	
CUGA0062	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-08/10/92	2	60	
CUGA0077	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	6	92	
CUGA0090	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/18/82-05/18/82	0	1	
CUGA0024	No	01047	IRON, FERROUS (UG/L AS FE)	06/22/67-04/25/68	0	8	
CUGA0006	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-08/12/96	4	21	
CUGA0022	No	01049	LEAD, DISSOLVED (UG/L AS PB)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-01/13/92	1	44	
CUGA0031	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	6	175	
CUGA0032	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/24/90-08/23/93	2	50	
CUGA0035	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	6	178	
CUGA0036	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-08/10/92	2	60	
CUGA0037	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	02/22/93-12/19/94	1	34	
CUGA0040	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	1	40	
CUGA0047	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	7	182	
CUGA0059	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/16/91-01/13/92	0	2	
CUGA0061	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/26/64-09/18/64	0	2	
CUGA0062	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-08/10/92	2	60	
CUGA0077	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	6	92	
CUGA0084	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/27/64-05/27/64	0	1	
CUGA0090	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/82-05/18/82	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0012	No	01051	LEAD, TOTAL (UG/L AS PB)	11/05/70-07/29/76	5	21	
CUGA0013	No	01051	LEAD, TOTAL (UG/L AS PB)	08/11/97-08/11/97	0	3	
CUGA0040	No	01051	LEAD, TOTAL (UG/L AS PB)	05/18/82-05/18/82	0	1	
CUGA0061	No	01051	LEAD, TOTAL (UG/L AS PB)	07/18/80-07/18/80	0	1	
CUGA0069	No	01051	LEAD, TOTAL (UG/L AS PB)	06/05/85-06/05/85	0	1	
CUGA0075	No	01051	LEAD, TOTAL (UG/L AS PB)	06/05/85-06/05/85	0	1	
CUGA0086	No	01051	LEAD, TOTAL (UG/L AS PB)	04/29/81-04/29/81	0	1	
CUGA0087	No	01051	LEAD, TOTAL (UG/L AS PB)	04/29/81-04/29/81	0	1	
CUGA0090	No	01051	LEAD, TOTAL (UG/L AS PB)	05/18/82-05/18/82	0	1	
CUGA0009	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0040	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0061	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	06/07/79-03/26/81	1	7	
CUGA0004	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/04/80-02/26/81	0	3	
CUGA0005	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	01/07/92-04/08/96	4	9	
CUGA0012	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/30/70-04/07/71	1	2	
CUGA0013	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/11/97-08/11/97	0	3	
CUGA0015	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-08/12/96	4	21	
CUGA0022	No	01055	MANGANESE, TOTAL (UG/L AS MN)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	03/10/96-03/10/96	0	1	
CUGA0024	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/22/67-12/08/76	9	23	
CUGA0025	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/20/75-09/08/76	0	13	
CUGA0026	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-01/13/92	1	44	
CUGA0031	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	6	174	
CUGA0032	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/24/90-08/23/93	2	50	
CUGA0035	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	6	178	
CUGA0036	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-08/10/92	2	60	
CUGA0037	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	02/22/93-12/19/94	1	34	
CUGA0040	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	1	40	
CUGA0047	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	7	181	
CUGA0059	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/16/91-01/13/92	0	2	
CUGA0061	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-03/26/81	16	38	T
CUGA0062	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/17/91-01/13/92	0	3	
CUGA0064	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/22/64	0	2	
CUGA0065	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	7	197	
CUGA0066	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	6	178	
CUGA0069	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-08/10/92	2	60	
CUGA0075	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/05/85-06/05/85	0	1	
CUGA0077	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	6	92	
CUGA0079	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-10/20/65	1	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0080	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/18/64	0	3	
CUGA0081	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/21/65-10/21/65	0	1	
CUGA0084	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-05/27/64	0	1	
CUGA0085	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/18/64	0	3	
CUGA0086	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/29/81-04/29/81	0	1	
CUGA0087	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/29/81-04/29/81	0	1	
CUGA0090	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/18/82-05/18/82	0	1	
CUGA0095	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-11/23/65	1	4	
CUGA0097	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/17/64	0	3	
CUGA0002	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	0	1	
CUGA0003	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	0	1	
CUGA0004	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/04/80-02/26/81	0	3	
CUGA0005	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/04/80-02/26/81	0	3	
CUGA0006	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/03/91-10/15/93	2	8	
CUGA0007	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/09/96-05/21/97	0	4	
CUGA0020	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/17/78-05/17/78	0	1	
CUGA0021	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-08/12/96	4	21	
CUGA0022	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/10/96-03/10/96	0	1	
CUGA0024	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/67-12/08/76	9	19	
CUGA0025	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/20/75-09/08/76	0	12	
CUGA0026	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-01/13/92	1	44	
CUGA0031	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	6	174	
CUGA0032	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/24/90-08/23/93	2	50	
CUGA0035	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	6	177	
CUGA0036	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-08/10/92	2	60	
CUGA0037	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	02/22/93-12/19/94	1	34	
CUGA0040	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	1	40	
CUGA0047	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	1	42	
CUGA0052	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/07/78-05/07/78	0	1	
CUGA0053	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	7	182	
CUGA0059	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/16/91-01/13/92	0	2	
CUGA0061	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/11/66-03/26/81	14	12	
CUGA0062	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	7	197	
CUGA0066	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-08/10/92	2	60	
CUGA0077	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	6	92	
CUGA0082	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/78-06/18/78	0	1	
CUGA0090	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/82-05/18/82	0	1	
CUGA0086	No	01059	THALLIUM, TOTAL (UG/L AS TL)	04/29/81-04/29/81	0	1	
CUGA0087	No	01059	THALLIUM, TOTAL (UG/L AS TL)	04/29/81-04/29/81	0	1	
CUGA0006	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/03/91-10/16/92	1	3	
CUGA0008	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/03/91-10/16/92	1	3	
CUGA0011	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/21/92-10/16/92	0	2	
CUGA0015	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	4	18	
CUGA0017	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-12/05/93	1	4	
CUGA0021	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	4	18	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0022	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	04/20/92-08/12/96	4	22	
CUGA0026	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-01/13/92	1	30	
CUGA0031	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0032	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	37	
CUGA0033	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/24/90-06/29/92	1	18	
CUGA0035	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0036	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-06/29/92	2	31	
CUGA0037	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0039	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/05/93-11/28/94	0	9	
CUGA0041	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/16/91	1	26	
CUGA0043	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	4	20	
CUGA0045	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/05/93	3	40	
CUGA0046	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/17/91	1	27	
CUGA0047	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	6	51	
CUGA0049	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/10/90-12/20/90	0	2	
CUGA0051	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/17/91	1	27	
CUGA0053	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	02/15/95-03/06/96	1	4	
CUGA0056	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-01/13/92	1	30	
CUGA0058	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0060	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	6	56	
CUGA0066	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0067	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	6	54	
CUGA0070	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-06/29/92	2	29	
CUGA0071	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/10/90-03/23/93	2	14	
CUGA0073	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-06/29/92	2	30	
CUGA0077	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-03/23/93	2	36	
CUGA0086	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	04/29/81-04/29/81	0	1	
CUGA0087	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	04/29/81-04/29/81	0	1	
CUGA0086	No	01064	TELLURIUM, TOTAL IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0087	No	01064	TELLURIUM, TOTAL IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0006	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/07/92-04/08/96	4	9	
CUGA0012	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/19/73-07/29/76	3	11	
CUGA0015	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-08/12/96	4	21	
CUGA0022	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-01/13/92	1	44	
CUGA0031	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	6	174	
CUGA0032	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	6	114	
CUGA0033	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/24/90-08/23/93	2	50	
CUGA0035	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	6	177	
CUGA0036	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-08/10/92	2	60	
CUGA0037	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	7	180	
CUGA0038	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	02/22/93-12/19/94	1	33	
CUGA0041	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	1	40	
CUGA0047	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	6	171	
CUGA0049	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	7	181	
CUGA0059	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/17/91-01/13/92	0	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0065	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	7	197	
CUGA0066	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	6	177	
CUGA0070	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-08/10/92	2	60	
CUGA0077	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	6	92	
CUGA0040	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-05/18/82	0	1	
CUGA0069	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/05/85-06/05/85	0	1	
CUGA0075	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/05/85-06/05/85	0	1	
CUGA0086	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/29/81-04/29/81	0	1	
CUGA0087	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/29/81-04/29/81	0	1	
CUGA0090	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-05/18/82	0	1	
CUGA0040	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0019	Yes	01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	0	2	
CUGA0022	No	01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	0	1	
CUGA0031	No	01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	0	1	
CUGA0037	No	01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	0	2	
CUGA0040	No	01077	SILVER, TOTAL (UG/L AS AG)	05/18/82-05/18/82	0	1	
CUGA0043	Yes	01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	0	1	
CUGA0045	Yes	01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	0	1	
CUGA0058	Yes	01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	0	2	
CUGA0061	No	01077	SILVER, TOTAL (UG/L AS AG)	07/18/80-07/18/80	0	1	
CUGA0065	Yes	01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	0	2	
CUGA0069	No	01077	SILVER, TOTAL (UG/L AS AG)	06/05/85-06/05/85	0	1	
CUGA0075	No	01077	SILVER, TOTAL (UG/L AS AG)	06/05/85-06/05/85	0	1	
CUGA0077	No	01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	0	1	
CUGA0086	No	01077	SILVER, TOTAL (UG/L AS AG)	04/29/81-04/29/81	0	1	
CUGA0087	No	01077	SILVER, TOTAL (UG/L AS AG)	04/29/81-04/29/81	0	1	
CUGA0090	No	01077	SILVER, TOTAL (UG/L AS AG)	05/18/82-05/18/82	0	1	
CUGA0006	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/03/91-10/16/92	1	4	
CUGA0008	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/03/91-10/16/92	1	4	
CUGA0011	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/03/92-10/16/92	0	3	
CUGA0015	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-03/23/93	0	5	
CUGA0017	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-10/16/92	0	4	
CUGA0021	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-03/23/93	0	5	
CUGA0022	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	04/20/92-03/23/93	0	7	
CUGA0027	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-01/13/92	1	30	
CUGA0031	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0032	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	35	
CUGA0033	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/24/90-06/29/92	1	18	
CUGA0035	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0036	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-06/29/92	2	31	
CUGA0037	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0041	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/16/91	1	26	
CUGA0043	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/29/92-03/23/93	0	6	
CUGA0045	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	2	39	
CUGA0046	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/17/91	1	27	
CUGA0047	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	2	36	
CUGA0049	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/10/90-12/20/90	0	2	
CUGA0051	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/17/91	1	27	
CUGA0053	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/16/91-01/13/92	0	2	
CUGA0056	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-01/13/92	1	30	
CUGA0058	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0060	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	2	41	
CUGA0066	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0067	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	39	
CUGA0070	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-06/29/92	2	29	
CUGA0071	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/10/90-03/23/93	2	14	
CUGA0073	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-06/29/92	2	30	
CUGA0077	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	2	36	
CUGA0086	No	01082	STRONTIUM, TOTAL (UG/L AS SR)	04/29/81-04/29/81	0	1	
CUGA0087	No	01082	STRONTIUM, TOTAL (UG/L AS SR)	04/29/81-04/29/81	0	1	
CUGA0002	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	0	1	
CUGA0003	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	0	1	
CUGA0006	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	03/03/91-10/16/92	1	3	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0007	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	03/03/91-10/16/92	1	3	
CUGA0011	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/21/92-10/16/92	0	2	
CUGA0015	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	4	18	
CUGA0017	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-12/05/93	1	4	
CUGA0020	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	05/17/78-05/17/78	0	1	
CUGA0021	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	4	18	
CUGA0022	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/20/92-08/12/96	4	22	
CUGA0026	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-01/13/92	1	30	
CUGA0031	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	54	
CUGA0032	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	37	
CUGA0033	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/24/90-06/29/92	1	18	
CUGA0035	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	53	
CUGA0036	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-06/29/92	2	31	
CUGA0037	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	54	
CUGA0039	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/05/93-11/28/94	0	9	
CUGA0041	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/16/91	1	26	
CUGA0043	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	4	20	
CUGA0045	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/05/93	3	40	
CUGA0046	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/17/91	1	27	
CUGA0047	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	6	51	
CUGA0049	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/10/90-12/20/90	0	2	
CUGA0051	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/17/91	1	27	
CUGA0052	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	05/07/78-05/07/78	0	1	
CUGA0053	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	02/15/95-03/06/96	1	4	
CUGA0056	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-01/13/92	1	30	
CUGA0058	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	53	
CUGA0060	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	6	55	
CUGA0066	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	53	
CUGA0067	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	6	53	
CUGA0070	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-06/29/92	2	28	
CUGA0071	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/10/90-03/23/93	2	14	
CUGA0073	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-06/29/92	2	29	
CUGA0077	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-03/23/93	2	35	
CUGA0082	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/78-06/18/78	0	1	
CUGA0086	No	01087	VANADIUM, TOTAL (UG/L AS V)	04/29/81-04/29/81	0	1	
CUGA0087	No	01087	VANADIUM, TOTAL (UG/L AS V)	04/29/81-04/29/81	0	1	
CUGA0006	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-08/12/96	4	21	
CUGA0022	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-01/13/92	1	44	
CUGA0031	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	6	175	
CUGA0032	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/24/90-08/23/93	2	50	
CUGA0035	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	6	178	
CUGA0036	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-08/10/92	2	60	
CUGA0037	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	1	40	
CUGA0047	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/08/91-06/15/92	0	13	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0055	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	7	182	
CUGA0059	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-08/10/92	2	60	
CUGA0077	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	6	92	
CUGA0012	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/30/70-07/29/76	6	23	
CUGA0013	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/11/97-08/11/97	0	3	
CUGA0024	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/22/67-04/25/68	0	8	
CUGA0040	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/18/82-05/18/82	0	1	
CUGA0061	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/18/80-07/18/80	0	1	
CUGA0069	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/05/85-06/05/85	0	1	
CUGA0075	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/05/85-06/05/85	0	1	
CUGA0086	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/29/81-04/29/81	0	1	
CUGA0087	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/29/81-04/29/81	0	1	
CUGA0090	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/18/82-05/18/82	0	1	
CUGA0009	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0010	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/18/83-03/18/83	0	1	
CUGA0040	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0019	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	0	2	
CUGA0022	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	0	1	
CUGA0031	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	0	1	
CUGA0037	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	0	2	
CUGA0043	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	0	1	
CUGA0045	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	0	1	
CUGA0058	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	0	2	
CUGA0065	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	0	2	
CUGA0077	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	0	1	
CUGA0086	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	04/29/81-04/29/81	0	1	
CUGA0087	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	04/29/81-04/29/81	0	1	
CUGA0086	No	01102	TIN, TOTAL (UG/L AS SN)	04/29/81-04/29/81	0	1	
CUGA0087	No	01102	TIN, TOTAL (UG/L AS SN)	04/29/81-04/29/81	0	1	
CUGA0006	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-08/12/96	4	21	
CUGA0022	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-01/13/92	1	44	
CUGA0031	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	6	175	
CUGA0032	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/24/90-08/23/93	2	50	
CUGA0035	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	6	178	
CUGA0036	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-08/10/92	2	60	
CUGA0037	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	02/22/93-12/19/94	1	34	
CUGA0040	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	1	40	
CUGA0047	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/06/94-05/21/97	2	32	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0056	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	7	182	
CUGA0059	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/16/91-01/13/92	0	2	
CUGA0061	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/07/65-06/13/67	1	11	
CUGA0062	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	7	197	
CUGA0066	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	6	178	
CUGA0069	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/05/85-06/05/85	0	1	
CUGA0070	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-08/10/92	2	60	
CUGA0075	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/05/85-06/05/85	0	1	
CUGA0077	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	6	92	
CUGA0086	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/29/81-04/29/81	0	1	
CUGA0087	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/29/81-04/29/81	0	1	
CUGA0090	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/82-05/18/82	0	1	
CUGA0002	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	0	1	
CUGA0003	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	0	1	
CUGA0006	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/03/91-10/15/93	2	8	
CUGA0007	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	0	1	
CUGA0008	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/09/96-05/21/97	0	4	
CUGA0020	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/17/78-05/17/78	0	1	
CUGA0021	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-08/12/96	4	21	
CUGA0022	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-01/13/92	1	44	
CUGA0031	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	6	175	
CUGA0032	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/24/90-08/23/93	2	50	
CUGA0035	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	6	178	
CUGA0036	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-08/10/92	2	60	
CUGA0037	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	02/22/93-12/19/94	1	34	
CUGA0040	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	1	40	
CUGA0047	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	1	42	
CUGA0052	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/07/78-05/07/78	0	1	
CUGA0053	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	7	182	
CUGA0059	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/16/91-01/13/92	0	2	
CUGA0061	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/11/66-10/11/66	0	1	
CUGA0062	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	7	198	
CUGA0066	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	6	177	
CUGA0070	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-08/10/92	2	60	
CUGA0077	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	6	92	
CUGA0082	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/78-06/18/78	0	1	
CUGA0090	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/18/82-05/18/82	0	1	
CUGA0040	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/05/85-06/05/85	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0006	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	03/03/91-10/16/92	1	3	
CUGA0008	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	03/03/91-10/16/92	1	3	
CUGA0011	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/21/92-10/16/92	0	2	
CUGA0015	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	0	3	
CUGA0017	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	0	3	
CUGA0021	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	0	3	
CUGA0022	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	04/20/92-12/17/92	0	6	
CUGA0030	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-01/13/92	1	30	
CUGA0031	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0032	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-10/19/92	2	34	
CUGA0033	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/24/90-06/29/92	1	18	
CUGA0035	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0036	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-06/29/92	2	31	
CUGA0037	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0041	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/16/91	1	26	
CUGA0043	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-12/17/92	0	5	
CUGA0045	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	2	38	
CUGA0046	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/91	1	27	
CUGA0047	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	2	35	
CUGA0049	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/10/90-12/20/90	0	2	
CUGA0051	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/91	1	27	
CUGA0053	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/16/91-01/13/92	0	2	
CUGA0056	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-01/13/92	1	30	
CUGA0058	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0060	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	2	40	
CUGA0066	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0067	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	38	
CUGA0070	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-06/29/92	2	29	
CUGA0071	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/10/90-04/26/91	0	13	
CUGA0073	Yes	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-06/29/92	2	30	
CUGA0077	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	2	35	
CUGA0006	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	03/03/91-10/16/92	1	3	
CUGA0008	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	03/03/91-10/16/92	1	3	
CUGA0011	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/21/92-10/16/92	0	2	
CUGA0015	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	0	4	
CUGA0017	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	0	4	
CUGA0021	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	0	4	
CUGA0022	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	04/20/92-12/17/92	0	6	
CUGA0030	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-01/13/92	1	30	
CUGA0031	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0032	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-10/19/92	2	34	
CUGA0033	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/24/90-06/29/92	1	18	
CUGA0035	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0036	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-06/29/92	2	31	
CUGA0037	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0041	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/16/91	1	26	
CUGA0043	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/29/92-12/17/92	0	5	
CUGA0045	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	2	38	
CUGA0046	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/91	1	27	
CUGA0047	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	2	35	
CUGA0049	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/10/90-12/20/90	0	2	
CUGA0051	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/91	1	27	
CUGA0053	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/28/91-01/13/92	0	4	
CUGA0054	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/16/91-01/13/92	0	2	
CUGA0056	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-01/13/92	1	30	
CUGA0058	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0060	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	2	40	
CUGA0066	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0067	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	38	
CUGA0070	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-06/29/92	2	29	
CUGA0071	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/10/90-04/26/91	0	13	
CUGA0073	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-06/29/92	2	30	
CUGA0077	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	2	35	
CUGA0006	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	03/03/91-10/15/93	2	8	
CUGA0011	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	01/07/92-10/15/93	1	7	
CUGA0015	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-03/23/93	0	7	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0017	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-01/11/93	0	5	
CUGA0021	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-03/23/93	0	7	
CUGA0022	No	01140	SILICON, DISSOLVED (UG/L AS SI)	02/03/92-03/23/93	1	26	
CUGA0026	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	07/06/93-07/06/93	0	1	
CUGA0027	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-01/13/92	1	44	
CUGA0031	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	3	95	
CUGA0032	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	3	92	
CUGA0033	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/24/90-08/23/93	2	50	
CUGA0035	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	3	99	
CUGA0036	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-08/10/92	2	60	
CUGA0037	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	3	97	
CUGA0038	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	02/22/93-07/06/93	0	2	
CUGA0041	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/01/91-03/23/93	1	24	
CUGA0045	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	3	89	
CUGA0046	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	1	40	
CUGA0047	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	3	93	
CUGA0049	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	10/08/91-06/15/92	0	13	
CUGA0056	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	3	99	
CUGA0059	No	01140	SILICON, DISSOLVED (UG/L AS SI)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	3	111	
CUGA0066	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	3	99	
CUGA0067	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	3	99	
CUGA0070	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-08/10/92	2	60	
CUGA0077	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	3	91	
CUGA0040	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/18/82-05/18/82	0	1	
CUGA0090	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/18/82-05/18/82	0	1	
CUGA0019	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	0	2	
CUGA0022	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	0	1	
CUGA0031	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	0	1	
CUGA0037	No	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	0	2	
CUGA0040	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/18/82-05/18/82	0	1	
CUGA0043	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	0	1	
CUGA0045	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	0	1	
CUGA0058	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	0	2	
CUGA0061	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/18/80-07/18/80	0	1	
CUGA0065	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	0	2	
CUGA0069	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/05/85-06/05/85	0	1	
CUGA0075	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/05/85-06/05/85	0	1	
CUGA0077	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	0	1	
CUGA0086	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/29/81-04/29/81	0	1	
CUGA0087	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/29/81-04/29/81	0	1	
CUGA0090	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/18/82-05/18/82	0	1	
CUGA0006	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/21/97-05/21/97	0	1	
CUGA0021	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-08/12/96	4	21	
CUGA0022	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	02/03/92-08/12/96	4	42	
CUGA0023	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/13/92	1	44	
CUGA0031	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	6	174	
CUGA0032	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/24/90-08/23/93	2	50	
CUGA0035	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	6	178	
CUGA0036	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-08/10/92	2	60	
CUGA0037	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	7	178	
CUGA0038	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/09/92-03/09/92	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0039	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/01/91-08/12/96	4	39	
CUGA0045	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	3	91	
CUGA0046	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	1	40	
CUGA0047	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	7	179	
CUGA0059	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	7	195	
CUGA0066	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-08/10/92	2	60	
CUGA0077	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	3	91	
CUGA0086	No	01152	TITANIUM, TOTAL (UG/L AS TI)	04/29/81-04/29/81	0	1	
CUGA0087	No	01152	TITANIUM, TOTAL (UG/L AS TI)	04/29/81-04/29/81	0	1	
CUGA0040	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0086	No	01203	YTTRIUM, TOTAL (UG/L AS Y)	04/29/81-04/29/81	0	1	
CUGA0087	No	01203	YTTRIUM, TOTAL (UG/L AS Y)	04/29/81-04/29/81	0	1	
CUGA0002	No	22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	0	1	
CUGA0003	No	22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	0	1	
CUGA0007	No	22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	0	1	
CUGA0020	No	22703	URANIUM, NATURAL, DISSOLVED	05/17/78-05/17/78	0	1	
CUGA0052	Yes	22703	URANIUM, NATURAL, DISSOLVED	05/07/78-05/07/78	0	1	
CUGA0082	No	22703	URANIUM, NATURAL, DISSOLVED	06/18/78-06/18/78	0	1	
CUGA0024	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	11/17/75-10/12/76	0	13	
CUGA0025	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	11/17/75-09/08/76	0	12	
CUGA0012	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	05/18/70-12/03/70	0	7	
CUGA0024	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/22/67-04/25/68	0	8	
CUGA0024	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/22/67-04/25/68	0	8	
CUGA0012	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	5	57	
CUGA0013	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/11/97-08/11/97	0	1	
CUGA0024	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-12/08/76	1	17	
CUGA0025	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-09/08/76	0	13	
CUGA0040	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	0	1	
CUGA0090	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	0	1	
CUGA0014	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0034	No	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0048	No	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	25	
CUGA0063	No	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	24	
CUGA0076	No	31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	0	23	
CUGA0040	No	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	0	1	
CUGA0090	No	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	0	1	
CUGA0014	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0034	No	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0048	No	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	25	
CUGA0063	No	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	24	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0076	No	31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	0	23	
CUGA0072	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	05/05/82-08/08/90	8	5	
CUGA0001	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/11/61-09/11/61	0	1	
CUGA0040	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/18/82-05/18/82	0	1	
CUGA0069	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	06/05/85-06/05/85	0	1	
CUGA0075	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	06/05/85-06/05/85	0	1	
CUGA0090	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/18/82-05/18/82	0	1	
CUGA0086	No	34200	ACENAPHTHYLENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34200	ACENAPHTHYLENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34205	ACENAPHTHENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34205	ACENAPHTHENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34220	ANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34220	ANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34247	BENZO-A-PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34247	BENZO-A-PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0069	No	34257	B-BHC-BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34257	B-BHC-BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0069	No	34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0086	No	34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0040	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0086	No	34320	CHRYSENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34320	CHRYSENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0040	No	34336	DIETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	34336	DIETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	34336	DIETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	34336	DIETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34336	DIETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	34336	DIETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0040	No	34341	DIMETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	34341	DIMETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	34341	DIMETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	34341	DIMETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34341	DIMETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	34341	DIMETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0086	No	34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0069	No	34354	ENDOSULFAN SULFATE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34354	ENDOSULFAN SULFATE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0069	No	34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0069	No	34364	ENDOSULFAN, ALPHA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34364	ENDOSULFAN, ALPHA DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0069	No	34369	ENDRIN ALDEHYDE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34369	ENDRIN ALDEHYDE DRY WGTBOTUG/KG	06/05/85-06/05/85	0	1	
CUGA0086	No	34376	FLUORANTHENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34376	FLUORANTHENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34381	FLUORENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34381	FLUORENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34396	HEXACHLOROETHANE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34396	HEXACHLOROETHANE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34408	ISOPHORONE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34408	ISOPHORONE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	04/29/81-04/29/81	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0087	No	34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34433	N-NITROSODIPHENYLAMINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34433	N-NITROSODIPHENYLAMINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34447	NITROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34447	NITROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34452	PARACHLOROMETA CRESOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34452	PARACHLOROMETA CRESOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34461	PHENANTHRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34461	PHENANTHRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34469	PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34469	PYRENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34536	1,2-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34536	1,2-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34566	1,3-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34566	1,3-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34571	1,4-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34571	1,4-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34581	2-CHLORONAPHTHALENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34581	2-CHLORONAPHTHALENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34586	2-CHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34586	2-CHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34591	2-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34591	2-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0040	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	0	1	
CUGA0086	No	34601	2,4-DICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34601	2,4-DICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34606	2,4-DIMETHYLPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34606	2,4-DIMETHYLPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34611	2,4-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34611	2,4-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34616	2,4-DINITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34616	2,4-DINITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34626	2,6-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34626	2,6-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34646	4-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34646	4-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0086	No	34696	NAPHTHALENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	34696	NAPHTHALENE TOTWUG/L	04/29/81-04/29/81	0	1	
CUGA0069	No	34721	2,3,4,6-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	34721	2,3,4,6-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0061	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-11/23/65	1	13	
CUGA0064	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/22/64-09/22/64	0	1	
CUGA0079	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/27/64-02/24/65	0	2	
CUGA0080	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-09/18/64	0	2	
CUGA0081	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10/21/65-10/21/65	0	1	
CUGA0085	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/27/64-09/18/64	0	3	
CUGA0095	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/22/64-09/22/64	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0097	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-09/17/64	0	2	
CUGA0086	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	04/29/81-04/29/81	0	1	
CUGA0009	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/18/83-03/18/83	0	1	
CUGA0010	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/18/83-03/18/83	0	1	
CUGA0040	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/05/85-06/05/85	0	1	
CUGA0009	No	39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	03/18/83-03/18/83	0	1	
CUGA0010	No	39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	03/18/83-03/18/83	0	1	
CUGA0040	No	39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	10/06/83-10/06/83	0	1	
CUGA0069	No	39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	06/05/85-06/05/85	0	1	
CUGA0075	No	39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	06/05/85-06/05/85	0	1	
CUGA0009	No	39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	03/18/83-03/18/83	0	1	
CUGA0010	No	39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	03/18/83-03/18/83	0	1	
CUGA0040	No	39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	10/06/83-10/06/83	0	1	
CUGA0069	No	39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	06/05/85-06/05/85	0	1	
CUGA0075	No	39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	06/05/85-06/05/85	0	1	
CUGA0009	No	39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	03/18/83-03/18/83	0	1	
CUGA0010	No	39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	03/18/83-03/18/83	0	1	
CUGA0040	No	39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	06/05/85-06/05/85	0	1	
CUGA0009	No	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	03/18/83-03/18/83	0	1	
CUGA0010	No	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	03/18/83-03/18/83	0	1	
CUGA0040	No	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	10/06/83-10/06/83	0	1	
CUGA0069	No	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	06/05/85-06/05/85	0	1	
CUGA0075	No	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	06/05/85-06/05/85	0	1	
CUGA0040	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0040	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0069	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	0	1	
CUGA0086	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0087	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	0	1	
CUGA0090	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	0	1	
CUGA0040	No	39117	PHTHLATE ESTERS IN WATER MG/L	05/18/82-05/18/82	0	1	
CUGA0090	No	39117	PHTHLATE ESTERS IN WATER MG/L	05/18/82-05/18/82	0	1	
CUGA0086	No	39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0087	No	39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0009	No	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0069	No	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/18/83-03/18/83	0	1	
CUGA0010	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/18/83-03/18/83	0	1	
CUGA0040	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	10/06/83-10/06/83	0	1	
CUGA0069	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/05/85-06/05/85	0	1	
CUGA0009	No	39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	03/18/83-03/18/83	0	1	
CUGA0010	No	39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	03/18/83-03/18/83	0	1	
CUGA0040	No	39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	10/06/83-10/06/83	0	1	
CUGA0069	No	39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	06/05/85-06/05/85	0	1	
CUGA0075	No	39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	06/05/85-06/05/85	0	1	
CUGA0009	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0010	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0040	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/06/83-10/06/83	0	1	
CUGA0069	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0075	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0009	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0010	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0040	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/06/83-10/06/83	0	1	
CUGA0069	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0075	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0009	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0010	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	03/18/83-03/18/83	0	1	
CUGA0040	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	10/06/83-10/06/83	0	1	
CUGA0069	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0075	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	06/05/85-06/05/85	0	1	
CUGA0009	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0086	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0087	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	0	1	
CUGA0009	No	39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0086	No	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	04/29/81-04/29/81	0	1	
CUGA0087	No	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	04/29/81-04/29/81	0	1	
CUGA0069	No	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0009	No	39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0010	No	39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	0	1	
CUGA0040	No	39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	0	1	
CUGA0069	No	39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0075	No	39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	0	1	
CUGA0024	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	06/22/67-12/08/76	9	23	
CUGA0006	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/03/91-10/15/93	2	7	
CUGA0008	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/03/91-04/08/96	5	9	
CUGA0011	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	01/07/92-04/08/96	4	8	
CUGA0015	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-08/12/96	4	25	
CUGA0017	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-12/18/95	3	8	
CUGA0019	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/09/96-05/21/97	0	4	
CUGA0021	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-08/12/96	4	20	
CUGA0022	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	02/03/92-03/03/97	5	39	
CUGA0023	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/10/96-03/10/96	0	1	
CUGA0026	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	07/06/93-11/07/95	2	4	
CUGA0027	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/23/93-03/23/93	0	1	
CUGA0030	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-01/13/92	1	44	
CUGA0031	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	6	169	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0032	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	6	109	
CUGA0033	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/24/90-08/23/93	2	47	
CUGA0035	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	6	172	
CUGA0036	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-08/10/92	2	58	
CUGA0037	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	7	175	
CUGA0038	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/09/92-03/09/92	0	1	
CUGA0039	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	02/22/93-12/19/94	1	34	
CUGA0041	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	1	39	
CUGA0043	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/01/91-03/03/97	5	36	
CUGA0045	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	6	86	
CUGA0046	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	1	40	
CUGA0047	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	6	166	
CUGA0049	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/10/90-12/01/91	0	3	
CUGA0051	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	1	42	
CUGA0053	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/06/91-06/15/92	1	27	
CUGA0054	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	10/08/91-06/15/92	0	13	
CUGA0055	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/06/94-05/21/97	2	32	
CUGA0056	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-06/15/92	1	50	
CUGA0058	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	7	176	
CUGA0059	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	10/24/91-10/24/91	0	1	
CUGA0060	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/16/91-01/13/92	0	2	
CUGA0062	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/17/91-01/13/92	0	3	
CUGA0065	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	7	192	
CUGA0066	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	7	173	
CUGA0067	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	6	172	
CUGA0070	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-08/10/92	2	56	
CUGA0071	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/10/90-03/23/93	2	24	
CUGA0073	Yes	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-08/10/92	2	58	
CUGA0077	No	47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	6	86	
CUGA0086	No	47006	BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	0	1	
CUGA0087	No	47006	BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	0	1	
CUGA0087	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	04/29/81-04/29/81	0	1	
CUGA0003	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0007	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0052	Yes	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/07/78-05/07/78	0	1	
CUGA0082	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	0	1	
CUGA0002	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0003	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0007	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0020	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/17/78-05/17/78	0	1	
CUGA0052	Yes	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/07/78-05/07/78	0	1	
CUGA0082	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	0	1	
CUGA0002	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0007	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	0	1	
CUGA0082	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	0	1	
CUGA0014	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0034	No	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0048	No	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	25	
CUGA0063	No	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0076	No	50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0014	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0034	No	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0048	No	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	25	
CUGA0063	No	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0076	No	50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0014	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0029	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0034	No	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0048	No	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	25	
CUGA0063	No	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0076	No	50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0014	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0034	No	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0048	No	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	25	
CUGA0063	No	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0076	No	50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0014	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0034	No	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0048	No	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	25	
CUGA0063	No	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	24	
CUGA0076	No	50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	0	23	
CUGA0001	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/11/61-09/11/61	0	1	
CUGA0004	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/80-02/26/81	0	3	
CUGA0005	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/80-02/26/81	0	3	
CUGA0024	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/20/75-12/08/76	1	16	
CUGA0025	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/20/75-09/08/76	0	13	
CUGA0040	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/18/82-05/18/82	0	1	
CUGA0044	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/06/53-08/06/53	0	1	
CUGA0061	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	16	63	T,S
CUGA0069	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/05/85-06/05/85	0	1	
CUGA0075	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/05/85-06/05/85	0	1	
CUGA0079	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-02/24/65	0	2	
CUGA0085	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-05/27/64	0	1	
CUGA0090	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/18/82-05/18/82	0	1	
CUGA0092	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/10/64-06/10/64	0	1	
CUGA0001	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	09/11/61-09/11/61	0	1	
CUGA0044	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/06/53-08/06/53	0	1	
CUGA0061	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/02/67-07/18/80	12	6	
CUGA0092	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/10/64-06/10/64	0	1	
CUGA0001	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	09/11/61-09/11/61	0	1	
CUGA0025	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	10/20/75-06/09/76	0	10	
CUGA0061	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	10/11/66-03/26/81	14	28	
CUGA0079	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	02/24/65-02/24/65	0	1	
CUGA0001	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/11/61-09/11/61	0	1	
CUGA0025	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/20/75-09/08/76	0	13	
CUGA0061	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-03/26/81	16	30	T
CUGA0079	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-02/24/65	0	2	
CUGA0085	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-05/27/64	0	1	
CUGA0040	No	70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	10/06/83-10/06/83	0	1	
CUGA0069	No	70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	06/05/85-06/05/85	0	1	
CUGA0075	No	70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	06/05/85-06/05/85	0	1	
CUGA0061	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	11	44	T,S
CUGA0096	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	10/14/86-10/05/89	2	29	
CUGA0097	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/14/87-10/05/89	2	35	
CUGA0061	No	70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	06/06/81-06/06/81	0	1	
CUGA0061	No	70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70335	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 1.00MM	12/09/86-02/21/89	2	3	
CUGA0097	No	70335	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 1.00MM	12/09/86-04/04/89	2	5	
CUGA0096	No	70336	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 2.00MM	12/09/86-02/21/89	2	3	
CUGA0097	No	70336	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 2.00MM	12/09/86-04/04/89	2	4	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0061	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	11/26/86-06/15/89	2	19	
CUGA0097	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	11/26/86-06/15/89	2	44	
CUGA0061	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	11/26/86-06/15/89	2	19	
CUGA0097	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	11/26/86-06/15/89	2	44	
CUGA0061	No	70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	11/26/86-06/15/89	2	14	
CUGA0097	No	70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	11/26/86-06/15/89	2	37	
CUGA0061	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	11/26/86-06/15/89	2	19	
CUGA0097	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	11/26/86-06/15/89	2	44	
CUGA0061	No	70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	06/06/81-06/06/81	0	1	
CUGA0096	No	70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	11/26/86-06/15/89	2	14	
CUGA0097	No	70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	11/26/86-06/15/89	2	36	
CUGA0096	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	11/26/86-06/15/89	2	14	
CUGA0097	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	11/26/86-06/15/89	2	30	
CUGA0096	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	11/26/86-06/15/89	2	14	
CUGA0097	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	11/26/86-06/15/89	2	26	
CUGA0096	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	11/26/86-06/15/89	2	13	
CUGA0097	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	11/26/86-06/15/89	2	17	
CUGA0096	No	70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	12/09/86-06/15/89	2	4	
CUGA0097	No	70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	11/26/86-06/15/89	2	8	
CUGA0096	No	70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	12/09/86-02/27/87	0	2	
CUGA0097	No	70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	02/27/87-02/21/89	1	3	
CUGA0006	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	01/07/92-04/08/96	4	9	
CUGA0012	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	6	38	
CUGA0015	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/21/97-05/21/97	0	1	
CUGA0021	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-08/12/96	4	21	
CUGA0022	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/03/92-08/12/96	4	42	
CUGA0023	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/13/92	1	44	
CUGA0031	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	6	174	
CUGA0032	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/24/90-08/23/93	2	50	
CUGA0035	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	6	178	
CUGA0036	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-08/10/92	2	60	
CUGA0037	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	7	178	
CUGA0038	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/01/91-08/12/96	4	39	
CUGA0045	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	3	91	
CUGA0046	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	1	40	
CUGA0047	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	7	179	
CUGA0059	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	7	195	
CUGA0066	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-08/10/92	2	60	
CUGA0077	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	3	91	
CUGA0012	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	6	38	
CUGA0040	No	70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0069	No	70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	06/05/85-06/05/85	0	1	
CUGA0075	No	70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	06/05/85-06/05/85	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0090	No	70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	05/18/82-05/18/82	0	1	
CUGA0014	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0029	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0034	No	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0048	No	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	25	
CUGA0063	No	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	24	
CUGA0076	No	71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	0	23	
CUGA0061	No	71825	ACIDITY, TOTAL (MG/L AS H)	06/06/66-08/10/66	0	3	
CUGA0001	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/11/61-09/11/61	0	1	
CUGA0044	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/06/53-09/08/58	5	2	
CUGA0057	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/64-03/18/64	0	1	
CUGA0061	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	8	58	T,S
CUGA0078	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/03/65-11/03/65	0	1	
CUGA0079	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-10/20/65	1	3	
CUGA0081	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/21/65-10/21/65	0	1	
CUGA0085	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-05/27/64	0	1	
CUGA0089	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	0	1	
CUGA0091	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	0	1	
CUGA0092	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	06/10/64-06/10/64	0	1	
CUGA0093	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	0	1	
CUGA0094	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/15/64-05/15/64	0	1	
CUGA0061	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	08/26/64-09/18/64	0	2	
CUGA0084	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	05/27/64-05/27/64	0	1	
CUGA0001	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	09/11/61-09/11/61	0	1	
CUGA0044	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	08/06/53-08/06/53	0	1	
CUGA0061	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	12/26/68-08/27/71	2	9	
CUGA0092	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	06/10/64-06/10/64	0	1	
CUGA0001	No	71885	IRON (UG/L AS FE)	09/11/61-09/11/61	0	1	
CUGA0044	No	71885	IRON (UG/L AS FE)	08/06/53-09/08/58	5	2	
CUGA0057	No	71885	IRON (UG/L AS FE)	03/18/64-03/18/64	0	1	
CUGA0061	No	71885	IRON (UG/L AS FE)	05/27/64-08/27/71	7	49	
CUGA0078	No	71885	IRON (UG/L AS FE)	11/03/65-11/03/65	0	1	
CUGA0079	No	71885	IRON (UG/L AS FE)	10/20/65-10/20/65	0	1	
CUGA0081	No	71885	IRON (UG/L AS FE)	10/21/65-10/21/65	0	1	
CUGA0084	No	71885	IRON (UG/L AS FE)	05/27/64-05/27/64	0	1	
CUGA0089	No	71885	IRON (UG/L AS FE)	05/20/64-05/20/64	0	1	
CUGA0091	No	71885	IRON (UG/L AS FE)	05/20/64-05/20/64	0	1	
CUGA0092	No	71885	IRON (UG/L AS FE)	06/10/64-06/10/64	0	1	
CUGA0093	No	71885	IRON (UG/L AS FE)	05/20/64-05/20/64	0	1	
CUGA0094	No	71885	IRON (UG/L AS FE)	05/15/64-05/15/64	0	1	
CUGA0095	No	71885	IRON (UG/L AS FE)	10/21/65-11/23/65	0	2	
CUGA0061	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/28/70-07/18/80	9	4	
CUGA0006	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/03/91-10/16/92	1	4	
CUGA0008	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/03/91-10/16/92	1	4	
CUGA0011	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/03/92-10/16/92	0	3	
CUGA0015	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-08/12/96	4	19	
CUGA0017	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-12/05/93	1	5	
CUGA0021	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-08/12/96	4	19	
CUGA0022	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/20/92-08/12/96	4	23	
CUGA0026	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	11/07/95-11/07/95	0	1	
CUGA0027	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-01/13/92	1	28	
CUGA0031	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0032	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	36	
CUGA0033	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/24/90-06/29/92	1	17	
CUGA0035	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0036	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-06/29/92	2	30	
CUGA0037	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0039	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/05/93-11/28/94	0	9	
CUGA0040	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/82-05/18/82	0	1	
CUGA0041	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/16/91	1	24	
CUGA0043	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/92-08/12/96	4	21	
CUGA0045	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/05/93	3	39	
CUGA0046	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/17/91	1	25	
CUGA0047	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	6	50	
CUGA0049	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/10/90-12/20/90	0	2	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0051	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/17/91	1	25	
CUGA0053	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-05/18/92	0	3	
CUGA0054	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-01/13/92	0	2	
CUGA0055	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	02/15/95-03/06/96	1	4	
CUGA0056	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-05/18/92	1	29	
CUGA0058	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0060	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/17/91-01/13/92	0	2	
CUGA0065	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	6	53	
CUGA0066	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0067	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6	53	
CUGA0070	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-06/29/92	2	28	
CUGA0071	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/10/90-03/23/93	2	14	
CUGA0073	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-06/29/92	2	29	
CUGA0077	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-03/23/93	2	35	
CUGA0090	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/82-05/18/82	0	1	
CUGA0012	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/16/70-07/29/76	5	24	
CUGA0040	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/18/82-05/18/82	0	1	
CUGA0061	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/06/70-07/18/80	9	2	
CUGA0069	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/05/85-06/05/85	0	1	
CUGA0075	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/05/85-06/05/85	0	1	
CUGA0090	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/18/82-05/18/82	0	1	
CUGA0040	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/06/83-10/06/83	0	1	
CUGA0069	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0075	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/05/85-06/05/85	0	1	
CUGA0006	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/03/91-10/15/93	2	8	
CUGA0008	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/03/91-04/08/96	5	10	
CUGA0011	Yes	74010	IRON, TOTAL (MG/L AS FE)	01/07/92-04/08/96	4	9	
CUGA0015	Yes	74010	IRON, TOTAL (MG/L AS FE)	05/04/92-08/12/96	4	26	
CUGA0017	Yes	74010	IRON, TOTAL (MG/L AS FE)	05/04/92-12/18/95	3	9	
CUGA0019	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/09/96-05/21/97	0	4	
CUGA0021	Yes	74010	IRON, TOTAL (MG/L AS FE)	05/04/92-08/12/96	4	21	
CUGA0022	No	74010	IRON, TOTAL (MG/L AS FE)	02/03/92-03/03/97	5	43	
CUGA0023	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/10/96-03/10/96	0	1	
CUGA0026	Yes	74010	IRON, TOTAL (MG/L AS FE)	07/06/93-11/07/95	2	4	
CUGA0027	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/23/93-03/23/93	0	1	
CUGA0030	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-01/13/92	1	44	
CUGA0031	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	6	175	
CUGA0032	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	6	115	
CUGA0033	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/24/90-08/23/93	2	50	
CUGA0035	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	6	178	
CUGA0036	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-08/10/92	2	60	
CUGA0037	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	7	181	
CUGA0038	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/09/92-03/09/92	0	1	
CUGA0039	Yes	74010	IRON, TOTAL (MG/L AS FE)	02/22/93-12/19/94	1	34	
CUGA0041	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	1	39	
CUGA0043	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/01/91-03/03/97	5	40	
CUGA0045	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	6	92	
CUGA0046	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	1	40	
CUGA0047	No	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	6	172	
CUGA0049	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/10/90-12/01/91	0	3	
CUGA0051	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	1	42	
CUGA0053	Yes	74010	IRON, TOTAL (MG/L AS FE)	05/06/91-07/27/92	1	28	
CUGA0054	Yes	74010	IRON, TOTAL (MG/L AS FE)	10/08/91-06/15/92	0	13	
CUGA0055	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/06/94-05/21/97	2	32	
CUGA0056	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-07/27/92	2	51	
CUGA0058	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	7	181	
CUGA0059	No	74010	IRON, TOTAL (MG/L AS FE)	10/24/91-10/24/91	0	1	
CUGA0060	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/16/91-01/13/92	0	2	
CUGA0062	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/17/91-01/13/92	0	3	
CUGA0065	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	7	197	
CUGA0066	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	7	179	
CUGA0067	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	6	178	
CUGA0070	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-08/10/92	2	58	
CUGA0071	Yes	74010	IRON, TOTAL (MG/L AS FE)	12/10/90-03/23/93	2	24	
CUGA0073	Yes	74010	IRON, TOTAL (MG/L AS FE)	06/19/90-08/10/92	2	60	
CUGA0077	No	74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	6	92	
CUGA0086	No	74010	IRON, TOTAL (MG/L AS FE)	04/29/81-04/29/81	0	1	
CUGA0087	No	74010	IRON, TOTAL (MG/L AS FE)	04/29/81-04/29/81	0	1	
CUGA0014	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0016	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0028	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0029	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0034	No	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0042	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0048	No	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0050	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	25	
CUGA0063	No	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0068	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	23	
CUGA0074	Yes	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	24	
CUGA0076	No	78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	0	23	
CUGA0040	No	80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	10/06/83-10/06/83	0	1	
CUGA0069	No	80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	06/05/85-06/05/85	0	1	
CUGA0075	No	80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	06/05/85-06/05/85	0	1	
CUGA0061	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	14	119	T,S
CUGA0096	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	3	58	
CUGA0097	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/14/86-10/05/89	2	75	
CUGA0061	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	4	47	
CUGA0061	No	80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	09/19/80-09/19/80	0	1	
CUGA0061	No	80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	09/19/80-08/27/81	0	2	
CUGA0061	No	80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	09/19/80-08/27/81	0	2	
CUGA0096	No	80181	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80182	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80183	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80184	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80185	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80186	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80187	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80188	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	08/11/86-09/01/86	0	2	
CUGA0096	No	80189	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	09/01/86-09/01/86	0	1	
CUGA0061	No	82031	COAL IN BOTTOM MATERIAL DRY WEIGHT GRAMS/KG	07/18/80-07/18/80	0	1	
CUGA0006	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/03/91-01/29/93	1	6	
CUGA0008	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/03/91-01/29/93	1	6	
CUGA0011	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	01/07/92-01/29/93	1	5	
CUGA0015	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-08/12/96	4	21	
CUGA0017	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-12/04/95	3	6	
CUGA0019	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/09/96-05/21/97	0	4	
CUGA0021	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-08/12/96	4	18	
CUGA0022	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	02/03/92-03/03/97	5	39	
CUGA0026	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/12/94-10/03/95	1	2	
CUGA0027	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/23/93-03/23/93	0	1	
CUGA0030	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-01/13/92	1	44	
CUGA0031	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	6	160	
CUGA0032	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	6	111	
CUGA0033	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/24/90-08/23/93	2	50	
CUGA0035	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	6	161	
CUGA0036	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-08/10/92	2	60	
CUGA0037	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	7	165	
CUGA0038	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/09/92-03/09/92	0	1	
CUGA0039	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	02/22/93-12/19/94	1	24	
CUGA0041	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	1	39	
CUGA0043	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/01/91-03/03/97	5	36	
CUGA0045	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	6	91	
CUGA0046	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	1	40	
CUGA0047	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	6	156	
CUGA0049	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/10/90-12/01/91	0	3	
CUGA0051	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	1	42	
CUGA0053	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/06/91-07/27/92	1	28	
CUGA0054	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	10/08/91-06/15/92	0	13	
CUGA0055	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/06/94-05/21/97	2	24	
CUGA0056	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-07/27/92	2	51	
CUGA0058	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	7	167	
CUGA0059	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	10/24/91-10/24/91	0	1	
CUGA0062	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/30/91-12/30/91	0	1	
CUGA0065	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	7	180	
CUGA0066	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	7	161	
CUGA0067	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	6	161	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0070	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-08/10/92	2	58	
CUGA0071	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/10/90-03/23/93	2	24	
CUGA0073	Yes	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-08/10/92	2	59	
CUGA0077	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	6	92	
CUGA0040	No	82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/82-05/18/82	0	1	
CUGA0069	No	82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	06/05/85-06/05/85	0	1	
CUGA0075	No	82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	06/05/85-06/05/85	0	1	
CUGA0090	No	82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/82-05/18/82	0	1	
CUGA0006	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/03/91-10/15/93	2	8	
CUGA0008	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/03/91-04/08/96	5	10	
CUGA0011	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	01/07/92-04/08/96	4	9	
CUGA0015	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-08/12/96	4	26	
CUGA0017	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-12/18/95	3	9	
CUGA0019	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/21/97-05/21/97	0	1	
CUGA0021	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-08/12/96	4	21	
CUGA0022	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	02/03/92-08/12/96	4	42	
CUGA0023	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/10/96-03/10/96	0	1	
CUGA0026	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	07/06/93-11/07/95	2	4	
CUGA0027	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/23/93-03/23/93	0	1	
CUGA0030	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/13/92	1	44	
CUGA0031	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	6	174	
CUGA0032	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	6	115	
CUGA0033	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/24/90-08/23/93	2	50	
CUGA0035	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	6	178	
CUGA0036	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-08/10/92	2	60	
CUGA0037	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	7	178	
CUGA0038	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/09/92-03/09/92	0	1	
CUGA0039	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	02/22/93-12/19/94	1	34	
CUGA0041	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	1	39	
CUGA0043	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/01/91-08/12/96	4	39	
CUGA0045	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	3	91	
CUGA0046	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	1	40	
CUGA0047	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	6	171	
CUGA0049	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/10/90-12/01/91	0	3	
CUGA0051	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	1	42	
CUGA0053	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/06/91-07/27/92	1	28	
CUGA0054	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	10/08/91-06/15/92	0	13	
CUGA0055	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/06/94-05/21/97	2	32	
CUGA0056	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-07/27/92	2	51	
CUGA0058	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	7	179	
CUGA0059	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	10/24/91-10/24/91	0	1	
CUGA0060	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/16/91-01/13/92	0	2	
CUGA0062	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/17/91-01/13/92	0	3	
CUGA0065	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	7	194	
CUGA0066	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	7	178	
CUGA0067	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	6	175	
CUGA0070	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-08/10/92	2	58	
CUGA0071	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/10/90-03/23/93	2	24	
CUGA0073	Yes	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-08/10/92	2	60	
CUGA0077	No	82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	3	90	
CUGA0002	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	0	1	
CUGA0003	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	0	1	
CUGA0007	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	0	1	
CUGA0020	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	05/17/78-05/17/78	0	1	
CUGA0052	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	05/07/78-05/07/78	0	1	
CUGA0082	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/18/78-06/18/78	0	1	
CUGA0061	No	82398	SAMPLING METHOD (CODES)	10/03/88-06/23/92	3	31	
CUGA0096	No	82398	SAMPLING METHOD (CODES)	10/03/88-10/05/89	1	19	
CUGA0097	No	82398	SAMPLING METHOD (CODES)	10/03/88-10/05/89	1	29	
CUGA0069	No	82556	2,3,4,5-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	82556	2,3,4,5-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0069	No	82557	ENDRIN KEYTONE IN BOTTOM DEPOSITS SEDDRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0075	No	82557	ENDRIN KEYTONE IN BOTTOM DEPOSITS SEDDRYWGTMG/KG	06/05/85-06/05/85	0	1	
CUGA0044	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/06/53-09/08/58	5	2	
CUGA0057	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	03/18/64-03/18/64	0	1	
CUGA0078	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/03/65-11/03/65	0	1	
CUGA0089	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0091	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0092	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/10/64-06/10/64	0	1	
CUGA0093	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0094	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/15/64-05/15/64	0	1	
CUGA0044	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/06/53-09/08/58	5	2	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation
From 08/06/53 To 09/24/97

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
CUGA0057	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	03/18/64-03/18/64	0	1	
CUGA0078	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/03/65-11/03/65	0	1	
CUGA0089	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0091	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0092	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/10/64-06/10/64	0	1	
CUGA0093	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/20/64-05/20/64	0	1	
CUGA0094	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/15/64-05/15/64	0	1	

[1]T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station-By-Station Results

Station Inventory for Station: CUGA0001

NPS Station ID: CUGA0001
LAT/LON: 36.697504/ -83.392503
Agency: 112WRD
Date Created: / /
Location: MARTINS F NR ALVA
FIPS State/County: 21095 KENTUCKY/HARLAN
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03400740
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130103
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130103
RF1 Mile Point: 0.000
Distance from RF1: 1.20
On/Off RF1:
RF3 Index: 05130101005213.03
RF3 Mile Point: 17.28
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0001

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/61-09/11/61	1	23.5	23.5	23.5	23.5	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/11/61-09/11/61	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	09/11/61-09/11/61	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/11/61-09/11/61	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	09/11/61-09/11/61	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/61-09/11/61	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/11/61-09/11/61	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	09/11/61-09/11/61	1	71.	71.	71.	71.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/11/61-09/11/61	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/11/61-09/11/61	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/11/61-09/11/61	1	0.398	0.398	0.398	0.398	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/11/61-09/11/61	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/11/61-09/11/61	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/11/61-09/11/61	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/11/61-09/11/61	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	09/11/61-09/11/61	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/11/61-09/11/61	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/11/61-09/11/61	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/11/61-09/11/61	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/11/61-09/11/61	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/11/61-09/11/61	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/11/61-09/11/61	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/11/61-09/11/61	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/11/61-09/11/61	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/11/61-09/11/61	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/11/61-09/11/61	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/11/61-09/11/61	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/11/61-09/11/61	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	09/11/61-09/11/61	1	14.	14.	14.	14.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	09/11/61-09/11/61	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/11/61-09/11/61	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/11/61-09/11/61	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	09/11/61-09/11/61	1	40.	40.	40.	40.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	09/11/61-09/11/61	1	80.	80.	80.	80.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0001

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0002

NPS Station ID: CUGA0002 | LAT/LON: 36.662615/ -83.402892 | Agency: 11NPSWRD | Date Created: 08/09/97
Location: VALE537R | FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/SPRING | STORET Station ID(s): CUGA_NURE_14 /NURE_4090408
RMI-Indexes: | Within Park Boundary: No
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 0 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE EWING; KY-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING OUTSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0002

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	1	178.	178.	178.	178.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/78-06/17/78	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	1	115.	115.	115.	115.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	1	9.44	9.44	9.44	9.44	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	1	123.	123.	123.	123.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	1	110.	110.	110.	110.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	1	0.053	0.053	0.053	0.053	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	4900.	4900.	4900.	4900.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	14.	14.	14.	14.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0002

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0003

NPS Station ID: CUGA0003 | LAT/LON: 36.629115/ -83.444310 | Agency: 11NPSWRD | Date Created: 08/09/97
Location: VALE535R | | FIPS State/County: 51105 VIRGINIA/LEE |
Station Type: /TYPA/AMBNT/SPRING | | STORET Station ID(s): CUGA_NURE_13 /NURE_4090406 |
RMI-Indexes: | | Within Park Boundary: No |
RMI-Miles: | | |
HUC: 06010206 | Depth of Water: 0 | Aquifer: |
Major Basin: OHIO RIVER | Elevation: 0 | Water Body Id: |
Minor Basin: CUMBERLAND RIVER | | ECO Region: |
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:

Description:
THE SITE IS LOCATED ON THE EWING; KY-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING OUTSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	1	201.	201.	201.	201.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/78-06/17/78	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	1	125.	125.	125.	125.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	1	9.04	9.04	9.04	9.04	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	1	158.	158.	158.	158.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	1	128.	128.	128.	128.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	1	0.057	0.057	0.057	0.057	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	15.	15.	15.	15.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	2800.	2800.	2800.	2800.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0003

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0004

NPS Station ID: CUGA0004 LAT/LON: 36.722503/ -83.452781 Agency: 22KYOSM2 Date Created: 07/18/81
Location: LICK BRANCH, UPSTREAM OF CULVERT NEAR PATH FORK FIPS State/County: 21095 KENTUCKY/HARLAN
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 0077801S03
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 0 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 05130101054400.00 RF3 Mile Point: 1.37 Distance from RF3: 0.01 On/Off RF3:
Description:
DATA COLLECTED FOR SMALL OPERATOR ASSISTANCE PROGRAM, PL95-87 COAL COMPANY: DEBRA LYNN COALS, INC., PERMIT #048-0039
FIRM COLLECTING SAMPLE: DAMES & MOORE FIRM ANALYZING SAMPLE: T. M. REGAN, INC.
FIRM PERFORMING REPORT: BOOKER ASSOCIATES, INC.

Parameter Inventory for Station: CUGA0004

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/04/80-02/26/81	3	15.	15.633	24.	7.9	65.103	8.069	**	**	**	**
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	09/04/80-10/02/80	2	43.75	43.75	56.	31.5	300.125	17.324	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/02/80-10/02/80	1	4.49	4.49	4.49	4.49	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/02/80-10/02/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/04/80-02/26/81	3	181.	187.	210.	170.	427.	20.664	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/04/80-10/02/80	2	8.65	8.65	9.2	8.1	0.605	0.778	**	**	**	**
00400	PH (STANDARD UNITS)	09/04/80-02/26/81	3	6.7	6.7	6.9	6.5	0.04	0.2	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/04/80-02/26/81	3	6.7	6.67	6.9	6.5	0.041	0.203	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/04/80-02/26/81	3	0.2	0.214	0.316	0.126	0.009	0.096	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	3	50.	47.	59.	32.	189.	13.748	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	3	22.	22.333	30.	15.	56.333	7.506	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/80-02/26/81	3	12.	14.667	20.	12.	21.333	4.619	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/04/80-02/26/81	3	0.7	0.617	1.	0.15	0.186	0.431	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/80-10/02/80	2	58.5	58.5	59.	58.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/26/81-02/26/81	1	62.	62.	62.	62.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	09/04/80-02/26/81	3	463.	462.667	554.	371.	8372.333	91.5	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/04/80-02/26/81	3 ##	30.	35.	45.	30.	75.	8.66	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/04/80-02/26/81	3	10.	188.333	545.	10.	95408.333	308.882	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/04/80-02/26/81	3 ##	30.	47.	91.	20.	1477.	38.432	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/80-02/26/81	3	156.	171.333	228.	130.	2577.333	50.767	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0004

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0004

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	1	0.33	2	1	0.50				1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0005

NPS Station ID: CUGA0005 LAT/LON: 36.722226/ -83.453893 Agency: 22KYOSM2 Date Created: 06/27/81
Location: PATH FORK CREEK, JUST UPSTREAM OF LICK BRANCH FIPS State/County: 21095 KENTUCKY/HARLAN
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 0077801S01
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 0 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 05130101006602.83 RF3 Mile Point: 3.22 Distance from RF3: 0.16 On/Off RF3:
Description:
DATA COLLECTED FOR SMALL OPERATOR ASSISTANCE PROGRAM, PL95-87 COAL COMPANY: DEBRA LYNN COALS, INC., PERMIT #048-0039
FIRM COLLECTING SAMPLE: DAMES & MOORE FIRM ANALYZING SAMPLE: T. M. REGAN, INC.
FIRM PERFORMING REPORT: BOOKER ASSOCIATES, INC.

Parameter Inventory for Station: CUGA0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/04/80-02/26/81	3	15.5	16.7	24.	10.6	45.97	6.78	**	**	**	**
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	09/04/80-10/02/80	2	42.25	42.25	57.	27.5	435.125	20.86	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/04/80-02/26/81	3	8.08	708.857	2114.	4.49	1480824.062	1216.891	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/04/80-02/26/81	3	0.	0.833	2.5	0.	2.083	1.443	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/04/80-02/26/81	3	230.	230.333	280.	181.	2450.333	49.501	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/04/80-09/04/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/04/80-02/26/81	3	7.1	6.967	7.1	6.7	0.053	0.231	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/04/80-02/26/81	3	7.1	6.923	7.1	6.7	0.056	0.237	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/04/80-02/26/81	3	0.079	0.119	0.2	0.079	0.005	0.069	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	3	120.	104.	149.	43.	3001.	54.781	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	09/04/80-02/26/81	3	28.	22.667	30.	10.	121.333	11.015	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/80-02/26/81	3	16.	12.	19.	1.	93.	9.644	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/04/80-02/26/81	3 ##	0.15	0.417	1.	0.1	0.256	0.506	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/80-10/02/80	2	33.5	33.5	34.	33.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/26/81-02/26/81	1	63.	63.	63.	63.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	09/04/80-02/26/81	3	500.	701.333	1420.	184.	412325.333	642.126	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/04/80-02/26/81	3 ##	45.	58.333	100.	30.	1358.333	36.856	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/04/80-02/26/81	3	121.	240.333	515.	85.	56905.333	238.548	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/04/80-02/26/81	3	90.	83.667	131.	30.	2580.333	50.797	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/80-02/26/81	3	179.	233.333	387.	134.	18216.333	134.968	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0006

NPS Station ID: CUGA0006 LAT/LON: 36.680755/ -83.464365 Agency: 11NPSWRD Date Created: 09/20/97
Location: MARTINS FORK: DOWNSTREAM LIMIT OF STUDY AREA FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_MF5
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 2400 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE EWING; KENTUCKY-VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED 3.5 MILES DOWNSTREAM FROM THE STATION MF2. STATION MF5 MARKS THE DOWNSTREAM LIMIT OF THE MARTIN FORKS STUDY AREA. IT IS USED AS A CONTROL TO MONITOR THE EFFECTS OF TUNNEL AND HIGHWAY CONSTRUCTION. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0006

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/91-10/15/93	8	11.2	10.525	16.4	5.3	14.456	3.802	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/03/91-10/15/93	7	0.6	1.343	4.	0.	3.396	1.843	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/03/91-10/15/93	8	17.	16.125	35.	5.	98.696	9.935	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/03/91-10/15/93	8	19.5	19.875	23.	18.	2.982	1.727	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/03/91-10/15/93	8	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/03/91-10/15/93	8	8.1	8.6	10.1	7.5	1.297	1.139	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/07/92-10/15/93	7	5.2	5.1	5.3	4.9	0.027	0.163	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/07/92-10/15/93	7	5.2	5.073	5.3	4.9	0.027	0.166	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/07/92-10/15/93	7	6.31	8.446	12.589	5.012	10.372	3.221	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/03/91-10/15/93	8	4.65	4.663	5.1	4.4	0.06	0.245	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/03/91-10/15/93	8	4.647	4.609	5.1	4.4	0.063	0.251	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/91-10/15/93	8	22.536	24.6	39.811	7.943	139.603	11.815	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/03/91-10/15/93	8 ##	0.05	0.406	1.	0.05	0.242	0.492	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/03/91-10/15/93	8	3.5	2.394	4.	0.05	3.881	1.97	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/03/91-05/03/92	3	0.6	0.4	0.6	0.	0.12	0.346	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/03/92-05/03/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/91-10/15/93	8	2.	1.975	4.	0.	1.491	1.221	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/03/91-05/03/92	3	0.02	0.213	0.61	0.01	0.118	0.344	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/91-10/15/93	8 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0006

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/03/91-10/15/93	8	0.075	0.204	0.82	0.02	0.077	0.277	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/03/91-10/15/93	8 ##	0.05	0.039	0.05	0.02	0.	0.015	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	2	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/03/91-10/15/93	8	4.	3.625	5.	1.	1.411	1.188	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/03/91-10/15/93	8	0.7	0.638	1.	0.005	0.102	0.319	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/03/91-10/15/93	8	0.4	0.375	0.4	0.3	0.002	0.046	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/03/91-10/15/93	8	0.265	0.263	0.34	0.2	0.003	0.05	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/03/91-10/15/93	8	0.35	0.459	0.98	0.3	0.058	0.24	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/03/91-10/15/93	8	0.55	0.55	0.8	0.2	0.04	0.2	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/03/91-10/15/93	8	4.2	4.337	5.4	3.9	0.243	0.493	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/03/91-10/15/93	8 ##	0.05	0.069	0.1	0.05	0.001	0.026	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	3 ##	50.	116.667	250.	50.	13333.333	115.47	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	3	20.	22.667	30.	18.	41.333	6.429	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	3 ##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/03/91-10/15/93	8 ##	5.	4.375	10.	0.	10.268	3.204	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/03/91-10/15/93	8	41.5	45.375	80.	10.	539.696	23.231	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/03/91-10/15/93	8 ##	25.	25.625	50.	0.	503.125	22.43	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/03/91-10/15/93	8	30.	43.125	100.	20.	835.268	28.901	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/03/91-10/15/93	8	35.	88.75	390.	20.	15526.786	124.607	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/03/91-10/16/92	3 ##	5.	3.333	5.	0.	8.333	2.887	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/03/91-10/16/92	4 ##	5.	5.	10.	0.	16.667	4.082	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	03/03/91-10/16/92	3 ##	5.	3.333	5.	0.	8.333	2.887	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/03/91-10/15/93	8 ##	9.5	12.375	30.	0.	170.839	13.071	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/03/91-10/15/93	8	155.	143.25	190.	90.	1735.929	41.664	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/03/91-10/15/93	8	127.	126.75	170.	80.	1095.929	33.105	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	03/03/91-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	03/03/91-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	03/03/91-10/15/93	8	1600.	6817.5	43800.	1300.	223335678.571	14944.42	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/03/91-10/15/93	7	8.	8.	10.	6.	2.	1.414	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/91-10/15/93	8 ##	0.15	0.131	0.15	0.	0.003	0.053	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/03/91-10/16/92	4 ##	42.5	33.75	50.	0.	556.25	23.585	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/03/91-10/15/93	8	0.065	0.065	0.1	0.03	0.001	0.027	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/03/91-01/29/93	6	1.5	1.5	3.	0.	1.1	1.049	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/03/91-10/15/93	8 ##	50.	68.75	100.	50.	669.643	25.877	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0006

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00403	PH, LAB	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00				2	0	0.00
		Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00				2	2	1.00
00406	PH, FIELD	Fresh Chronic	9.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Other-Lo Lim.	6.5	8	8	1.00	3	3	1.00	2	2	1.00	1	1	1.00	2	2	1.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	250.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00							1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0006

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	1	1.00										1	1	1.00
		Drinking Water	5.	1 &	1	1.00										1	1	1.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	1300.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	15.	3 &	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	100.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	5000.	8	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1 &	0	0.00							1	0	0.00			
		Drinking Water	2.	1 &	0	0.00							1	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	6	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0007

NPS Station ID: CUGA0007 | LAT/LON: 36.630503/ -83.494893 | Agency: 11NPSWRD | Date Created: 08/09/97
Location: VALE534R | | FIPS State/County: 51105 VIRGINIA/LEE |
Station Type: /TYPA/AMBNT/SPRING | | STORET Station ID(s): CUGA_NURE_12 /NURE_4090405 |
RMI-Indexes: | | Within Park Boundary: No |
RMI-Miles: | | |
HUC: 06010206 | Depth of Water: 0 | Aquifer: |
Major Basin: OHIO RIVER | Elevation: 0 | Water Body Id: |
Minor Basin: CUMBERLAND RIVER | | ECO Region: |
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:

Description:
THE SITE IS LOCATED ON THE EWING; KY-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING OUTSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0007

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/78-06/17/78	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/78-06/17/78	1	205.	205.	205.	205.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/17/78-06/17/78	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/78-06/17/78	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/78-06/17/78	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/78-06/17/78	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/78-06/17/78	1	8.62	8.62	8.62	8.62	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/17/78-06/17/78	1	157.	157.	157.	157.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/17/78-06/17/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/17/78-06/17/78	1	123.	123.	123.	123.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/17/78-06/17/78	1	0.086	0.086	0.086	0.086	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	56.	56.	56.	56.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	4100.	4100.	4100.	4100.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/17/78-06/17/78	1	10.	10.	10.	10.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/17/78-06/17/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0007

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0008

NPS Station ID: CUGA0008 | LAT/LON: 36.671837/ -83.512920 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: MARTINS FORK: ADJACENT TO PICNIC AREA | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_MF2
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 2920 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VARILLA; KENTUCKY-VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS IN THE EXTREME UPPER REACHES OF MARTINS FORK. IT IS ADJACENT TO A SMALL PICNIC AREA. THIS STATION IS USED AS A CONTROL TO MONITOR THE EFFECTS OF TUNNEL AND HIGHWAY CONSTRUCTION. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0008

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/91-12/18/95	9	8.9	9.889	15.4	5.7	9.419	3.069	5.7	7.35	12.1	15.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/03/91-10/15/93	7 ##	0.	0.174	1.	0.	0.138	0.371	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/03/91-04/08/96	10	10.	14.8	50.	5.	200.622	14.164	5.	5.	20.	47.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/03/91-12/18/95	9	17.	17.	20.	9.	11.75	3.428	9.	16.	20.	20.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/03/91-04/08/96	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/03/91-12/18/95	9	8.3	8.5	10.1	5.7	2.068	1.438	5.7	7.7	9.85	10.1
00403	PH, LAB, STANDARD UNITS SU	01/07/92-04/08/96	9	5.4	5.622	7.2	4.7	0.534	0.731	4.7	5.15	6.05	7.2
00403	CONVERTED PH, LAB, STANDARD UNITS	01/07/92-04/08/96	9	5.4	5.28	7.2	4.7	0.666	0.816	4.7	5.15	6.05	7.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/07/92-04/08/96	9	3.981	5.243	19.953	0.063	37.118	6.092	0.063	0.897	7.126	19.953
00406	PH, FIELD, STANDARD UNITS SU	03/03/91-04/08/96	10	4.95	4.93	5.7	4.1	0.271	0.521	4.13	4.475	5.4	5.67
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/03/91-04/08/96	10	4.947	4.671	5.7	4.1	0.346	0.588	4.13	4.475	5.4	5.67
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/91-04/08/96	10	11.295	21.354	79.433	1.995	587.18	24.232	2.194	3.981	33.67	75.471
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/03/91-04/08/96	10	0.3	0.49	1.	0.05	0.156	0.395	0.05	0.163	1.	1.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/03/91-04/08/96	10	1.4	1.7	5.	0.05	3.083	1.756	0.05	0.05	3.	4.8
00440	BICARBONATE ION (MG/L AS HCO3)	03/03/91-10/15/93	7	0.2	0.3	0.6	0.	0.057	0.238	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/91-04/08/96	10	3.5	3.8	9.	0.	10.124	3.182	0.04	0.55	6.5	8.9
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/03/91-04/17/93	4 ##	0.01	0.158	0.61	0.	0.091	0.302	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/91-04/08/96	10 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/03/91-04/08/96	10	0.305	0.649	2.16	0.11	0.436	0.66	0.115	0.205	1.075	2.074

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0008

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/03/91-04/08/96	10 ##	0.05	0.043	0.12	0.	0.001	0.033	0.001	0.021	0.05	0.113
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	2	7.3	7.3	12.8	1.8	60.5	7.778	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/03/91-04/08/96	10	4.	3.9	5.	1.	1.211	1.101	1.3	4.	4.25	5.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/03/91-04/08/96	10	0.95	1.821	10.7	0.005	9.829	3.135	0.085	0.8	1.025	9.74
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/03/91-04/08/96	10	0.4	0.39	0.4	0.3	0.001	0.032	0.31	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/03/91-04/08/96	10	0.28	0.288	0.6	0.1	0.019	0.138	0.106	0.19	0.333	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/03/91-04/08/96	10	0.34	0.342	0.5	0.11	0.013	0.115	0.123	0.285	0.433	0.497
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/03/91-04/08/96	10	0.6	0.63	1.	0.2	0.071	0.267	0.22	0.4	0.85	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/03/91-04/08/96	10	3.65	3.74	4.3	3.4	0.067	0.259	3.42	3.6	3.925	4.27
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/03/91-04/08/96	10 ##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	3 ##	50.	116.667	250.	50.	13333.333	115.47	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	3	20.	23.333	30.	20.	33.333	5.774	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/03/91-04/08/96	10 ##	5.	4.	10.	0.	10.	3.162	0.	0.	5.	9.5
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	3 ##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/03/91-04/08/96	10 ##	5.	3.5	5.	0.	5.833	2.415	0.	0.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	03/03/91-10/15/93	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/03/91-04/08/96	10 ##	5.	3.5	5.	0.	5.833	2.415	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	03/03/91-04/08/96	10	12.5	17.5	70.	5.	373.611	19.329	5.	5.	20.	65.
01049	LEAD, DISSOLVED (UG/L AS PB)	03/03/91-04/08/96	10 ##	37.5	31.	50.	0.	471.111	21.705	0.	7.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	03/03/91-04/08/96	10	29.5	30.6	60.	20.	149.156	12.213	20.	20.	34.75	58.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/03/91-04/08/96	10	21.	27.2	50.	20.	109.733	10.475	20.	20.	33.25	49.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/03/91-10/16/92	3 ##	5.	3.333	5.	0.	8.333	2.887	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/03/91-04/08/96	10 ##	5.	4.	10.	0.	10.	3.162	0.	0.	5.	9.5
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/03/91-10/16/92	4 ##	7.5	6.25	10.	0.	22.917	4.787	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	03/03/91-10/16/92	3 ##	5.	3.333	5.	0.	8.333	2.887	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/03/91-04/08/96	10	20.	15.9	30.	0.	151.433	12.306	0.	3.75	29.25	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/03/91-04/08/96	10	80.	79.8	130.	41.	604.178	24.58	42.9	60.	92.5	127.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/03/91-04/08/96	10	40.	43.6	83.	5.	511.822	22.623	7.4	29.75	62.25	81.6
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	03/03/91-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	03/03/91-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	03/03/91-10/15/93	8	1410.	1445.	1700.	1190.	34400.	185.472	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/03/91-04/08/96	10 ##	5.	3.5	5.	0.	5.833	2.415	0.	0.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/03/91-04/08/96	9	8.	7.667	9.	6.	0.75	0.866	6.	7.	8.	9.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/91-04/08/96	10 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/03/91-10/16/92	4 ##	42.5	33.75	50.	0.	556.25	23.585	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/03/91-04/08/96	10	0.035	0.036	0.06	0.005	0.	0.018	0.007	0.02	0.053	0.06
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/03/91-01/29/93	6	1.	1.833	4.	0.	2.967	1.722	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/03/91-04/08/96	10 ##	50.	65.	100.	50.	583.333	24.152	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0008

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	9	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
00403	PH, LAB	Fresh Chronic	9.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Other-Lo Lim.	6.5	9	8	0.89	3	2	0.67	3	3	1.00				3	3	1.00
00406	PH, FIELD	Fresh Chronic	9.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Other-Lo Lim.	6.5	10	10	1.00	3	3	1.00	3	3	1.00	1	1	1.00	3	3	1.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	250.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00							1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	1	1.00										1	1	1.00
		Drinking Water	5.	1 &	1	1.00										1	1	1.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0008

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	1300.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	15.	3 &	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	100.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	5000.	10	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1 &	0	0.00							1	0	0.00			
		Drinking Water	2.	1 &	0	0.00							1	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	6	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0009

NPS Station ID: CUGA0009
LAT/LON: 36.682226/ -83.564170
Agency: 21KY
Date Created: 04/22/89
Location: ARROW SPRING
FIPS State/County: 21213 KENTUCKY/SIMPSON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): SUD058 /03019001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05110002
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: GREEN RIVER
ECO Region:
RF1 Index: 05110002008
RF1 Mile Point: 40.800
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 05130101052700.00
RF3 Mile Point: 0.00
Distance from RF3: 0.74
On/Off RF3:
Description:
USGS TOPOGRAPHIC MAP NO. 2-28, FRANKLIN, KY QUADRANGLE SAMPLE COLLECTED FROM ARROW SPRING
ON 18 MARCH 83 IN SIMPSON COUNTY STREAM ORDER 1, MILEPOINT 0.5
BIOLOGICAL PHYSICOCHEMICAL STATION GREEN RIVER BASIN

Parameter Inventory for Station: CUGA0009

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/18/83-03/18/83	1	15.5	15.5	15.5	15.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	1	1.01	1.01	1.01	1.01	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	1	13.4	13.4	13.4	13.4	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/18/83-03/18/83	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/18/83-03/18/83	1	31.1	31.1	31.1	31.1	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/18/83-03/18/83	1	34.5	34.5	34.5	34.5	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	03/18/83-03/18/83	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	03/18/83-03/18/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: CUGA0010

NPS Station ID: CUGA0010 LAT/LON: 36.687781/ -83.566670 Agency: 21KY Date Created: 04/01/89
Location: SHARPS BRANCH ABOVE MOUTH OF ARROW SPRING FIPS State/County: 21213 KENTUCKY/SIMPSON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): SUD059 /03019002
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05110002 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 0 Water Body Id:
Minor Basin: GREEN RIVER ECO Region:
RF1 Index: 05110002008 RF1 Mile Point: 40.800 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 05130101000511.99 RF3 Mile Point: 16.02 Distance from RF3: 0.02 On/Off RF3:
Description:
USGS TOPOGRAPHIC MAP NO. 2-28, FRAQNKLIN, KY-TN QUADRANGLE SAMPLE COLLECTED ABOVE MOUTH OF ARROW SPRING
ON 18 MARCH 83 IN SIMPSON COUNTY STREAM ORDER 2, MILEPOINT 1.6
BIOLOGICAL PHYSICOCHEMICAL STATION GREEN RIVER BASIN

Parameter Inventory for Station: CUGA0010

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/18/83-03/18/83	1	7.89	7.89	7.89	7.89	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/18/83-03/18/83	1	33.3	33.3	33.3	33.3	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/18/83-03/18/83	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/18/83-03/18/83	1	32.5	32.5	32.5	32.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/18/83-03/18/83	1	25.	25.	25.	25.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	03/18/83-03/18/83	1 ##	3.	3.	3.	3.	0.	0.	**	**	**	**
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/18/83-03/18/83	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	03/18/83-03/18/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/18/83-03/18/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: CUGA0011

NPS Station ID: CUGA0011 | LAT/LON: 36.648781/ -83.578503 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: SHILLALAH CREEK: AT PARK BOUNDARY | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_SH10
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 2440 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VARILLA; KENTUCKY-VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON SHILLALAH CREEK AT THE PARK BOUNDARY. IT IS THE ONLY SAMPLING STATION ON SHILLALAH CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/07/92-12/18/95	8	10.75	10.163	16.1	4.3	17.368	4.168	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/07/92-10/15/93	6	0.75	1.583	4.	0.	3.642	1.908	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	01/07/92-04/08/96	9	10.	9.667	18.	5.	19.25	4.387	5.	5.	12.	18.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/07/92-12/18/95	8	19.	19.875	24.	17.	5.268	2.295	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	01/07/92-04/08/96	9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/07/92-12/18/95	8	9.55	9.425	10.7	7.7	1.419	1.191	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/07/92-04/08/96	9	5.5	5.5	6.3	5.	0.193	0.439	5.	5.1	5.85	6.3
00403	CONVERTED PH, LAB, STANDARD UNITS	01/07/92-04/08/96	9	5.5	5.344	6.3	5.	0.22	0.469	5.	5.1	5.85	6.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/07/92-04/08/96	9	3.162	4.524	10.	0.501	11.539	3.397	0.501	1.498	7.943	10.
00406	PH, FIELD, STANDARD UNITS SU	01/07/92-04/08/96	9	5.6	5.533	7.1	4.3	0.657	0.811	4.3	4.9	5.95	7.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	01/07/92-04/08/96	9	5.6	5.007	7.1	4.3	0.97	0.985	4.3	4.9	5.95	7.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/07/92-04/08/96	9	2.512	9.851	50.119	0.079	265.684	16.3	0.079	1.19	13.948	50.119
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	01/07/92-04/08/96	9	0.3	0.544	2.	0.05	0.449	0.67	0.05	0.05	1.	2.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	01/07/92-04/08/96	9	2.	1.9	3.	0.05	1.564	1.251	0.05	0.525	3.	3.
00440	BICARBONATE ION (MG/L AS HCO3)	01/07/92-10/15/93	4	0.6	0.6	1.	0.2	0.107	0.327	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/03/92-05/03/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/07/92-04/08/96	9	2.	2.033	5.	0.	3.61	1.9	0.	0.15	4.	5.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	01/07/92-10/16/92	3 ##	0.	0.003	0.01	0.	0.	0.006	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/07/92-04/08/96	9 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/07/92-04/08/96	9	0.05	0.463	2.23	0.	0.61	0.781	0.	0.025	0.815	2.23
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	01/07/92-04/08/96	9 ##	0.05	0.039	0.05	0.02	0.	0.013	0.02	0.025	0.05	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/21/92-10/16/92	2	2.4	2.4	2.6	2.2	0.08	0.283	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/07/92-04/08/96	9	5.	5.333	9.	2.	3.75	1.936	2.	4.5	6.5	9.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/07/92-04/08/96	9	1.	2.344	12.1	0.1	13.808	3.716	0.1	0.85	2.05	12.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/07/92-04/08/96	9	0.5	0.556	0.7	0.5	0.005	0.073	0.5	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/07/92-04/08/96	9	0.3	0.374	1.26	0.04	0.137	0.371	0.04	0.135	0.455	1.26
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/07/92-04/08/96	9	0.4	0.52	1.41	0.12	0.143	0.378	0.12	0.28	0.65	1.41
00941	CHLORIDE, DISSOLVED IN WATER MG/L	01/07/92-04/08/96	9	0.8	0.678	1.	0.4	0.052	0.228	0.4	0.45	0.85	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/07/92-04/08/96	9	4.8	4.6	6.3	1.7	1.5	1.225	1.7	4.45	5.1	6.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/07/92-04/08/96	9 ##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/03/92-10/16/92	3 ##	50.	116.667	250.	50.	13333.333	115.47	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/03/92-10/16/92	3	21.	23.667	30.	20.	30.333	5.508	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	01/07/92-04/08/96	9 ##	5.	3.889	5.	0.	4.861	2.205	0.	2.5	5.	5.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/03/92-10/16/92	3 ##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	01/07/92-04/08/96	9 ##	5.	3.889	5.	0.	4.861	2.205	0.	2.5	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	01/07/92-10/15/93	7 ##	5.	4.714	13.	0.	18.905	4.348	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	01/07/92-04/08/96	9 ##	5.	58.333	490.	0.	26212.5	161.903	0.	2.5	7.5	490.
01046	IRON, DISSOLVED (UG/L AS FE)	01/07/92-04/08/96	9 ##	5.	11.667	30.	5.	87.5	9.354	5.	5.	20.	30.
01049	LEAD, DISSOLVED (UG/L AS PB)	01/07/92-04/08/96	9 ##	50.	34.444	50.	0.	396.528	19.913	0.	17.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	01/07/92-04/08/96	9	30.	30.778	40.	23.	34.944	5.911	23.	27.	35.	40.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/07/92-04/08/96	9	30.	93.222	610.	20.	37583.944	193.866	20.	25.5	34.	610.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/21/92-10/16/92	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/07/92-04/08/96	9 ##	5.	3.889	5.	0.	4.861	2.205	0.	2.5	5.	5.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/03/92-10/16/92	3	10.	10.333	11.	10.	0.333	0.577	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/21/92-10/16/92	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	01/07/92-04/08/96	9	20.	15.778	30.	0.	104.444	10.22	0.	6.	22.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	01/07/92-04/08/96	9	80.	89.889	176.	36.	1860.111	43.129	36.	58.5	115.	176.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/07/92-04/08/96	9	80.	81.889	138.	40.	1055.611	32.49	40.	55.	105.	138.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/21/92-10/16/92	2 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/21/92-10/16/92	2 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	01/07/92-10/15/93	7	1550.	1618.571	1900.	1400.	32080.952	179.112	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	01/07/92-04/08/96	9 ##	5.	5.	10.	0.	6.25	2.5	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	01/07/92-04/08/96	8	8.5	8.75	12.	5.	4.214	2.053	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	01/07/92-04/08/96	9 ##	0.15	0.133	0.15	0.	0.002	0.05	0.	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/03/92-10/16/92	3 ##	50.	45.	50.	35.	75.	8.66	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	01/07/92-04/08/96	9	0.02	0.02	0.04	0.005	0.	0.013	0.005	0.008	0.03	0.04
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	01/07/92-01/29/93	5	1.	2.	6.	1.	5.	2.236	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	01/07/92-04/08/96	9 ##	50.	61.111	100.	50.	486.111	22.048	50.	50.	75.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0011

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	8	0	0.00	3	0	0.00	3	0	0.00				2	0	0.00
00403	PH, LAB	Fresh Chronic	9.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Other-Lo Lim.	6.5	9	9	1.00	3	3	1.00	3	3	1.00				3	3	1.00
00406	PH, FIELD	Fresh Chronic	9.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Other-Lo Lim.	6.5	9	8	0.89	3	2	0.67	3	3	1.00				3	3	1.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Drinking Water	250.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00							1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	1	1.00										1	1	1.00
		Drinking Water	5.	1 &	1	1.00										1	1	1.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0011

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01040	COPPER, DISSOLVED	Fresh Acute	18.	9	1	0.11	3	1	0.33	3	0	0.00				3	0	0.00
		Drinking Water	1300.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Drinking Water	15.	2 &	0	0.00				1	0	0.00				1	0	0.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Drinking Water	100.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
		Drinking Water	5000.	9	0	0.00	3	0	0.00	3	0	0.00				3	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	5	0	0.00	2	0	0.00	2	0	0.00				1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0012

NPS Station ID: CUGA0012 LAT/LON: 36.602616/ -83.583476 Agency: 21VASWCB Date Created: / /
Location: S. OF RT. 58 AT NASH MILL FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 6BIND008.15 /VA6B01-X0028/VA6B1X0028
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: 04-TENNESSEE, 05-OHIO Elevation: 0 Water Body Id:
Minor Basin: 6-TENNESSEE + BIG-SANDY ECO Region:
RF1 Index: 06010206024 RF1 Mile Point: 6.330 Distance from RF1: 10.50 On/Off RF1: OFF
RF3 Index: 06010206002200.31 RF3 Mile Point: 1.46 Distance from RF3: 0.76 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 6B CLINCH-POWELL REGION: 1 SOUTHWEST
RIVER: INDIAN CREEK SECTION: 01 TOPO MAP #: 0004 TOPO MAP NAME: WHEELER, TN - VA

Parameter Inventory for Station: CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	67	15.6	15.101	26.1	5.	31.104	5.577	7.8	10.	20.	22.2
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/17/71-07/13/71	3	7.	6.167	9.	2.5	11.083	3.329	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	64	10.	9.858	13.8	6.6	2.896	1.702	7.7	8.525	10.95	12.2
00310	BOD, 5 DAY, 20 DEG C MG/L	03/30/70-04/07/71	3	0.8	0.933	1.8	0.2	0.653	0.808	**	**	**	**
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	68	8.5	8.375	9.2	6.8	0.215	0.463	7.8	8.	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	68	8.5	8.056	9.2	6.8	0.318	0.564	7.8	8.	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	68	0.003	0.009	0.158	0.001	0.	0.02	0.001	0.002	0.01	0.016
00403	PH, LAB, STANDARD UNITS SU	03/30/70-05/18/70	2	7.8	7.8	8.	7.6	0.08	0.283	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/30/70-05/18/70	2	7.755	7.755	8.	7.6	0.084	0.29	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-05/18/70	2	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/30/70-05/18/70	2	103.	103.	110.	96.	98.	9.899	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	36	189.	243.028	2208.	134.	114264.656	338.031	152.2	167.25	202.75	222.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	35	81.	79.714	115.	35.	432.269	20.791	49.6	65.	90.	110.4
00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	35	104.	107.143	194.	68.	580.597	24.096	83.6	91.	120.	131.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	36	7.5	10.389	35.	1.	61.102	7.817	4.	5.	13.	23.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	35	3.	4.4	14.	1.	9.365	3.06	1.6	2.	5.	9.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	35	4.	6.143	24.	0.	40.479	6.362	0.6	2.	7.	17.
00545	RESIDUE, SETTLEABLE (ML/L)	06/08/70-04/09/73	30 ##	0.05	0.075	0.4	0.05	0.005	0.073	0.05	0.05	0.05	0.19
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	38 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.064
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	38 ##	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	38	0.795	0.739	1.399	0.16	0.086	0.294	0.317	0.558	0.9	1.119
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	38	0.1	0.154	0.6	0.05	0.018	0.134	0.05	0.05	0.2	0.4
01002	ARSENIC, TOTAL (UG/L AS AS)	02/28/71-07/29/76	10 ##	2.5	1.95	2.5	0.5	0.581	0.762	0.55	1.375	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	11/05/70-07/29/76	16 ##	5.	4.531	5.	1.	1.649	1.284	1.35	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	03/30/70-07/29/76	23 ##	5.	6.739	20.	5.	12.747	3.57	5.	5.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	03/30/70-07/29/76	23 ##	5.	8.043	20.	5.	26.68	5.165	5.	5.	10.	20.
01045	IRON, TOTAL (UG/L AS FE)	11/05/70-04/07/71	2	300.	300.	400.	200.	20000.	141.421	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/05/70-07/29/76	21 ##	5.	9.238	30.	2.	59.89	7.739	5.	5.	10.	24.8
01055	MANGANESE, TOTAL (UG/L AS MN)	03/30/70-04/07/71	2	55.	55.	100.	10.	4050.	63.64	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/19/73-07/29/76	11 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	03/30/70-07/29/76	23 ##	5.	11.739	50.	5.	153.656	12.396	5.	5.	10.	36.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	05/18/70-12/03/70	7	4600.	4442.857	11000.	1500.	10012857.143	3164.31	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	05/18/70-12/03/70	7	3.663	3.567	4.041	3.176	0.079	0.281	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			3686.355								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	57	400.	1824.561	40000.	50.	29784207.393	5457.491	50.	100.	1300.	5840.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	57	2.602	2.62	4.602	1.699	0.517	0.719	1.699	2.	3.114	3.766
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			416.391								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	38 ##	0.05	0.054	0.2	0.025	0.001	0.026	0.05	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	38 ##	0.05	0.037	0.05	0.005	0.	0.02	0.005	0.009	0.05	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	09/16/70-07/29/76	24 ##	0.25	0.26	0.5	0.25	0.003	0.051	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0012

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00	1	0	0.00							2	0	0.00
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	64	0	0.00	23	0	0.00	13	0	0.00	10	0	0.00	18	0	0.00
00400	PH	Fresh Chronic	9.	68	8	0.12	24	2	0.08	16	1	0.06	10	2	0.20	18	3	0.17
		Other-Lo Lim.	6.5	68	0	0.00	24	0	0.00	16	0	0.00	10	0	0.00	18	0	0.00
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00							1	0	0.00	1	0	0.00
		Other-Lo Lim.	6.5	2	0	0.00							1	0	0.00	1	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	38	0	0.00	14	0	0.00	8	0	0.00	5	0	0.00	11	0	0.00
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	38	0	0.00	14	0	0.00	8	0	0.00	5	0	0.00	11	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	50.	10	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2 &	0	0.00	1	0	0.00							1	0	0.00
		Drinking Water	5.	2 &	0	0.00	1	0	0.00							1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	8	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	23	3	0.13	8	0	0.00	8	1	0.13	1	1	1.00	6	1	0.17
		Drinking Water	1300.	23	0	0.00	8	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	21	0	0.00	8	0	0.00	8	0	0.00	1	0	0.00	4	0	0.00
		Drinking Water	15.	21	4	0.19	8	1	0.13	8	1	0.13	1	1	1.00	4	1	0.25
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	11	0	0.00	4	0	0.00	4	0	0.00				3	0	0.00
		Drinking Water	100.	11	0	0.00	4	0	0.00	4	0	0.00				3	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	23	0	0.00	8	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00
		Drinking Water	5000.	23	0	0.00	8	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	7	7	1.00	3	3	1.00	2	2	1.00				2	2	1.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	57	39	0.68	21	17	0.81	12	4	0.33	9	5	0.56	15	13	0.87
71900	MERCURY, TOTAL	Fresh Acute	2.4	24	0	0.00	9	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00
		Drinking Water	2.	24	0	0.00	9	0	0.00	8	0	0.00	1	0	0.00	6	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1970 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	8	13.65	14.663	23.3	7.8	31.903	5.648	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	9	10.	9.622	11.6	7.4	1.944	1.394	7.4	8.3	10.6	11.6
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	9	8.2	8.3	9.2	7.5	0.377	0.614	7.5	7.75	8.85	9.2
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	9	8.2	7.973	9.2	7.5	0.498	0.705	7.5	7.75	8.85	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	9	0.006	0.011	0.032	0.001	0.	0.012	0.001	0.001	0.021	0.032

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	12	12.2	13.8	23.3	5.	42.675	6.533	5.51	7.925	20.45	22.82
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	12	10.6	10.667	13.8	8.	3.792	1.947	8.18	8.8	12.35	13.68
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	12	8.5	8.517	8.8	8.	0.056	0.237	8.06	8.425	8.7	8.8
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	12	8.5	8.45	8.8	8.	0.061	0.247	8.06	8.425	8.7	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	12	0.003	0.004	0.01	0.002	0.	0.002	0.002	0.002	0.004	0.009
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	10 ##	50.	5800.	40000.	50.	152940555.556	12366.914	50.	50.	6350.	36800.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	10 ##	1.699	2.605	4.602	1.699	1.435	1.198	1.699	1.699	3.798	4.532
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			403.038								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	11	16.7	15.564	21.1	7.8	23.175	4.814	8.24	10.	20.	21.
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	11	9.2	9.155	12.2	6.6	3.043	1.744	6.68	8.	10.8	11.96
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.	8.064	8.7	6.8	0.257	0.507	7.	7.9	8.5	8.66
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.	7.667	8.7	6.8	0.429	0.655	7.	7.9	8.5	8.66
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	11	0.01	0.022	0.158	0.002	0.002	0.046	0.002	0.003	0.013	0.13
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	400.	409.091	800.	50.	90409.091	300.681	50.	100.	700.	800.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	2.602	2.437	2.903	1.699	0.218	0.467	1.699	2.	2.845	2.903
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			273.678								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	11	14.4	13.736	20.	5.	27.967	5.288	5.56	8.3	18.9	19.88
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	9	9.2	9.733	11.8	8.2	1.53	1.237	8.2	8.8	10.9	11.8
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.3	8.273	9.	7.5	0.238	0.488	7.56	7.8	8.8	8.96
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.3	8.047	9.	7.5	0.294	0.543	7.56	7.8	8.8	8.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	11	0.005	0.009	0.032	0.001	0.	0.009	0.001	0.002	0.016	0.028
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	900.	1245.455	6000.	50.	3142227.273	1772.633	50.	100.	1700.	5300.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	2.954	2.621	3.778	1.699	0.564	0.751	1.699	2.	3.23	3.702
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			417.473								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	9	15.6	15.856	21.1	8.9	19.213	4.383	8.9	12.2	20.55	21.1
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	9	10.	10.	11.6	8.4	0.78	0.883	8.4	9.5	10.4	11.6
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	9	8.5	8.222	9.	7.6	0.229	0.479	7.6	7.8	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	9	8.5	8.018	9.	7.6	0.276	0.526	7.6	7.8	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	9	0.003	0.01	0.025	0.001	0.	0.009	0.001	0.003	0.016	0.025
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	9	400.	511.111	1500.	200.	158611.111	398.26	200.	250.	600.	1500.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	9	2.602	2.624	3.176	2.301	0.073	0.27	2.301	2.389	2.778	3.176
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			420.916								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	11	16.7	15.655	23.9	6.7	38.563	6.21	7.14	8.9	22.2	23.56
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	9	10.	10.133	13.8	7.6	5.2	2.28	7.6	8.	12.2	13.8
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.7	8.7	9.	8.4	0.05	0.224	8.42	8.5	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	11	8.7	8.651	9.	8.4	0.053	0.229	8.42	8.5	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	11	0.002	0.002	0.004	0.001	0.	0.001	0.001	0.001	0.003	0.004
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	900.	1263.636	6000.	50.	2844045.455	1686.43	50.	200.	1600.	5160.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	11	2.954	2.755	3.778	1.699	0.426	0.653	1.699	2.301	3.204	3.674
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			568.42								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	5	18.9	18.34	26.1	7.8	50.933	7.137	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	5	10.	9.36	11.8	7.	4.668	2.161	**	**	**	**
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	5	8.7	8.64	9.	8.3	0.068	0.261	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	5	8.7	8.58	9.	8.3	0.073	0.269	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	5	0.002	0.003	0.005	0.001	0.	0.002	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	5	300.	1860.	6000.	100.	6663000.	2581.279	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/31/71-07/29/76	5	2.477	2.74	3.778	2.	0.686	0.828	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			550.156								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	23	20.	19.709	26.1	13.3	10.444	3.232	13.74	17.2	21.7	23.66
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	23	8.4	8.565	10.2	6.6	1.028	1.014	7.16	8.	9.4	10.
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	24	8.5	8.429	9.	7.5	0.108	0.329	8.	8.225	8.575	8.85
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	24	8.5	8.282	9.	7.5	0.131	0.362	8.	8.225	8.575	8.85
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	24	0.003	0.005	0.032	0.001	0.	0.006	0.001	0.003	0.006	0.01
00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	13	202.	208.769	286.	181.	685.859	26.189	184.6	194.	217.5	261.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	13	92.	92.846	115.	65.	309.808	17.601	66.6	75.	110.	113.4
00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	13	111.	115.923	194.	75.	821.41	28.66	81.4	100.	128.	170.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	13	6.	8.462	23.	2.	34.936	5.911	2.8	4.5	11.	20.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	13	3.	4.308	14.	2.	10.231	3.199	2.	2.	5.	10.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	13	3.	4.154	12.	0.	13.474	3.671	0.	1.5	7.	10.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	14 ##	0.05	0.054	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.08
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	14 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	14	0.66	0.591	1.099	0.16	0.063	0.252	0.18	0.45	0.722	0.95
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	14	0.15	0.211	0.6	0.05	0.031	0.177	0.05	0.088	0.325	0.55
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	14 ##	0.05	0.054	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.075
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	14 ##	0.05	0.035	0.05	0.005	0.	0.021	0.005	0.009	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	16	8.05	8.588	12.8	5.	5.017	2.24	5.	6.975	10.	12.03
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	13	10.8	11.369	13.8	9.2	1.612	1.27	9.68	10.6	12.	13.64
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	16	8.45	8.325	9.	7.5	0.223	0.473	7.5	7.85	8.7	8.86
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	16	8.447	8.071	9.	7.5	0.292	0.541	7.5	7.85	8.7	8.86
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	16	0.004	0.008	0.032	0.001	0.	0.01	0.001	0.002	0.014	0.032
00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	6	180.5	514.333	2208.	162.	688538.667	829.782	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	6	77.	74.	88.	50.	174.4	13.206	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	6	109.	107.	120.	92.	132.8	11.524	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	5.5	5.833	13.	1.	15.767	3.971	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	2.5	2.833	5.	1.	2.167	1.472	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	1.5	3.	11.	0.	16.4	4.05	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	8 ##	0.05	0.056	0.1	0.05	0.	0.018	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	8 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	8	0.95	1.062	1.399	0.8	0.054	0.232	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	8 ##	0.125	0.125	0.2	0.05	0.006	0.08	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	8 ##	0.05	0.069	0.2	0.05	0.003	0.053	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	8 ##	0.05	0.039	0.05	0.005	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	10	10.	10.95	16.7	7.8	9.807	3.132	7.85	8.75	13.875	16.59
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	10	11.1	11.32	13.8	10.	1.228	1.108	10.	10.6	11.75	13.64
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	10	8.35	8.34	9.	7.6	0.243	0.493	7.62	7.95	8.775	9.
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	10	8.325	8.114	9.	7.6	0.3	0.547	7.62	7.95	8.775	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	10	0.005	0.008	0.025	0.001	0.	0.008	0.001	0.002	0.011	0.024
00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	6	158.	158.	177.	139.	152.4	12.345	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	6	77.5	72.667	86.	54.	179.867	13.411	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	6	84.5	85.333	98.	68.	108.667	10.424	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	9.5	9.333	13.	5.	9.067	3.011	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	5.	5.	8.	3.	4.	2.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	6	3.5	4.333	7.	2.	4.667	2.16	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	5 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	5 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	5	0.8	0.66	0.9	0.2	0.078	0.279	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	5 ##	0.05	0.15	0.4	0.05	0.024	0.154	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	5 ##	0.05	0.045	0.05	0.025	0.	0.011	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	5 ##	0.05	0.037	0.05	0.005	0.	0.02	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/70-07/29/76	18	17.8	17.311	23.3	10.	13.66	3.696	10.99	14.4	20.	23.3
00300	OXYGEN, DISSOLVED MG/L	03/30/70-07/29/76	18	9.4	9.606	12.6	7.	2.283	1.511	7.18	8.725	10.45	12.42
00400	PH (STANDARD UNITS)	03/30/70-07/29/76	18	8.5	8.367	9.2	6.8	0.367	0.606	7.7	7.875	8.8	9.02
00400	CONVERTED PH (STANDARD UNITS)	03/30/70-07/29/76	18	8.5	7.841	9.2	6.8	0.659	0.812	7.7	7.875	8.8	9.02
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/70-07/29/76	18	0.003	0.014	0.158	0.001	0.001	0.036	0.001	0.002	0.013	0.03
00500	RESIDUE, TOTAL (MG/L)	03/30/70-07/29/76	11	185.	181.909	222.	134.	621.091	24.922	136.8	168.	196.	218.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/70-07/29/76	10	72.	70.3	110.	35.	620.678	24.913	35.2	46.	88.5	108.
00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/70-07/29/76	10	106.5	108.9	157.	85.	532.1	23.067	85.1	86.75	123.75	154.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/70-07/29/76	11	13.	15.727	35.	5.	110.218	10.498	5.2	7.	25.	34.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/70-07/29/76	10	4.	5.1	11.	1.	15.878	3.985	1.	1.75	9.5	11.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/70-07/29/76	10	8.5	11.7	24.	1.	74.456	8.629	1.4	5.	23.	23.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/70-07/29/76	11 ##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.092
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	11 ##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/70-07/29/76	11	0.8	0.729	1.049	0.36	0.051	0.225	0.378	0.58	0.89	1.039
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/70-07/29/76	11	0.1	0.105	0.2	0.05	0.004	0.065	0.05	0.05	0.2	0.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/70-07/29/76	11 ##	0.05	0.048	0.05	0.025	0.	0.008	0.03	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/70-07/29/76	11 ##	0.05	0.038	0.05	0.005	0.	0.021	0.005	0.005	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0013

NPS Station ID: CUGA0013 LAT/LON: 36.587781/ -83.600837 Agency: 21TNECO Date Created: 11/29/97
Location: INDIAN CREEK NEAR GREERS CHAPEL ROAD BUGS ONLY FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ECO67F26
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: TN RIVER Elevation: 0 Water Body Id:
Minor Basin: CLINCH RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
BENTHICS ONLY 4TH QUARTER 97 COMPARE WITH BIG WAR CREEK POSSIBLE REPLACEMENT CLAIBORNE COUNTY

Parameter Inventory for Station: CUGA0013

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/97-08/11/97	1	20.1	20.1	20.1	20.1	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	08/11/97-08/11/97	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/11/97-08/11/97	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/11/97-08/11/97	1	12.7	12.7	12.7	12.7	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/11/97-08/11/97	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/11/97-08/11/97	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/97-08/11/97	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/11/97-08/11/97	1	163.	163.	163.	163.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	08/11/97-08/11/97	1	147.	147.	147.	147.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/11/97-08/11/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/11/97-08/11/97	3 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/11/97-08/11/97	3	0.44	0.307	0.45	0.03	0.057	0.24	**	**	**	**
00635	NITROGEN, AMMONIA&ORG., TOTAL 1 DET (MG/L AS N)	08/11/97-08/11/97	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/11/97-08/11/97	3	0.015	0.017	0.035	0.002	0.	0.017	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	08/11/97-08/11/97	2 ##	1.05	1.05	1.6	0.5	0.605	0.778	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/11/97-08/11/97	1	172.	172.	172.	172.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/11/97-08/11/97	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/11/97-08/11/97	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/11/97-08/11/97	3 ##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/11/97-08/11/97	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	08/11/97-08/11/97	3	161.	111.833	162.	12.5	7400.583	86.027	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/11/97-08/11/97	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	08/11/97-08/11/97	3	18.	13.167	19.	2.5	85.583	9.251	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	08/11/97-08/11/97	3	3.	7.667	18.	2.	80.333	8.963	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/11/97-08/11/97	1	180.	180.	180.	180.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/11/97-08/11/97	1	2.255	2.255	2.255	2.255	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			180.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0013

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	3	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	3	0	0.00	3	0	0.00									
		Drinking Water	5.	3	0	0.00	3	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	3	0	0.00	3	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	3	0	0.00	3	0	0.00									
		Drinking Water	1300.	3	0	0.00	3	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	3	0	0.00	3	0	0.00									
		Drinking Water	5000.	3	0	0.00	3	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0014

NPS Station ID: CUGA0014 | LAT/LON: 36.600059/ -83.625503 | Agency: 11NPSWRD | Date Created: 07/12/97
Location: STATION CREEK AT US 58 | FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CMRC_SC10
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1250 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON STATION CREEK AT THE INTERSECTION OF US 58 AS THEY EXIT THE PARK. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0014

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	526041.667	10000000.	0.	**********	2071959.259	0.	0.	0.	1300000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.968	7.	0.	5.057	2.249	0.	0.	0.	5.919
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			9.294								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	187500.	2300000.	0.	341141304347.826	584073.03	0.	0.	0.	1100000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.759	6.362	0.	4.224	2.055	0.	0.	0.	5.929
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			5.743								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1333.333	30000.	0.	37449275.362	6119.581	0.	0.	0.	1000.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	875.	21000.	0.	18375000.	4286.607	0.	0.	0.	0.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0014

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	4	0.17	8	2	0.25	6	1	0.17	3	0	0.00	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0015

NPS Station ID: CUGA0015 LAT/LON: 36.600031/ -83.625476 Agency: 11NPSWRD Date Created: 09/20/97
Location: STATION CREEK: AT INTERSECTION WITH US 58 FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_ST10
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1250 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT THE INTERSECTION OF STATION CREEK AND US 58; (THE PARK BOUNDARY). IT IS USED TO MONITOR THE IMPACTS ON WATER QUALITY OF A CAMPGROUND WITH A SEPTIC SYSTEM AND FUTURE IMPACTS OF HIGHWAY CONSTRUCTION ON US 58. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY M. TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-08/12/96	26	11.45	12.342	18.4	7.	12.543	3.542	7.62	9.425	15.35	17.63
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-08/12/96	13	7.	10.216	30.	0.	110.486	10.511	0.004	0.9	20.	27.2
00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-08/12/96	26	17.5	17.135	40.	2.5	91.271	9.554	5.	10.	25.	30.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-08/12/96	26	126.5	173.769	686.	43.	20870.585	144.467	48.9	65.5	246.	339.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-08/12/96	26	1.	0.615	1.	0.	0.246	0.496	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-08/12/96	26	8.9	8.054	11.6	2.5	4.769	2.184	4.72	6.9	9.6	10.23
00403	PH, LAB, STANDARD UNITS SU	05/04/92-08/12/96	26	7.5	7.558	8.4	6.6	0.143	0.378	7.2	7.3	7.725	8.12
00403	CONVERTED PH, LAB, STANDARD UNITS	05/04/92-08/12/96	26	7.5	7.4	8.4	6.6	0.168	0.41	7.2	7.3	7.725	8.12
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-08/12/96	26	0.032	0.04	0.251	0.004	0.002	0.046	0.008	0.019	0.05	0.063
00406	PH, FIELD, STANDARD UNITS SU	05/04/92-08/12/96	26	7.2	7.35	8.2	6.7	0.166	0.407	6.97	7.1	7.7	8.13
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/04/92-08/12/96	26	7.2	7.212	8.2	6.7	0.186	0.431	6.97	7.1	7.7	8.13
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-08/12/96	26	0.063	0.061	0.2	0.006	0.002	0.043	0.007	0.02	0.079	0.108
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-08/12/96	26	43.	75.	330.	10.	6268.56	79.174	11.7	18.5	106.25	191.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-11/28/94	14	23.	35.071	92.	6.	927.456	30.454	6.5	10.	57.5	90.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-08/12/96	26	9.5	36.596	335.	0.	4826.56	69.473	1.55	3.	44.75	91.1
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-06/29/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-08/12/96	26 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-08/12/96	26	0.45	1.165	13.	0.	6.364	2.523	0.106	0.193	1.05	2.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-08/12/96	26 ##	0.05	0.045	0.05	0.	0.	0.012	0.025	0.05	0.05	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	18	2.9	5.161	22.	0.	36.166	6.014	1.17	1.8	5.1	18.4
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	26	51.	76.885	280.	18.	4015.866	63.371	19.7	26.75	110.	167.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-08/12/96	26	16.85	26.538	101.	5.4	536.595	23.165	6.26	9.	37.825	61.93
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-08/12/96	26	2.15	2.715	7.4	1.	2.701	1.643	1.1	1.375	3.725	5.26
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-08/12/96	26	0.935	2.214	22.	0.32	17.518	4.185	0.421	0.52	2.913	3.48
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-08/12/96	26	0.935	1.115	2.7	0.7	0.221	0.47	0.721	0.8	1.303	1.75
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-08/12/96	26	1.	3.258	41.	0.5	61.015	7.811	0.57	0.875	3.	5.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-08/12/96	26	8.8	10.558	33.	6.7	28.991	5.384	7.	7.5	10.85	15.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-08/12/96	26 ##	0.05	0.067	0.2	0.05	0.002	0.042	0.05	0.05	0.05	0.13
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-08/12/96	17 ##	50.	73.529	250.	50.	4411.765	66.421	50.	50.	50.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-08/12/96	19	20.	34.737	200.	10.	1821.427	42.678	18.	20.	30.	80.
01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-08/12/96	26 ##	5.	5.192	10.	0.	2.962	1.721	5.	5.	5.	6.5
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/04/92-08/12/96	19 ##	5.	5.263	10.	5.	1.316	1.147	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-08/12/96	26 ##	5.	4.808	5.	0.	0.962	0.981	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-03/23/93	7 ##	5.	5.286	12.	0.	12.238	3.498	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-08/12/96	26 ##	5.	4.808	5.	0.	0.962	0.981	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-08/12/96	26	79.5	99.115	330.	5.	7745.866	88.011	5.	16.5	160.	215.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-08/12/96	26 ##	50.	43.654	50.	0.	197.115	14.04	20.5	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-08/12/96	26	17.5	45.115	400.	5.	6332.906	79.58	5.	5.	58.75	99.9
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-08/12/96	26 ##	5.	10.346	72.	0.	200.795	14.17	5.	5.	10.5	23.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	18 ##	50.	42.5	50.	5.	297.794	17.257	5.	50.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-08/12/96	26 ##	5.	4.808	5.	0.	0.962	0.981	5.	5.	5.	5.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-03/23/93	5	70.	71.	120.	10.	2255.	47.487	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	18 ##	5.	6.667	20.	5.	23.529	4.851	5.	5.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-08/12/96	26 ##	5.	9.5	45.	0.	98.1	9.905	5.	5.	10.	23.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-08/12/96	26	150.	291.731	1200.	5.	108593.725	329.536	5.	38.25	365.	921.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-08/12/96	26	82.5	118.769	440.	5.	14514.745	120.477	5.	8.75	190.	313.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	4 ##	55.	65.	100.	50.	566.667	23.805	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-03/23/93	7	3200.	2990.	3450.	1900.	330300.	574.717	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-08/12/96	26 ##	5.	6.538	20.	5.	17.538	4.188	5.	5.	5.	13.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-08/12/96	25	58.	91.84	353.	21.	7369.89	85.848	24.6	31.	111.	243.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-08/12/96	26 ##	0.15	0.163	0.5	0.15	0.005	0.069	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-08/12/96	19 ##	50.	48.421	50.	35.	22.368	4.73	35.	50.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	05/04/92-08/12/96	26	0.19	0.247	1.3	0.02	0.073	0.271	0.027	0.09	0.31	0.582
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-08/12/96	21	13.	32.048	200.	2.	2889.748	53.756	2.	3.	39.5	148.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-08/12/96	26 ##	50.	51.923	100.	50.	96.154	9.806	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0015

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	26	2	0.08	7	0	0.00	7	0	0.00	7	2	0.29	5	0	0.00
00403	PH, LAB	Fresh Chronic	9.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	26	1	0.04	7	0	0.00	7	1	0.14	7	0	0.00	5	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	250.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	17	0	0.00	4	0	0.00	3	0	0.00	5	0	0.00	5	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	19	0	0.00	4	0	0.00	3	0	0.00	7	0	0.00	5	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	1	1.00										1	1	1.00
		Drinking Water	5.	1 &	1	1.00										1	1	1.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0015

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	1300.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	15.	2 &	0	0.00										2	0	0.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	100.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	5000.	26	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00	5	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	21	2	0.10	7	0	0.00	3	0	0.00	6	1	0.17	5	1	0.20

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0016

NPS Station ID: CUGA0016 LAT/LON: 36.603226/ -83.627171 Agency: 11NPSWRD Date Created: 07/12/97
Location: STATION CREEK - 0.25 MILES NORTH OF US 58 FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CMRC_SC5
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1250 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON STATION CREEK APPROXIMATELY 0.25 MILE NORTH OF THE INTERSECTION OF US 58 AND 300 FEET EAST OF THE GIBSON GAP TRAIL.
THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0016

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	487083.333	6600000.	0.	**********	1484618.174	0.	0.	0.	2500000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	1.023	6.82	0.	5.55	2.356	0.	0.	0.	6.392
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			10.55								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	212500.	2900000.	0.	528967391304.348	727301.445	0.	0.	0.	1100000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.534	6.462	0.	3.268	1.808	0.	0.	0.	3.171
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			3.416								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	2112.5	50000.	0.	104051576.087	10200.567	0.	0.	0.	350.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	2083.333	50000.	0.	104166666.667	10206.207	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.196	4.699	0.	0.92	0.959	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.57								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	25000.	350000.	0.	7391304347.826	85972.695	0.	0.	0.	125000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.456	5.544	0.	2.386	1.545	0.	0.	0.	2.699
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			2.857								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0016

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	4	0.17	8	2	0.25	6	1	0.17	3	0	0.00	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0017

NPS Station ID: CUGA0017
LAT/LON: 36.606198/ -83.629226
Agency: 11NPSWRD
Date Created: 09/20/97
Location: STATION CREEK: NORTH OF US 58
FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_ST5
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1250
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS APPROXIMATELY 0.45 MILES NORTH OF THE PARK BOUNDARY WHERE STATION CREEK INTERSECTS US 58. THIS STATION MONITORS THE EFFECTS OF FUTURE HIGHWAY CONSTRUCTION ON US 58 AND OF TIMBER REMOVAL ON STATION CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0017

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-12/18/95	9	9.8	11.933	18.9	8.7	13.378	3.658	8.7	9.4	14.9	18.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-12/04/95	7	0.9	2.599	12.	0.09	18.045	4.248	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-12/18/95	9	16.	22.	62.	5.	361.75	19.02	5.	7.5	35.	62.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-12/18/95	9	131.	128.778	199.	49.	2472.944	49.729	49.	81.5	168.	199.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-12/18/95	9	0.	0.111	1.	0.	0.111	0.333	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/18/95	9	8.	8.467	9.8	6.9	1.173	1.083	6.9	7.7	9.55	9.8
00403	PH, LAB, STANDARD UNITS SU	05/04/92-12/18/95	9	7.6	7.567	8.2	7.1	0.135	0.367	7.1	7.25	7.85	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	05/04/92-12/18/95	9	7.6	7.446	8.2	7.1	0.151	0.389	7.1	7.25	7.85	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-12/18/95	9	0.025	0.036	0.079	0.006	0.001	0.026	0.006	0.014	0.057	0.079
00406	PH, FIELD, STANDARD UNITS SU	05/04/92-12/18/95	9	7.5	7.422	7.8	7.	0.074	0.273	7.	7.15	7.65	7.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/04/92-12/18/95	9	7.5	7.345	7.8	7.	0.081	0.285	7.	7.15	7.65	7.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-12/18/95	9	0.032	0.045	0.1	0.016	0.001	0.029	0.016	0.023	0.071	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-12/18/95	9	53.	53.778	93.	15.	847.944	29.119	15.	23.	81.5	93.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-12/18/95	9 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-12/05/93	5	31.	31.6	55.	9.	355.8	18.863	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-12/18/95	9	2.	7.756	44.	0.	199.788	14.135	0.	0.9	8.5	44.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-06/29/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-12/18/95	9 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-12/18/95	9	0.15	0.307	1.1	0.	0.185	0.43	0.	0.025	0.62	1.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0017

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-12/18/95	9 ##	0.05	0.093	0.54	0.	0.028	0.168	0.	0.025	0.05	0.54
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-12/05/93	4	2.9	2.55	4.4	0.	3.497	1.87	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-12/18/95	9	70.	65.111	107.	19.	999.111	31.609	19.	33.	94.	107.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-12/18/95	9	22.2	20.467	34.3	5.5	112.093	10.587	5.5	9.65	30.05	34.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-12/18/95	9	3.6	3.367	5.4	1.3	1.783	1.335	1.3	2.15	4.35	5.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-12/18/95	9	1.2	1.171	1.95	0.48	0.216	0.465	0.48	0.745	1.535	1.95
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-12/18/95	9	1.	1.099	1.45	0.72	0.054	0.232	0.72	0.965	1.3	1.45
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-12/18/95	9	0.9	0.978	2.	0.6	0.172	0.415	0.6	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-12/18/95	9	10.4	10.689	14.	7.7	4.601	2.145	7.7	9.2	12.5	14.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-12/18/95	9 ##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-12/05/93	5 ##	50.	130.	250.	50.	12000.	109.545	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-12/05/93	5	40.	44.	80.	20.	530.	23.022	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-12/18/95	9 ##	5.	10.	50.	0.	231.25	15.207	0.	5.	7.5	50.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/04/92-12/05/93	5 ##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-12/18/95	9 ##	5.	5.	10.	0.	6.25	2.5	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-01/11/93	5 ##	5.	10.4	30.	0.	138.3	11.76	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-12/18/95	9 ##	5.	4.444	5.	0.	2.778	1.667	0.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-12/18/95	9	30.	44.778	145.	5.	1894.194	43.522	5.	16.5	65.	145.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-12/18/95	9 ##	50.	37.778	50.	20.	213.194	14.601	20.	22.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-12/18/95	9 ##	5.	14.222	53.	5.	251.694	15.865	5.	5.	20.	53.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-12/18/95	9 ##	5.	5.	10.	0.	6.25	2.5	0.	5.	5.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-12/05/93	4 ##	5.	16.25	50.	5.	506.25	22.5	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-12/18/95	9 ##	5.	5.	10.	0.	6.25	2.5	0.	5.	5.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-10/16/92	4	57.5	61.25	80.	50.	172.917	13.15	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-12/05/93	4 ##	7.5	10.	20.	5.	50.	7.071	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-12/18/95	9 ##	5.	10.444	30.	0.	100.528	10.026	0.	5.	19.5	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-12/18/95	9	80.	117.222	307.	5.	13642.944	116.803	5.	15.	240.	307.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-12/18/95	9	30.	55.333	162.	5.	3525.5	59.376	5.	5.	115.	162.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	4 ##	55.	67.5	110.	50.	825.	28.723	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-01/11/93	5	3260.	3210.	3600.	2720.	99600.	315.595	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-12/18/95	9 ##	5.	5.556	10.	5.	2.778	1.667	5.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-12/18/95	8	69.	71.5	144.	26.	1539.714	39.239	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-12/18/95	9 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-12/05/93	5 ##	50.	44.	50.	35.	67.5	8.216	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/04/92-12/18/95	9	0.09	0.116	0.37	0.01	0.014	0.117	0.01	0.025	0.185	0.37
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-12/04/95	6	3.5	3.333	6.	1.	5.067	2.251	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-12/18/95	9 ##	50.	55.556	100.	50.	277.778	16.667	50.	50.	50.	100.

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EPA Water Quality Criteria Analysis for Station: CUGA0017

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00403	PH, LAB	Fresh Chronic	9.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Drinking Water	250.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	2	0	0.00	1	0	0.00				2	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	2	0	0.00	1	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	1	1.00										1	1	1.00
		Drinking Water	5.	1 &	1	1.00										1	1	1.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0017

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Drinking Water	1300.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Drinking Water	15.	2 &	2	1.00										2	2	1.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Drinking Water	100.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
		Drinking Water	5000.	9	0	0.00	2	0	0.00	5	0	0.00				2	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	6	0	0.00	2	0	0.00	2	0	0.00				2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0018

NPS Station ID: CUGA0018
LAT/LON: 36.540559/ -83.636116
Agency: 131TVAC
Date Created: 08/12/89
Location: SOUTH WEST OF RIVER VIEW
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 477170
RMI-Indexes: 1021500 007720 00920 7930 3390
Within Park Boundary: No
RMI-Miles: 0953.80 0046.50 567.70 088.85 065.00
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: CLINCH RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: POWELL RIVER 65.0
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.90
On/Off RF1:
RF3 Index: 06010206000624.47
RF3 Mile Point: 28.31
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0018

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/05/89-06/05/89	2	20.75	20.75	20.8	20.7	0.005	0.071	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/05/89-06/05/89	2	337.	337.	337.	337.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/05/89-06/05/89	2	8.15	8.15	8.3	8.	0.045	0.212	**	**	**	**
00400	PH (STANDARD UNITS)	06/05/89-06/05/89	2	7.705	7.705	7.71	7.7	0.	0.007	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/05/89-06/05/89	2	7.705	7.705	7.71	7.7	0.	0.007	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/05/89-06/05/89	2	0.02	0.02	0.02	0.019	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0018

			Total	Exceed	Prop.	7/01-10/31			11/01-1/31			2/01-3/31			4/01-6/30		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00										2	0	0.00
00400	PH	Fresh Chronic	9.	2	0	0.00										2	0	0.00
		Other-Lo Lim.	6.5	2	0	0.00										2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0019

NPS Station ID: CUGA0019 | LAT/LON: 36.605004/ -83.639448 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: LEWIS HOLLOW DRAINAGE AT HIGHWAY 58 | FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_LH10
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1300 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON THE LEWIS HOLLOW DRAINAGE IMMEDIATELY PRIOR TO THE ENTRANCE OF WILDERNESS ROAD CAMPGROUND ON HIGHWAY 58. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/96-05/21/97	4	12.35	12.3	16.1	8.4	9.9	3.146	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/09/96-05/21/97	3	0.3	0.833	2.	0.2	1.023	1.012	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/09/96-05/21/97	4	22.5	22.5	40.	5.	208.333	14.434	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/96-05/21/97	4	180.	196.5	314.	112.	9644.333	98.206	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/09/96-05/21/97	4	0.	0.25	1.	0.	0.25	0.5	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/96-05/21/97	4	9.55	9.4	10.2	8.3	0.673	0.821	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/09/96-05/21/97	4	7.45	7.3	7.8	6.5	0.353	0.594	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/09/96-05/21/97	4	7.382	6.984	7.8	6.5	0.487	0.698	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/96-05/21/97	4	0.042	0.104	0.316	0.016	0.021	0.143	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	12/09/96-05/21/97	4	7.3	7.375	8.	6.9	0.269	0.519	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/09/96-05/21/97	4	7.204	7.185	8.	6.9	0.317	0.563	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/96-05/21/97	4	0.063	0.065	0.126	0.01	0.003	0.056	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/09/96-05/21/97	4	57.	58.	94.	24.	820.667	28.647	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/09/96-05/21/97	4 ##	0.5	0.388	0.5	0.05	0.051	0.225	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/09/96-05/21/97	4	17.	40.25	121.	6.	2991.583	54.695	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/09/96-05/21/97	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/09/96-05/21/97	4	3.45	3.031	5.2	0.025	4.712	2.171	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/09/96-05/21/97	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/09/96-05/21/97	4	77.5	82.5	130.	45.	1297.667	36.023	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/09/96-05/21/97	4	19.9	20.275	39.1	2.2	259.789	16.118	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/09/96-05/21/97	4	4.15	4.675	7.2	3.2	3.236	1.799	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/09/96-05/21/97	4	3.8	3.725	4.9	2.4	1.216	1.103	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/09/96-05/21/97	4	1.85	1.94	3.3	0.76	1.128	1.062	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/09/96-05/21/97	4	4.5	4.5	7.	2.	4.333	2.082	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/09/96-05/21/97	4	14.5	17.5	30.	11.	73.667	8.583	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/21/97-05/21/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	2 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/21/97-05/21/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/09/96-05/21/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/09/96-05/21/97	4 ##	5.	16.25	50.	5.	506.25	22.5	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/09/96-05/21/97	4	38.	43.75	70.	29.	356.917	18.892	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	12/09/96-05/21/97	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	12/09/96-05/21/97	4 ##	16.5	19.25	39.	5.	290.917	17.056	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/09/96-05/21/97	4 ##	5.	10.75	28.	5.	132.25	11.5	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/09/96-05/21/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/09/96-05/21/97	4 ##	50.	46.25	50.	35.	56.25	7.5	**	**	**	**
01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	2 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/09/96-05/21/97	4	98.5	134.	309.	30.	15122.	122.972	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/09/96-05/21/97	4	21.5	43.25	125.	5.	3078.917	55.488	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/21/97-05/21/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/09/96-05/21/97	4	88.	95.5	153.	53.	1808.333	42.525	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/21/97-05/21/97	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/09/96-05/21/97	4	0.105	0.128	0.23	0.07	0.005	0.071	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/09/96-05/21/97	4	22.5	45.25	134.	2.	3798.25	61.63	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/21/97-05/21/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0019

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00403	PH, LAB	Fresh Chronic	9.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Other-Lo Lim.	6.5	4	1	0.25				1	1	1.00	2	0	0.00	1	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Other-Lo Lim.	6.5	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	0	0.00							2	0	0.00			
		Drinking Water	0.2	2	0	0.00							2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Drinking Water	250.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00							2	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	3 &	0	0.00							2	0	0.00	1	0	0.00
		Drinking Water	1300.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Drinking Water	15.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Drinking Water	100.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	2	0	0.00							2	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
		Drinking Water	5000.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0019

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00							2	0	0.00			
		Drinking Water	50.	2	0	0.00							2	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	4	1	0.25				1	0	0.00	2	1	0.50	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0020

NPS Station ID: CUGA0020
LAT/LON: 36.559615/ -83.639615
Agency: 11NPSWRD
Date Created: 08/09/97
Location: TNCL563R
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): CUGA_NURE_07 /NURE_4083745
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING OUTSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0020

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/78-05/17/78	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/17/78-05/17/78	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/17/78-05/17/78	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/17/78-05/17/78	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/78-05/17/78	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/17/78-05/17/78	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/17/78-05/17/78	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/17/78-05/17/78	1	12.56	12.56	12.56	12.56	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/17/78-05/17/78	1	116.	116.	116.	116.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	05/17/78-05/17/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/17/78-05/17/78	1	117.	117.	117.	117.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	05/17/78-05/17/78	1	0.055	0.055	0.055	0.055	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/17/78-05/17/78	1	5000.	5000.	5000.	5000.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	05/17/78-05/17/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0020

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0021

NPS Station ID: CUGA0021
LAT/LON: 36.607309/ -83.643532
Agency: 11NPSWRD
Date Created: 09/20/97
Location: LEWIS HOLLOW: UPSTREAM FROM US 58
FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_LH5
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1400
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT THE MOUTH OF LEWIS HOLLOW ABOUT 50 FEET UPSTREAM FROM US 58. IT IS LOCATED IN AN AREA CURRENTLY NOT AFFECTED BY CONSTRUCTION OR ADVERSE RUNOFF. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606) 248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/92-08/12/96	21	11.4	12.076	19.4	6.9	15.26	3.906	7.32	8.95	14.95	17.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/92-08/12/96	15	4.	4.127	17.	0.	22.408	4.734	0.006	0.4	7.	12.2
00080	COLOR (PLATINUM-COBALT UNITS)	05/04/92-08/12/96	21	15.	18.167	43.	2.5	121.033	11.002	5.	10.	27.5	34.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/04/92-08/12/96	21	80.	85.571	156.	19.	1582.557	39.781	43.8	54.5	115.	154.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/04/92-08/12/96	21	1.	0.762	1.	0.	0.19	0.436	0.	0.5	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-08/12/96	21	8.2	7.757	10.3	2.5	4.379	2.093	3.76	6.5	9.35	10.02
00403	PH, LAB, STANDARD UNITS SU	05/04/92-08/12/96	21	7.5	7.476	8.	7.	0.064	0.253	7.06	7.3	7.7	7.86
00403	CONVERTED PH, LAB, STANDARD UNITS	05/04/92-08/12/96	21	7.5	7.407	8.	7.	0.069	0.263	7.06	7.3	7.7	7.86
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-08/12/96	21	0.032	0.039	0.1	0.01	0.001	0.024	0.014	0.02	0.05	0.09
00406	PH, FIELD, STANDARD UNITS SU	05/04/92-08/12/96	21	7.2	7.143	7.7	6.6	0.09	0.299	6.72	6.95	7.3	7.68
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/04/92-08/12/96	21	7.2	7.052	7.7	6.6	0.098	0.313	6.72	6.95	7.3	7.68
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/92-08/12/96	21	0.063	0.089	0.251	0.02	0.003	0.059	0.021	0.051	0.113	0.191
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/04/92-08/12/96	21	24.	34.429	89.	9.	570.557	23.886	9.4	15.5	52.5	69.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	05/04/92-11/28/94	14	16.5	23.286	68.	5.	353.451	18.8	5.5	8.75	41.25	55.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/04/92-08/12/96	21	9.	33.286	344.	3.	5454.814	73.857	4.2	5.5	29.5	78.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/04/92-02/23/94	4 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/04/92-08/12/96	21 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/04/92-08/12/96	21	0.14	0.182	0.76	0.	0.041	0.202	0.025	0.025	0.29	0.496

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/04/92-08/12/96	21 ##	0.05	0.044	0.08	0.	0.	0.018	0.005	0.05	0.05	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	18	2.75	4.028	12.	0.	13.754	3.709	0.99	1.525	5.225	11.1
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/92-08/12/96	21	37.	40.286	77.	15.	382.714	19.563	16.8	23.	54.	76.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/92-08/12/96	21	12.	12.486	24.9	4.2	40.508	6.365	5.14	7.35	17.4	23.98
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/92-08/12/96	21	1.7	1.995	4.1	1.	0.92	0.959	1.02	1.2	2.55	3.76
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/92-08/12/96	21	0.48	0.697	2.1	0.26	0.208	0.456	0.332	0.39	0.895	1.366
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/92-08/12/96	21	0.79	0.935	1.9	0.52	0.113	0.336	0.616	0.71	1.2	1.346
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/04/92-08/12/96	21	0.8	0.748	1.	0.4	0.044	0.209	0.5	0.55	0.95	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/04/92-08/12/96	21	7.7	8.367	12.	6.6	2.932	1.712	6.72	7.	9.7	11.08
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/92-08/12/96	21 ##	0.05	0.062	0.2	0.05	0.001	0.035	0.05	0.05	0.05	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/04/92-08/12/96	17 ##	50.	73.529	250.	50.	4411.765	66.421	50.	50.	50.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/04/92-08/12/96	19	20.	26.684	90.	5.	354.673	18.833	10.	20.	30.	50.
01020	BORON, DISSOLVED (UG/L AS B)	05/04/92-08/12/96	21 ##	5.	5.238	10.	0.	3.69	1.921	5.	5.	5.	9.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/29/92-08/12/96	18 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/04/92-08/12/96	21 ##	5.	4.762	5.	0.	1.19	1.091	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	05/04/92-03/23/93	7 ##	5.	5.143	11.	0.	10.143	3.185	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/04/92-08/12/96	21 ##	5.	4.762	5.	0.	1.19	1.091	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	05/04/92-08/12/96	21	90.	109.762	290.	5.	7164.19	84.642	8.4	40.	180.	250.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/04/92-08/12/96	21 ##	50.	43.095	50.	0.	188.69	13.736	25.	40.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	05/04/92-08/12/96	21	10.	28.762	270.	5.	3391.39	58.236	5.	5.	20.	72.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/04/92-08/12/96	21 ##	5.	5.238	10.	0.	3.69	1.921	5.	5.	5.	9.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	18 ##	50.	42.5	50.	5.	297.794	17.257	5.	50.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/04/92-08/12/96	21 ##	5.	4.762	5.	0.	1.19	1.091	5.	5.	5.	5.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	05/04/92-03/23/93	5	50.	45.4	60.	10.	410.8	20.268	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	18 ##	5.	6.944	20.	5.	23.938	4.893	5.	5.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/04/92-08/12/96	21 ##	5.	10.81	42.	0.	122.562	11.071	5.	5.	15.	32.
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/04/92-08/12/96	21	310.	370.714	1100.	5.	120832.514	347.61	68.4	101.5	516.	1100.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/04/92-08/12/96	21	113.	139.857	350.	5.	11918.329	109.171	5.	52.5	240.	304.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-10/16/92	3 ##	50.	33.333	50.	0.	833.333	28.868	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	05/04/92-10/16/92	4 ##	50.	52.5	60.	50.	25.	5.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	05/04/92-03/23/93	7	2950.	2792.857	3400.	2000.	198590.476	445.635	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/04/92-08/12/96	21 ##	5.	5.714	10.	5.	3.214	1.793	5.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/04/92-08/12/96	20	38.5	43.75	108.	21.	503.461	22.438	24.	26.5	57.25	80.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/04/92-08/12/96	21 ##	0.15	0.5	7.5	0.15	2.573	1.604	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/04/92-08/12/96	19 ##	50.	96.316	960.	35.	43766.228	209.204	35.	50.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	05/04/92-08/12/96	21	0.2	0.225	0.74	0.04	0.034	0.184	0.044	0.08	0.28	0.602
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-08/12/96	18	12.	27.278	200.	4.	1994.683	44.662	5.8	7.	30.25	56.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/04/92-08/12/96	21 ##	50.	52.381	100.	50.	119.048	10.911	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0021

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	21	2	0.10	5	0	0.00	4	0	0.00	7	2	0.29	5	0	0.00
00403	PH, LAB	Fresh Chronic	9.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	250.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	17	0	0.00	4	0	0.00	3	0	0.00	5	0	0.00	5	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	19	0	0.00	4	0	0.00	3	0	0.00	7	0	0.00	5	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0021

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	1300.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	15.	2 &	1	0.50										2	1	0.50
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	100.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
		Drinking Water	5000.	21	0	0.00	5	0	0.00	4	0	0.00	7	0	0.00	5	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1 &	1	1.00							1	1	1.00			
		Drinking Water	2.	1 &	1	1.00							1	1	1.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	18	1	0.06	5	0	0.00	2	0	0.00	6	1	0.17	5	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0022

NPS Station ID: CUGA0022 | LAT/LON: 36.595003/ -83.661532 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: DRAINAGE DITCH: SOUTH OF 25E AND US 58 | FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /CANAL/TYPA/AMBNT | STORET Station ID(s): CUGA_CPSU_STOR1
RMI-Indexes: | Within Park Boundary: No
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1300 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS APPROXIMATELY ONE-HALF MILE SOUTH OF THE INTERSECTION OF US 25E AND US 58. IT IS LOCATED ON A DRAINAGE DITCH LEADING FROM AN ENCAPSULATED SPOIL PILE OF LOW-PH SHALE. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996); "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0022

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/92-03/03/97	43	11.9	12.698	21.1	7.4	14.256	3.776	8.3	9.7	15.1	18.54
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/03/92-08/12/96	32	0.1	0.738	6.	0.	1.807	1.344	0.	0.013	0.725	2.
00080	COLOR (PLATINUM-COBALT UNITS)	02/03/92-03/03/97	43	15.	21.407	89.	2.5	267.646	16.36	10.	10.	25.	43.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/03/92-03/03/97	43	235.	293.186	580.	72.	22559.965	150.2	127.2	152.	438.	520.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	02/03/92-03/03/97	43	0.	0.488	1.	0.	0.256	0.506	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/03/92-03/03/97	43	7.5	7.105	10.4	2.3	3.537	1.881	4.	5.9	8.3	9.56
00403	PH, LAB, STANDARD UNITS SU	02/03/92-03/03/97	43	7.6	7.612	8.4	7.2	0.07	0.264	7.34	7.4	7.8	7.96
00403	CONVERTED PH, LAB, STANDARD UNITS	02/03/92-03/03/97	43	7.6	7.546	8.4	7.2	0.074	0.272	7.34	7.4	7.8	7.96
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/92-03/03/97	43	0.025	0.028	0.063	0.004	0.	0.014	0.011	0.016	0.04	0.046
00406	PH, FIELD, STANDARD UNITS SU	02/03/92-03/03/97	43	7.3	7.291	8.2	6.4	0.141	0.375	6.7	7.2	7.5	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	02/03/92-03/03/97	43	7.3	7.118	8.2	6.4	0.171	0.414	6.7	7.2	7.5	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/92-03/03/97	43	0.05	0.076	0.398	0.006	0.007	0.083	0.02	0.032	0.063	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	02/03/92-03/03/97	43	92.	101.837	183.	29.	2332.616	48.297	40.2	59.	147.	170.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	02/03/92-03/03/97	43 ##	0.05	0.06	0.5	0.05	0.005	0.069	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	02/03/92-11/28/94	34	53.5	60.382	112.	18.	866.546	29.437	21.	35.75	86.25	104.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/92-03/03/97	43	7.	18.556	195.	0.	1679.618	40.983	0.38	2.	16.	32.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	02/03/92-11/13/92	15 ##	0.	0.001	0.01	0.	0.	0.004	0.	0.	0.	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/92-03/03/97	43 ##	0.01	0.094	2.96	0.01	0.205	0.452	0.01	0.01	0.01	0.092
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/03/92-03/03/97	43	1.6	2.213	6.	0.01	2.817	1.678	0.386	0.78	3.37	5.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0022

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	02/03/92-03/03/97	43 ##	0.05	0.085	0.49	0.001	0.013	0.116	0.025	0.03	0.052	0.28
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/20/92-08/12/96	22	3.25	6.482	40.	0.	107.515	10.369	0.15	1.2	6.025	27.4
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/92-03/03/97	43	100.	132.442	283.	26.	5184.967	72.007	55.4	68.	209.	240.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/92-03/03/97	43	32.	43.426	93.	8.7	568.673	23.847	18.4	23.	68.8	78.78
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/92-03/03/97	43	5.	6.016	14.2	1.1	12.284	3.505	2.2	3.	9.5	11.18
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/92-03/03/97	43	3.5	4.728	12.3	1.2	9.449	3.074	1.6	2.34	6.93	9.9
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/92-03/03/97	43	2.3	3.232	11.5	0.88	5.634	2.374	1.24	1.6	4.1	6.856
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/03/92-03/03/97	43	2.	4.2	17.	0.8	15.708	3.963	1.	2.	6.	10.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/03/92-03/03/97	43	28.	37.195	166.	8.3	1054.611	32.475	12.	13.5	54.1	86.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/92-08/12/96	42	0.1	0.185	0.6	0.05	0.025	0.159	0.05	0.05	0.3	0.473
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/20/92-08/12/96	20 ##	50.	70.	250.	50.	3789.474	61.559	50.	50.	50.	230.
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/20/92-08/12/96	23	11.	18.174	100.	0.	473.332	21.756	5.	5.	20.	46.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/03/92-08/12/96	42	20.	28.095	130.	0.	810.235	28.465	5.	5.	40.	74.9
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/20/92-08/12/96	22 ##	5.	4.773	5.	0.	1.136	1.066	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/03/92-03/03/97	43 ##	5.	5.395	27.	0.	21.816	4.671	0.	5.	5.	9.2
01035	COBALT, DISSOLVED (UG/L AS CO)	02/03/92-03/23/93	26 ##	5.	8.192	60.	0.	166.242	12.893	0.	2.5	5.	26.5
01040	COPPER, DISSOLVED (UG/L AS CU)	02/03/92-03/03/97	43 ##	5.	3.953	10.	0.	5.426	2.329	0.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	02/03/92-03/03/97	43	65.	81.651	410.	5.	4524.614	67.265	25.2	44.	105.	156.
01049	LEAD, DISSOLVED (UG/L AS PB)	02/03/92-03/03/97	43 ##	50.	43.628	150.	17.	495.477	22.259	23.8	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	02/03/92-03/03/97	43	20.	39.07	220.	5.	2312.543	48.089	5.	10.	40.	115.6
01056	MANGANESE, DISSOLVED (UG/L AS MN)	02/03/92-03/03/97	43	14.	33.605	200.	0.	2265.53	47.598	5.	5.	30.	114.8
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	04/20/92-08/12/96	22 ##	50.	54.773	340.	0.	4389.232	66.251	5.	50.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	02/03/92-03/03/97	43 ##	5.	5.721	30.	0.	24.539	4.954	0.8	5.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	04/20/92-03/23/93	7	300.	286.571	600.	80.	29608.952	172.073	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/20/92-08/12/96	22 ##	5.	12.045	50.	0.	213.474	14.611	5.	5.	12.5	44.
01090	ZINC, DISSOLVED (UG/L AS ZN)	02/03/92-03/03/97	43	10.	17.558	70.	0.	290.538	17.045	0.	5.	20.	48.8
01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	1 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	02/03/92-03/03/97	43	230.	331.349	1500.	5.	112929.042	336.049	5.	110.	400.	724.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	02/03/92-03/03/97	43	60.	80.698	610.	5.	10639.549	103.148	5.	5.	110.	181.4
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	04/20/92-12/17/92	6 ##	50.	33.333	50.	0.	666.667	25.82	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	04/20/92-12/17/92	6 ##	50.	113.333	280.	50.	10266.667	101.325	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	02/03/92-03/23/93	26	2600.	3288.462	20000.	1500.	11802213.538	3435.435	2070.	2397.5	2917.5	3416.
01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	02/03/92-08/12/96	42 ##	5.	6.619	30.	0.	36.095	6.008	0.6	5.	5.	13.5
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	02/03/92-03/03/97	39	114.	154.692	415.	60.	9071.903	95.247	69.	78.	196.	286.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/03/92-08/12/96	42 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	04/20/92-08/12/96	23 ##	50.	50.87	100.	35.	133.3	11.546	41.	50.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	02/03/92-03/03/97	43	0.18	0.249	0.87	0.05	0.039	0.197	0.09	0.14	0.3	0.562
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	02/03/92-03/03/97	39	10.	25.	200.	2.	2045.316	45.225	3.	5.	23.	40.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	02/03/92-08/12/96	42 ##	50.	62.143	100.	10.	558.711	23.637	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0022

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	43	5	0.12	10	3	0.30	7	0	0.00	15	2	0.13	11	0	0.00
00403	PH, LAB	Fresh Chronic	9.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Other-Lo Lim.	6.5	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Other-Lo Lim.	6.5	43	2	0.05	10	1	0.10	7	0	0.00	15	1	0.07	11	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	43	1	0.02	10	1	0.10	7	0	0.00	15	0	0.00	11	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Drinking Water	250.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0022

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	42	0	0.00	10	0	0.00	7	0	0.00	14	0	0.00	11	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	20	0	0.00	5	0	0.00	4	0	0.00	5	0	0.00	6	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	23	0	0.00	5	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1 &	0	0.00										1	0	0.00
		Drinking Water	5.	1 &	0	0.00										1	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Drinking Water	1300.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	43	2	0.05	10	0	0.00	7	0	0.00	15	0	0.00	11	2	0.18
		Drinking Water	15.	12 &	12	1.00							5	5	1.00	7	7	1.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Drinking Water	100.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
		Drinking Water	5000.	43	0	0.00	10	0	0.00	7	0	0.00	15	0	0.00	11	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	39	3	0.08	10	1	0.10	4	1	0.25	14	1	0.07	11	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0023

NPS Station ID: CUGA0023 | LAT/LON: 36.593615/ -83.663170 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: DRAINAGE DITCH; CUMBERLAND DRIVE | FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /CANAL/TYPA/AMBNT | STORET Station ID(s): CUGA_CPSU_BP1
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1300 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT A DRAINAGE DITCH ON THE NORTH SIDE OF SOUTH CUMBERLAND DRIVE. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	03/10/96-03/10/96	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/10/96-03/10/96	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/10/96-03/10/96	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/10/96-03/10/96	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/10/96-03/10/96	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/10/96-03/10/96	1	400.	400.	400.	400.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/10/96-03/10/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/10/96-03/10/96	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/10/96-03/10/96	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/10/96-03/10/96	1	0.78	0.78	0.78	0.78	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/10/96-03/10/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/10/96-03/10/96	1	470.	470.	470.	470.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/10/96-03/10/96	1	162.	162.	162.	162.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/10/96-03/10/96	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/10/96-03/10/96	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/10/96-03/10/96	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/10/96-03/10/96	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/10/96-03/10/96	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/10/96-03/10/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01046	IRON, DISSOLVED (UG/L AS FE)	03/10/96-03/10/96	1	125.	125.	125.	125.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/10/96-03/10/96	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/10/96-03/10/96	1	4480.	4480.	4480.	4480.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/10/96-03/10/96	1	4360.	4360.	4360.	4360.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/10/96-03/10/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/10/96-03/10/96	1	541.	541.	541.	541.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/10/96-03/10/96	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/10/96-03/10/96	1	3.04	3.04	3.04	3.04	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/10/96-03/10/96	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0023

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00							1	0	0.00			
		Drinking Water	5000.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0024

NPS Station ID: CUGA0024
LAT/LON: 36.548892/ -83.665282
Agency: 131TVAC
Date Created: / /
Location:
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 475160 /3779
RMI-Indexes: 1021500 007720 00920 7930 3390 1690
Within Park Boundary: No
RMI-Miles: 0953.80 0046.50 567.70 088.85 054.67 004.44
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: CLINCH RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: GAP CREEK 4.44
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206000624.47
RF3 Mile Point: 28.42
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0024

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/67-12/08/76	27	11.5	12.526	19.7	4.	20.008	4.473	6.88	9.	17.2	18.44
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/67-12/08/76	25	6.	9.024	31.	0.8	70.811	8.415	1.52	3.	12.5	25.4
00070	TURBIDITY, (JACKSON CANDLE UNITS)	06/22/67-12/08/76	23	5.9	13.748	70.	2.1	349.378	18.692	2.36	3.7	14.	51.
00080	COLOR (PLATINUM-COBALT UNITS)	06/22/67-12/08/76	24	5.	7.167	35.	1.	51.536	7.179	1.	2.25	10.	13.5
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	10/20/75-12/08/76	16	13.5	14.	45.	5.	102.667	10.132	5.	6.25	16.75	31.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/67-12/08/76	24	255.	257.083	380.	150.	4386.775	66.233	160.	212.5	305.	360.
00300	OXYGEN, DISSOLVED MG/L	06/22/67-12/08/76	24	9.85	9.675	13.4	7.	2.237	1.496	7.5	8.475	10.75	11.2
00304	BOD, 2 DAY, 20 DEG C MG/L	06/22/67-02/13/68	7 ##	0.5	1.114	3.4	0.5	1.128	1.062	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/22/67-12/08/76	26 ##	0.5	1.638	16.8	0.5	10.183	3.191	0.5	0.5	1.825	2.88
00335	COD, .025N K2CR2O7 MG/L	06/22/67-12/08/76	24	6.5	7.042	29.	1.	32.216	5.676	1.5	3.25	9.	11.
00400	PH (STANDARD UNITS)	06/22/67-12/08/76	24	7.5	7.463	8.2	6.7	0.168	0.409	6.8	7.1	7.775	8.
00400	CONVERTED PH (STANDARD UNITS)	06/22/67-12/08/76	24	7.5	7.271	8.2	6.7	0.206	0.454	6.8	7.1	7.775	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/67-12/08/76	24	0.032	0.054	0.2	0.006	0.003	0.056	0.01	0.017	0.079	0.163
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/67-12/08/76	24	111.	111.625	150.	77.	481.114	21.934	84.	89.25	130.	140.
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	06/22/67-12/08/76	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00500	RESIDUE, TOTAL (MG/L)	06/22/67-04/25/68	8	185.	171.25	200.	110.	955.357	30.909	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/22/67-04/25/68	8	145.	145.	180.	110.	771.429	27.775	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/20/75-12/08/76	16	4.	5.844	28.	0.5	42.724	6.536	0.85	3.	6.75	16.8
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	06/22/67-12/08/76	24	0.15	0.208	0.58	0.08	0.016	0.127	0.1	0.11	0.3	0.385
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/22/67-12/08/76	24	0.03	0.041	0.21	0.005	0.002	0.045	0.005	0.006	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/22/67-04/25/68	8	0.01	0.013	0.02	0.005	0.	0.006	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/22/67-04/25/68	8	0.51	0.545	0.96	0.35	0.034	0.184	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/20/75-12/08/76	16	0.815	0.774	1.2	0.34	0.073	0.271	0.389	0.573	0.965	1.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/22/67-12/08/76	24	0.06	0.072	0.166	0.02	0.001	0.035	0.035	0.051	0.087	0.135
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/22/67-12/08/76	22	0.03	0.04	0.108	0.01	0.001	0.027	0.01	0.02	0.053	0.092
00916	CALCIUM, TOTAL (MG/L AS CA)	06/22/67-12/08/76	23	43.	40.609	64.	6.	153.34	12.383	26.6	34.	46.	60.6
00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/22/67-12/08/76	23	5.	5.287	8.4	2.8	2.708	1.646	3.14	3.8	6.9	7.64
00929	SODIUM, TOTAL (MG/L AS NA)	06/22/67-12/08/76	24	2.8	3.221	9.	1.2	3.235	1.799	1.55	1.925	3.975	5.75
00937	POTASSIUM, TOTAL MG/L AS K)	06/22/67-12/08/76	24	1.25	1.483	3.1	0.7	0.487	0.698	0.8	0.9	1.775	2.85
00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/67-12/08/76	24	5.	6.333	17.	3.	11.971	3.46	3.5	4.	7.5	12.5
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/67-12/08/76	24	12.	12.625	24.	5.	24.679	4.968	6.5	9.	15.75	21.
00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/75-12/08/76	16 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/75-12/08/76	16	5.55	5.563	7.4	4.1	1.108	1.053	4.24	4.725	6.65	7.19
00956	SILICA, TOTAL (MG/L AS SI02)	06/22/67-04/25/68	8	4.25	4.225	5.6	3.1	0.788	0.888	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/22/67-04/25/68	7 ##	5.	15.714	80.	5.	803.571	28.347	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/22/67-12/08/76	23	330.	436.522	1300.	150.	79750.988	282.402	164.	250.	570.	862.
01046	IRON, DISSOLVED (UG/L AS FE)	07/26/67-12/08/76	21	70.	86.905	310.	25.	5473.69	73.984	25.	25.	105.	214.
01047	IRON, FERROUS (UG/L AS FE)	06/22/67-04/25/68	8 ##	25.	25.	25.	25.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0024

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01055	MANGANESE, TOTAL (UG/L AS MN)	06/22/67-12/08/76	23	40.	50.435	130.	20.	740.711	27.216	24.	30.	60.	100.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/67-12/08/76	19	40.	36.579	60.	5.	205.702	14.342	20.	30.	50.	60.
01092	ZINC, TOTAL (UG/L AS ZN)	06/22/67-04/25/68	8	40.	56.25	200.	5.	4276.786	65.397	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	11/17/75-10/12/76	13	1880.	1382.692	3700.	5.	1497002.564	1223.521	23.	190.	2000.	3420.
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	11/17/75-10/12/76	13	3.274	2.752	3.568	0.699	0.71	0.842	1.099	2.278	3.301	3.532
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			565.55								
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/22/67-04/25/68	8	16700.	22612.5	70000.	2300.	524606964.286	22904.3	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/22/67-04/25/68	8	4.177	4.119	4.845	3.362	0.279	0.528	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			13151.214								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/22/67-04/25/68	8	1700.	3243.75	11000.	230.	13567426.786	3683.399	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/22/67-04/25/68	8	3.202	3.245	4.041	2.362	0.3	0.547	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1759.896								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-12/08/76	17	400.	692.647	2800.	5.	616437.868	785.136	41.	125.	1130.	2160.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-12/08/76	17	2.602	2.486	3.447	0.699	0.491	0.701	1.499	2.028	3.052	3.33
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			306.476								
46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	06/22/67-12/08/76	23	130.	123.304	190.	29.	1283.221	35.822	80.8	98.	140.	180.
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/20/75-12/08/76	16	145.	151.25	210.	100.	1211.667	34.809	107.	120.	180.	203.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0024

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	23	2	0.09	8	2	0.25	6	0	0.00	4	0	0.00	5	0	0.00
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
00400	PH	Fresh Chronic	9.	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	8	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	8	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	5	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
		Drinking Water	250.	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	24	0	0.00	9	0	0.00	6	0	0.00	4	0	0.00	5	0	0.00
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	16	0	0.00	5	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	7	1	0.14	4	0	0.00	1	0	0.00				2	1	0.50
		Drinking Water	1300.	7	0	0.00	4	0	0.00	1	0	0.00				2	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	8	1	0.13	4	0	0.00	1	0	0.00	1	0	0.00	2	1	0.50
		Drinking Water	5000.	8	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	13	7	0.54	4	4	1.00	3	1	0.33	3	1	0.33	3	1	0.33
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	8	8	1.00	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	8	8	1.00	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	17	12	0.71	5	5	1.00	5	4	0.80	4	1	0.25	3	2	0.67

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0025

NPS Station ID: CUGA0025
LAT/LON: 36.548892/ -83.665282
Agency: 112WRD
Date Created: 01/25/77
Location: GAP CREEK NEAR ARTHUR, TN
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03532050
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206000624.47
RF3 Mile Point: 28.31
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0025

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/75-09/08/76	15	11.1	12.407	19.	6.8	20.166	4.491	6.86	8.5	17.8	18.58
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/20/75-06/09/76	10	10.	11.8	31.	2.	78.178	8.842	2.1	6.	14.75	30.2
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/20/75-09/08/76	12	4.05	6.058	25.	2.1	40.397	6.356	2.13	2.725	6.7	20.41
00080	COLOR (PLATINUM-COBALT UNITS)	10/20/75-09/08/76	13	3.	4.923	12.	1.	16.744	4.092	1.	1.	8.5	11.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/20/75-09/08/76	13	240.	246.154	360.	150.	4858.974	69.706	154.	180.	315.	348.
00300	OXYGEN, DISSOLVED MG/L	10/20/75-09/08/76	13	9.9	9.638	11.3	7.	1.654	1.286	7.52	8.5	10.7	11.22
00310	BOD, 5 DAY, 20 DEG C MG/L	11/17/75-09/08/76	14 ##	0.5	0.971	3.3	0.5	0.691	0.832	0.5	0.5	1.275	2.6
00335	COD, .025N K2CR2O7 MG/L	10/20/75-09/08/76	13	4.	4.462	9.	1.	7.103	2.665	1.	2.5	6.5	9.
00400	PH (STANDARD UNITS)	10/20/75-09/08/76	13	7.4	7.338	8.2	6.7	0.186	0.431	6.7	7.	7.55	8.04
00400	CONVERTED PH (STANDARD UNITS)	10/20/75-09/08/76	13	7.4	7.157	8.2	6.7	0.222	0.471	6.7	7.	7.55	8.04
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/20/75-09/08/76	13	0.04	0.07	0.2	0.006	0.004	0.066	0.01	0.028	0.103	0.2
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/20/75-09/08/76	13	110.	110.	150.	77.	547.	23.388	81.	87.5	130.	146.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/20/75-09/08/76	13	4.	5.885	28.	0.5	53.006	7.281	0.7	2.	6.	21.6
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10/20/75-09/08/76	13	0.16	0.191	0.36	0.08	0.009	0.094	0.092	0.115	0.295	0.344
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/20/75-09/08/76	13	0.04	0.036	0.08	0.005	0.001	0.023	0.005	0.015	0.05	0.072
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/20/75-09/08/76	13	0.68	0.757	1.2	0.34	0.089	0.299	0.368	0.5	1.04	1.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/20/75-09/08/76	13	0.06	0.057	0.1	0.02	0.001	0.023	0.024	0.04	0.07	0.096
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/20/75-09/08/76	10	0.025	0.025	0.06	0.01	0.	0.015	0.01	0.01	0.03	0.057
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/20/75-09/08/76	12	120.	117.75	190.	55.	1221.841	34.955	60.7	96.5	130.	178.
00916	CALCIUM, TOTAL (MG/L AS CA)	10/20/75-09/08/76	12	41.	40.75	64.	25.	94.386	9.715	27.1	34.25	44.	59.2
00927	MAGNESIUM, TOTAL (MG/L AS MG)	10/20/75-09/08/76	13	4.4	4.785	8.4	2.8	2.518	1.587	2.96	3.6	5.75	7.8
00929	SODIUM, TOTAL (MG/L AS NA)	10/20/75-09/08/76	13	2.9	3.446	9.	1.5	4.243	2.06	1.66	2.	4.25	7.64
00937	POTASSIUM, TOTAL MG/L AS K)	10/20/75-09/08/76	13	1.1	1.177	2.2	0.8	0.167	0.409	0.8	0.85	1.35	2.
00940	CHLORIDE,TOTAL IN WATER MG/L	10/20/75-09/08/76	13	5.	5.769	13.	4.	6.859	2.619	4.	4.	6.	11.4
00945	SULFATE, TOTAL (MG/L AS SO4)	10/20/75-09/08/76	13	12.	12.538	22.	5.	16.103	4.013	6.6	10.5	14.5	19.6
00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/75-09/08/76	13 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/75-09/08/76	13	5.5	5.523	7.4	4.1	1.239	1.113	4.18	4.55	6.65	7.28
01045	IRON, TOTAL (UG/L AS FE)	10/20/75-09/08/76	13	270.	411.538	1300.	150.	100880.769	317.617	158.	230.	475.	1096.
01046	IRON, DISSOLVED (UG/L AS FE)	10/20/75-09/08/76	12	90.	110.417	310.	25.	7770.265	88.149	25.	33.75	172.5	283.
01055	MANGANESE, TOTAL (UG/L AS MN)	10/20/75-09/08/76	13	50.	44.615	70.	20.	243.59	15.607	20.	30.	55.	66.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/20/75-09/08/76	12	40.	37.083	60.	5.	229.356	15.145	9.5	30.	50.	57.
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	11/17/75-09/08/76	12	1325.	1341.25	3700.	5.	1608736.932	1268.36	18.5	185.	2000.	3490.
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	11/17/75-09/08/76	12	3.057	2.709	3.568	0.699	0.747	0.865	0.999	2.267	3.301	3.541
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			511.678								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-09/08/76	13	310.	757.308	2800.	5.	788960.897	888.235	23.	60.	1335.	2480.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/75-09/08/76	13	2.491	2.441	3.447	0.699	0.629	0.793	1.099	1.778	3.123	3.389
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			275.931								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/20/75-09/08/76	13	140.	146.923	210.	100.	1189.744	34.493	104.	120.	175.	206.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0025

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/20/75-06/09/76	10	3.51	3.978	8.37	0.91	5.745	2.397	0.945	2.018	6.08	8.216
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/20/75-09/08/76	13	0.19	0.198	0.29	0.14	0.002	0.047	0.144	0.16	0.235	0.282

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0025

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	12	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00400	PH	Fresh Chronic	9.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
		Other-Lo Lim.	6.5	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
		Drinking Water	250.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	13	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	12	6	0.50	3	3	1.00	3	1	0.33	3	1	0.33	3	1	0.33
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	13	9	0.69	3	3	1.00	3	3	1.00	4	1	0.25	3	2	0.67

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0026

NPS Station ID: CUGA0026
LAT/LON: 36.602727/ -83.667031
Agency: 11NPSWRD
Date Created: 09/20/97
Location: CUDJO CAVE
FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_CUDJO
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1800
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT THE SOURCE OF GAP CREEK IN CUDJO CAVE WHICH IS LOCATED ON CUMBERLAND MOUNTAIN; VIRGINIA. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0026

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/93-10/03/95	3	12.7	13.067	13.9	12.6	0.523	0.723	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	07/06/93-11/07/95	4 ##	6.25	6.25	10.	2.5	18.75	4.33	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/06/93-10/03/95	3	180.	185.	208.	167.	439.	20.952	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	07/06/93-11/07/95	4	0.	0.25	1.	0.	0.25	0.5	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/06/93-10/03/95	3	7.2	7.333	8.9	5.9	2.263	1.504	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/06/93-11/07/95	4	7.65	7.725	8.	7.6	0.036	0.189	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/06/93-11/07/95	4	7.647	7.698	8.	7.6	0.037	0.192	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/93-11/07/95	4	0.023	0.02	0.025	0.01	0.	0.007	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/06/93-10/03/95	3	7.6	7.367	7.9	6.6	0.463	0.681	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/06/93-10/03/95	3	7.6	7.016	7.9	6.6	0.647	0.805	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/93-10/03/95	3	0.025	0.096	0.251	0.013	0.018	0.134	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	07/06/93-11/07/95	4	76.5	68.5	89.	32.	631.	25.12	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	07/06/93-11/07/95	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/06/93-09/12/94	2	46.5	46.5	48.	45.	4.5	2.121	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/06/93-11/07/95	4	3.25	5.9	17.	0.1	62.007	7.874	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/93-11/07/95	4 ##	0.01	0.115	0.43	0.01	0.044	0.21	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/06/93-11/07/95	4	0.96	1.363	2.7	0.83	0.799	0.894	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/06/93-11/07/95	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/07/95-11/07/95	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/93-11/07/95	4	82.5	73.	94.	33.	740.667	27.215	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/93-11/07/95	4	27.4	24.475	31.7	11.4	80.116	8.951	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/93-11/07/95	4	3.4	2.875	3.5	1.2	1.256	1.121	**	**	**	**

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Parameter Inventory for Station: CUGA0026

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/93-11/07/95	4	1.	0.943	1.5	0.27	0.257	0.507	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/93-11/07/95	4	0.7	0.655	0.84	0.38	0.045	0.211	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/93-11/07/95	4	1.	0.975	1.	0.9	0.002	0.05	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/93-11/07/95	4	7.1	7.325	8.3	6.8	0.443	0.665	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/93-11/07/95	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	11/07/95-11/07/95	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	11/07/95-11/07/95	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	11/07/95-11/07/95	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	07/06/93-07/06/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/06/93-11/07/95	4 ##	5.	19.5	63.	5.	841.	29.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/06/93-11/07/95	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/93-11/07/95	4 ##	5.	7.5	15.	5.	25.	5.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	11/07/95-11/07/95	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	11/07/95-11/07/95	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/06/93-11/07/95	4 ##	5.	6.25	10.	5.	6.25	2.5	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	07/06/93-11/07/95	4	16.	72.5	253.	5.	14531.	120.545	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/93-11/07/95	4 ##	5.	27.25	94.	5.	1980.25	44.5	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	07/06/93-07/06/93	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	07/06/93-11/07/95	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	07/06/93-11/07/95	4	87.5	80.	100.	45.	580.667	24.097	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/06/93-11/07/95	4 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	11/07/95-11/07/95	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/06/93-11/07/95	4 ##	0.013	0.048	0.16	0.005	0.006	0.075	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/12/94-10/03/95	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	07/06/93-11/07/95	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0026

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00403	PH, LAB	Fresh Chronic	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	3	0	0.00	1	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00				1	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	1300.	4	0	0.00	3	0	0.00	1	0	0.00						
01049	LEAD, DISSOLVED	Fresh Acute	82.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	15.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0026

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01090	ZINC, DISSOLVED	Fresh Acute	120.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	5000.	4	0	0.00	3	0	0.00	1	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0027

NPS Station ID: CUGA0027
LAT/LON: 36.601142/ -83.668171
Agency: 11NPSWRD
Date Created: 09/20/97
Location: IRON FURNACE
FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_IF
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1400
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON GAP CREEK ABOVE SITE GC3 AND ADJACENT TO A HISTORIC IRON FURNACE; WHICH IS DIRECTLY SOUTH OF THE OLD WILDERNESS ROAD. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/93-03/23/93	1	11.9	11.9	11.9	11.9	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/23/93-03/23/93	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/93-03/23/93	1	132.	132.	132.	132.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/23/93-03/23/93	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/23/93-03/23/93	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/23/93-03/23/93	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/23/93-03/23/93	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/93-03/23/93	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/23/93-03/23/93	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/23/93-03/23/93	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/93-03/23/93	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/23/93-03/23/93	1	54.	54.	54.	54.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/23/93-03/23/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/23/93-03/23/93	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/23/93-03/23/93	1	151.	151.	151.	151.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/23/93-03/23/93	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/23/93-03/23/93	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/23/93-03/23/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/23/93-03/23/93	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/23/93-03/23/93	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/23/93-03/23/93	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/23/93-03/23/93	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/23/93-03/23/93	1	0.93	0.93	0.93	0.93	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/23/93-03/23/93	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/23/93-03/23/93	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/23/93-03/23/93	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/23/93-03/23/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	03/23/93-03/23/93	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/23/93-03/23/93	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/23/93-03/23/93	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/23/93-03/23/93	1	110.	110.	110.	110.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/23/93-03/23/93	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	03/23/93-03/23/93	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/23/93-03/23/93	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/23/93-03/23/93	1	530.	530.	530.	530.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/23/93-03/23/93	1	450.	450.	450.	450.	0.	0.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	03/23/93-03/23/93	1	2600.	2600.	2600.	2600.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/23/93-03/23/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/23/93-03/23/93	1	79.	79.	79.	79.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/23/93-03/23/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/23/93-03/23/93	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/23/93-03/23/93	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/23/93-03/23/93	1	200.	200.	200.	200.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/23/93-03/23/93	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: CUGA0027

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00							1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00							1	0	0.00			
		Drinking Water	5000.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0027

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0028

NPS Station ID: CUGA0028
LAT/LON: 36.601142/ -83.668116
Agency: 11NPSWRD
Date Created: 07/12/97
Location: GAP CREEK AT IRON FURNACE
FIPS State/County: 51105 VIRGINIA/LEE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CMRC_GC1
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON GAP CREEK AT THE IRON FURNACE WHICH IS DIRECTLY SOUTH OF THE OLD WILDERNESS ROAD. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0028

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	158750.	2500000.	0.	313533152173.913	559940.311	0.	0.	0.	655000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.72	6.398	0.	3.848	1.962	0.	0.	0.	5.438
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			5.245								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	58333.333	1400000.	0.	81666666666.667	285773.803	0.	0.	0.	0.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.256	6.146	0.	1.574	1.255	0.	0.	0.	0.
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			1.803								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	83.333	2000.	0.	166666.667	408.248	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1041.667	25000.	0.	26041666.667	5103.104	0.	0.	0.	0.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	70833.333	1250000.	0.	71503623188.406	267401.614	0.	0.	0.	225000.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.49	6.097	0.	2.756	1.66	0.	0.	0.	2.827
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			3.087								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0028

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	3	0.13	8	0	0.00	6	0	0.00	3	2	0.67	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0029

NPS Station ID: CUGA0029
LAT/LON: 36.636642/ -83.668727
Agency: 11NPSWRD
Date Created: 07/12/97
Location: SUGAR RUN NEAR HIGHWAY 988
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CMRC_SR10
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1160
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO NORTH; KY 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON SUGAR RUN ADJACENT TO THE PICNIC AREA AND HIGHWAY 988 AT THE PARK'S NORTHERN BOUNDARY. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	367083.333	7200000.	0.	**********	1472892.685	0.	0.	0.	735000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	1.171	6.857	0.	5.573	2.361	0.	0.	0.	5.822
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			14.825								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	43750.	1050000.	0.	45937500000.	214330.352	0.	0.	0.	0.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.251	6.021	0.	1.511	1.229	0.	0.	0.	0.
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			1.782								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	4.167	100.	0.	416.667	20.412	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1875.	45000.	0.	84375000.	9185.587	0.	0.	0.	0.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	54166.667	1000000.	0.	42590579710.145	206374.852	0.	0.	0.	150000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.679	6.	0.	3.393	1.842	0.	0.	0.	5.151
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			4.778								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0029

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	5	0.21	8	2	0.25	6	1	0.17	3	1	0.33	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0030

NPS Station ID: CUGA0030 | LAT/LON: 36.636642/ -83.668727 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: SUGAR RUN: AT HWY 988 AND PICNIC AREA | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_SR10
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1160 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO NORTH; KENTUCKY 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ADJACENT TO THE PICNIC AREA AND HIGHWAY 988 AT THE POINT WHERE SUGAR RUN EXITS THE PARK. IT IS RIGHT OF SUGAR RUN ROAD STATION 133. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970) 225-3516.

Parameter Inventory for Station: CUGA0030

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-01/13/92	44	13.25	13.166	20.7	3.5	28.113	5.302	6.2	7.575	18.8	19.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/13/92	44	0.5	2.151	15.	0.	13.475	3.671	0.	0.2	2.75	6.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-01/13/92	44	14.5	25.523	345.	5.	2568.209	50.677	5.	8.	27.75	38.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-01/13/92	44	26.5	27.977	125.	1.	245.139	15.657	23.	24.	28.	30.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-01/13/92	44	0.	0.091	1.	0.	0.085	0.291	0.	0.	0.	0.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-01/13/92	44	9.7	9.818	13.1	7.6	1.971	1.404	8.15	8.425	10.9	11.75
00403	PH, LAB, STANDARD UNITS SU	04/10/91-01/13/92	19	6.7	6.605	6.9	6.	0.054	0.232	6.3	6.4	6.8	6.9
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-01/13/92	19	6.7	6.537	6.9	6.	0.059	0.242	6.3	6.4	6.8	6.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-01/13/92	19	0.2	0.29	1.	0.126	0.041	0.203	0.126	0.158	0.398	0.501
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-01/13/92	44	6.55	6.55	8.2	5.2	0.246	0.496	6.	6.3	6.7	7.15
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-01/13/92	44	6.547	6.286	8.2	5.2	0.317	0.563	6.	6.3	6.7	7.15
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-01/13/92	44	0.284	0.517	6.31	0.006	0.897	0.947	0.071	0.2	0.501	1.
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-01/13/92	44	5.	4.682	10.	1.	5.571	2.36	1.	3.	7.	7.5
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-01/13/92	44 ##	0.05	0.89	7.	0.05	1.95	1.397	0.05	0.05	1.	3.
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/13/92	44	3.	2.882	6.	0.	2.155	1.468	0.8	2.	4.	4.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-01/13/92	44	2.5	7.845	216.	0.	1038.106	32.22	0.	1.	5.	7.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-01/13/92	44 ##	0.01	0.24	5.	0.	0.837	0.915	0.005	0.01	0.01	0.365
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-01/13/92	44 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-01/13/92	44	0.03	0.052	0.2	0.	0.003	0.059	0.	0.	0.1	0.14
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-01/13/92	44	0.02	0.03	0.16	0.	0.001	0.037	0.	0.	0.05	0.075
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-01/13/92	5 ##	0.5	1.26	4.3	0.5	2.888	1.699	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-01/13/92	44	8.	8.341	11.	6.	1.486	1.219	7.	7.	9.	10.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0030

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-01/13/92	44	1.8	1.791	2.5	1.2	0.117	0.342	1.3	1.5	2.	2.25
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-01/13/92	44	0.9	0.9	1.1	0.8	0.007	0.086	0.8	0.8	1.	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-01/13/92	44	0.46	0.482	0.73	0.34	0.008	0.089	0.38	0.423	0.548	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-01/13/92	44	0.91	0.893	1.42	0.56	0.041	0.202	0.61	0.72	1.028	1.155
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-01/13/92	44	0.8	0.952	4.	0.4	0.469	0.685	0.5	0.6	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-01/13/92	44	4.25	4.28	5.9	0.	1.224	1.106	3.3	3.5	5.2	5.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/13/92	44 ##	0.1	0.107	0.52	0.05	0.004	0.065	0.1	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-01/13/92	10 ##	0.	7.	35.	0.	217.778	14.757	0.	0.	8.75	35.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-01/13/92	12	30.	30.	40.	20.	72.727	8.528	20.	20.	40.	40.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/13/92	44 ##	0.	2.045	10.	0.	15.486	3.935	0.	0.	0.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-01/13/92	12 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-01/13/92	44 ##	0.	2.386	20.	0.	26.15	5.114	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-01/13/92	44 ##	0.	2.614	30.	0.	37.777	6.146	0.	0.	0.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-01/13/92	44 ##	0.	4.886	25.	0.	44.754	6.69	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-01/13/92	44	20.	30.	220.	0.	1083.721	32.92	10.	20.	30.	45.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-01/13/92	44 ##	10.	12.841	90.	0.	328.369	18.121	0.	0.	20.	40.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-01/13/92	44	10.	17.045	190.	0.	886.416	29.773	0.	10.	10.	40.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-01/13/92	44 ##	0.	2.727	30.	0.	43.552	6.599	0.	0.	0.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-01/13/92	30 ##	0.	0.833	10.	0.	7.04	2.653	0.	0.	0.	4.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-01/13/92	44 ##	0.	1.136	10.	0.	9.144	3.024	0.	0.	0.	7.5
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-01/13/92	30 ##	0.	7.333	90.	0.	282.299	16.802	0.	0.	10.	19.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-01/13/92	30 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-01/13/92	44 ##	0.	6.023	30.	0.	73.93	8.598	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-01/13/92	44	40.	72.273	1150.	10.	28650.529	169.265	20.	30.	57.5	115.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-01/13/92	44	20.	26.136	140.	0.	731.237	27.041	10.	10.	30.	40.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-01/13/92	30 ##	0.	0.333	10.	0.	3.333	1.826	0.	0.	0.	0.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-01/13/92	30 ##	0.	4.333	60.	0.	135.747	11.651	0.	0.	2.5	10.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-01/13/92	44	2400.	2414.318	3160.	1670.	131039.059	361.993	1855.	2200.	2700.	2845.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/13/92	44 ##	0.	2.045	70.	0.	114.323	10.692	0.	0.	0.	0.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-01/13/92	44	14.	14.295	17.	9.	3.097	1.76	12.	13.	16.	16.5
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/13/92	44 ##	0.15	0.198	2.	0.15	0.078	0.279	0.15	0.15	0.15	0.175
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-01/13/92	28 ##	0.	0.893	25.	0.	22.321	4.725	0.	0.	0.	0.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-01/13/92	44	0.055	0.1	0.8	0.02	0.024	0.156	0.03	0.04	0.087	0.185
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-01/13/92	44	3.	4.636	58.	0.	74.33	8.621	1.	2.	4.	7.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/13/92	44 ##	100.	97.727	100.	0.	227.273	15.076	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0030

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
00403	PH, LAB	Fresh Chronic	9.	19	0	0.00	8	0	0.00	5	0	0.00				6	0	0.00
		Other-Lo Lim.	6.5	19	7	0.37	8	0	0.00	5	4	0.80				6	3	0.50
00406	PH, FIELD	Fresh Chronic	9.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
		Other-Lo Lim.	6.5	44	22	0.50	19	6	0.32	13	9	0.69	5	3	0.60	7	4	0.57
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	250.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	10	0	0.00	5	0	0.00	3	0	0.00				2	0	0.00
		Drinking Water	50.	10	0	0.00	5	0	0.00	3	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	12	0	0.00	7	0	0.00	3	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12	0	0.00	7	0	0.00	3	0	0.00				2	0	0.00
		Drinking Water	5.	12	0	0.00	7	0	0.00	3	0	0.00				2	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	43 &	1	0.02	18	1	0.06	13	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	1300.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0030

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	44	1	0.02	19	1	0.05	13	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	15.	42 &	11	0.26	19	6	0.32	13	1	0.08	5	2	0.40	5	2	0.40
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	100.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	5000.	44	0	0.00	19	0	0.00	13	0	0.00	5	0	0.00	7	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	27 &	0	0.00	11	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
		Drinking Water	2.	27 &	0	0.00	11	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	44	1	0.02	19	0	0.00	13	1	0.08	5	0	0.00	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0031

NPS Station ID: CUGA0031 LAT/LON: 36.599003/ -83.669032 Agency: 11NPSWRD Date Created: 09/20/97
Location: GAP CREEK: WITHIN TOWN OF CUMBERLAND GAP FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_GC3
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1300 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON GAP CREEK WITHIN THE TOWN OF CUMBERLAND GAP IMMEDIATELY UPSTREAM OF EXISTING CULVERTS. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	175	12.9	13.411	20.4	0.2	6.334	2.517	11.	11.7	15.	16.88
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	154	2.	5.241	97.	0.	105.557	10.274	0.3	0.6	6.	12.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	174	8.	13.101	182.	0.5	562.	23.707	2.5	5.	11.25	21.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	174	139.5	153.092	414.	16.	2096.385	45.786	115.	123.75	173.75	204.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	175	0.	0.166	1.	0.	0.139	0.373	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	175	9.1	8.817	12.	2.	2.551	1.597	6.6	8.3	10.	10.5
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	147	7.9	7.878	8.2	7.	0.032	0.18	7.6	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	147	7.9	7.832	8.2	7.	0.035	0.186	7.6	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	147	0.013	0.015	0.1	0.006	0.	0.01	0.008	0.01	0.016	0.025
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	174	7.9	7.858	8.6	7.	0.068	0.261	7.6	7.7	8.	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	174	7.9	7.769	8.6	7.	0.076	0.276	7.6	7.7	8.	8.2
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	174	0.013	0.017	0.1	0.003	0.	0.015	0.006	0.01	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	175	58.	64.474	120.	30.	347.136	18.632	45.6	49.	81.	91.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	175 ##	0.05	0.053	0.5	0.05	0.001	0.034	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	127	36.	39.126	73.	0.	145.889	12.078	28.	30.	49.	56.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	174	2.	6.771	138.	0.	223.362	14.945	0.1	1.	5.	14.5
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-01/10/94	68 ##	0.01	0.359	13.	0.	2.877	1.696	0.	0.	0.01	0.059
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	175 ##	0.01	0.032	0.99	0.01	0.016	0.128	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	175	0.57	0.677	11.	0.	0.856	0.925	0.106	0.2	0.94	1.4
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	175 ##	0.05	0.101	0.86	0.	0.022	0.149	0.025	0.05	0.05	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	27	1.6	4.378	22.	0.	37.483	6.122	0.	0.8	5.8	14.14
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	175	66.	71.674	131.	40.	326.129	18.059	52.	58.	86.	98.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	175	22.5	24.293	45.	3.8	39.862	6.314	17.7	19.7	28.9	33.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	175	2.3	2.523	4.4	1.4	0.479	0.692	1.8	2.	3.	3.64
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	175	0.96	1.224	15.3	0.4	1.642	1.281	0.666	0.75	1.3	1.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	175	0.77	0.912	5.	0.27	0.388	0.623	0.554	0.67	0.9	1.12
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	175	1.	1.472	28.	0.4	5.035	2.244	0.8	0.9	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	175	7.1	7.705	39.	0.7	8.871	2.978	6.26	6.6	8.	9.44
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	174 ##	0.05	0.092	1.	0.05	0.012	0.11	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	48.065	250.	0.	3374.462	58.09	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	19.	18.289	50.	5.	119.617	10.937	5.	10.	20.25	31.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	174 ##	5.	9.368	100.	0.	179.517	13.398	0.	5.	5.	25.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	34 ##	5.	3.676	10.	0.	8.044	2.836	0.	0.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	175 ##	5.	5.2	30.	0.	17.839	4.224	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	95 ##	5.	7.953	50.	0.	97.703	9.884	0.	0.	10.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	175 ##	5.	5.343	50.	0.	44.997	6.708	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	175	20.	29.294	333.	0.	1539.69	39.239	5.	10.	30.	74.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	175 ##	50.	38.303	100.	0.	335.408	18.314	10.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	174 ##	5.	9.655	86.	0.	170.181	13.045	0.	5.	10.	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	174 ##	5.	5.305	59.	0.	32.756	5.723	0.	5.	5.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	5.	18.148	50.	0.	515.374	22.702	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	174 ##	5.	5.282	90.	0.	54.666	7.394	0.	5.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39	60.	54.59	190.	0.	3633.669	60.28	0.	0.	99.	140.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	54 ##	0.	3.519	40.	0.	37.386	6.114	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	175 ##	5.	12.84	439.	0.	1219.503	34.921	0.	5.	10.	30.
01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	1 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	175	60.	105.417	1410.	5.	34810.245	186.575	5.	20.	98.	210.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	175	22.	42.937	230.	5.	2603.174	51.021	5.	5.	60.	110.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	6.316	50.	0.	245.519	15.669	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	10.	35.789	190.	0.	2095.306	45.775	0.	0.	52.5	102.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	95	2500.	2740.505	20000.	1650.	3296172.338	1815.536	2260.	2390.	2750.	3040.
01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	174 ##	5.	5.601	70.	0.	68.032	8.248	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	169	70.	78.308	298.	37.	721.19	26.855	57.	62.	91.	108.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	174 ##	0.15	0.151	0.25	0.15	0.	0.011	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	22.547	100.	0.	694.829	26.36	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	175	0.04	0.087	1.	0.005	0.021	0.144	0.02	0.03	0.07	0.204
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	160	3.	8.844	200.	0.	457.604	21.392	1.	2.	5.75	20.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	174 ##	50.	67.069	100.	10.	606.966	24.637	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0031

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	175	3	0.02	60	0	0.00	42	0	0.00	32	3	0.09	41	0	0.00
00403	PH, LAB	Fresh Chronic	9.	147	0	0.00	48	0	0.00	33	0	0.00	26	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	147	0	0.00	48	0	0.00	33	0	0.00	26	0	0.00	40	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	174	0	0.00	60	0	0.00	42	0	0.00	31	0	0.00	41	0	0.00
		Other-Lo Lim.	6.5	174	0	0.00	60	0	0.00	42	0	0.00	31	0	0.00	41	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	175	1	0.01	60	0	0.00	42	1	0.02	32	0	0.00	41	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	250.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	174	0	0.00	60	0	0.00	42	0	0.00	31	0	0.00	41	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0031

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	0	0.00	5	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	13 &	2	0.15	7	2	0.29	3	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	5.	13 &	2	0.15	7	2	0.29	3	0	0.00	1	0	0.00	2	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	174 &	4	0.02	59	0	0.00	42	3	0.07	32	0	0.00	41	1	0.02
		Drinking Water	1300.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	175	1	0.01	60	0	0.00	42	1	0.02	32	0	0.00	41	0	0.00
		Drinking Water	15.	61 &	33	0.54	20	14	0.70	18	8	0.44	10	5	0.50	13	6	0.46
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	174	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	40	0	0.00
		Drinking Water	100.	174	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	40	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	175	1	0.01	60	0	0.00	42	0	0.00	32	0	0.00	41	1	0.02
		Drinking Water	5000.	175	0	0.00	60	0	0.00	42	0	0.00	32	0	0.00	41	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	160	6	0.04	58	3	0.05	36	1	0.03	29	2	0.07	37	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	17	15.2	14.671	17.9	10.1	6.218	2.494	10.98	12.05	17.	17.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	17	0.8	7.547	97.	0.	544.021	23.324	0.	0.5	3.	31.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	17	11.	21.471	161.	2.	1356.765	36.834	6.8	8.	15.5	62.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	17	165.	166.765	283.	108.	1953.066	44.194	115.2	129.	193.5	226.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	17	10.4	10.382	12.	9.5	0.357	0.597	9.58	10.	10.7	11.2
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	17	8.1	8.088	8.6	7.7	0.077	0.278	7.7	7.9	8.3	8.52
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	17	8.1	8.01	8.6	7.7	0.084	0.29	7.7	7.9	8.3	8.52
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	17	0.008	0.01	0.02	0.003	0.	0.006	0.003	0.005	0.013	0.02
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	17	71.	73.353	120.	39.	436.118	20.883	42.2	59.	86.5	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	43.	41.294	73.	0.	263.346	16.228	19.2	31.	50.	61.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	17	1.	3.235	30.	0.	52.066	7.216	0.	0.	2.5	12.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	17	0.1	0.171	0.3	0.1	0.008	0.092	0.1	0.1	0.3	0.3
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	17	0.09	0.117	0.39	0.	0.014	0.12	0.	0.02	0.16	0.39
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	17	79.	79.529	131.	48.	464.265	21.547	48.8	60.	94.	104.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	17	26.9	26.912	45.	15.7	56.924	7.545	16.26	19.95	31.75	35.64
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	17	2.8	2.918	4.4	1.8	0.482	0.694	1.96	2.45	3.45	4.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	17	1.08	2.194	15.3	0.54	12.725	3.567	0.636	0.96	1.36	7.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	17	0.9	1.023	2.52	0.77	0.162	0.403	0.818	0.84	1.05	1.488
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	17	1.	1.259	5.	0.8	0.996	0.998	0.88	0.9	1.	2.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	17	7.9	8.729	17.8	5.8	6.931	2.633	6.68	7.4	9.	12.36
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	17 ##	0.1	0.108	0.24	0.1	0.001	0.034	0.1	0.1	0.1	0.128
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	17	10.	9.412	40.	0.	105.882	10.29	0.	0.	10.	24.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	17 ##	0.	4.706	10.	0.	26.471	5.145	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	17 ##	0.	7.647	30.	0.	106.618	10.326	0.	0.	10.	30.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	17 ##	0.	4.118	10.	0.	25.735	5.073	0.	0.	10.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	17	30.	34.706	100.	0.	638.971	25.278	16.	20.	40.	92.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	17	10.	18.235	40.	0.	252.941	15.904	0.	5.	40.	40.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	17	10.	8.824	30.	0.	61.029	7.812	0.	0.	10.	22.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	17 ##	0.	5.294	20.	0.	38.971	6.243	0.	0.	10.	12.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	17 ##	0.	4.706	10.	0.	26.471	5.145	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	17 ##	0.	4.706	10.	0.	26.471	5.145	0.	0.	10.	10.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	17	100.	124.118	530.	50.	12813.235	113.196	58.	65.	120.	298.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	17	50.	66.471	180.	20.	1561.765	39.519	28.	40.	80.	132.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	17	2390.	2418.824	2820.	1700.	67048.529	258.937	2092.	2285.	2615.	2772.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	17 ##	0.	14.118	70.	0.	475.735	21.811	0.	0.	25.	54.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	17	78.	81.294	143.	49.	494.971	22.248	52.2	64.5	94.	108.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	17	0.05	0.134	1.	0.03	0.058	0.24	0.03	0.035	0.08	0.496
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	17	2.	4.588	40.	0.	87.007	9.328	0.	1.	4.	13.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	31	12.8	13.174	19.7	10.4	3.91	1.977	11.	11.5	14.4	15.76
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	31	1.	5.609	37.	0.	65.701	8.106	0.	0.3	9.	14.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	31	10.	28.032	182.	2.	1972.699	44.415	4.2	6.	22.	94.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	31	145.	150.581	246.	109.	1038.852	32.231	116.	124.	176.	192.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	31	0.	0.194	1.	0.	0.161	0.402	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	31	10.1	9.89	11.	6.6	0.769	0.877	8.56	9.4	10.4	10.68
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	21	8.	7.971	8.2	7.8	0.015	0.123	7.8	7.9	8.	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	21	8.	7.956	8.2	7.8	0.015	0.124	7.8	7.9	8.	8.2

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Annual Analysis for 1991 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	21	0.01	0.011	0.016	0.006	0.	0.003	0.006	0.01	0.013	0.016
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	31	7.8	7.784	8.4	7.4	0.041	0.202	7.52	7.7	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	31	7.8	7.741	8.4	7.4	0.043	0.206	7.52	7.7	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	31	0.016	0.018	0.04	0.004	0.	0.008	0.01	0.013	0.02	0.03
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	31	61.	67.129	106.	46.	330.849	18.189	48.	51.	85.	90.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	31 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	31	38.	41.032	65.	28.	124.232	11.146	29.	31.	52.	55.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	31	2.	5.594	46.	0.	96.413	9.819	0.	0.4	6.	15.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	31 ##	0.01	0.023	0.41	0.01	0.005	0.072	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	31	0.15	0.175	0.52	0.	0.011	0.104	0.102	0.13	0.2	0.296
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	31	0.22	0.29	0.86	0.	0.067	0.26	0.003	0.07	0.49	0.732
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	31	65.	71.484	109.	49.	304.458	17.449	52.2	57.	89.	97.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	31	22.1	24.045	36.6	16.6	33.522	5.79	17.62	19.2	29.8	32.88
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	31	2.3	2.632	4.	1.7	0.564	0.751	1.9	2.	3.5	3.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	31	0.96	1.107	4.01	0.7	0.365	0.605	0.732	0.76	1.3	1.478
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	31	0.87	0.904	1.97	0.63	0.062	0.248	0.68	0.76	0.94	1.07
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	31	1.	1.09	4.	0.8	0.331	0.575	0.82	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	31	6.9	7.639	18.2	5.9	5.506	2.347	6.2	6.5	7.7	10.36
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	31 ##	0.1	0.183	1.	0.1	0.051	0.226	0.1	0.1	0.1	0.658
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31	20.	23.226	100.	0.	629.247	25.085	0.	0.	40.	50.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	31 ##	0.	5.323	30.	0.	49.892	7.063	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	31	10.	11.29	50.	0.	189.946	13.782	0.	0.	20.	36.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	31 ##	0.	4.677	30.	0.	53.226	7.296	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	31	30.	41.935	160.	10.	1582.796	39.784	12.	20.	40.	126.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	31	20.	29.355	100.	0.	532.903	23.085	10.	10.	40.	68.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	31	10.	9.355	30.	0.	59.57	7.718	0.	0.	10.	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	31 ##	0.	4.839	10.	0.	25.806	5.08	0.	0.	10.	10.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	31 ##	0.	4.516	20.	0.	45.591	6.752	0.	0.	10.	18.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	31 ##	5.	8.226	30.	0.	74.247	8.617	0.	0.	15.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	31	80.	199.677	1410.	30.	86683.226	294.42	60.	70.	180.	512.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	31	80.	89.355	210.	20.	2866.237	53.537	40.	50.	120.	198.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	31	2400.	2456.774	3200.	1650.	94329.247	307.131	2048.	2300.	2700.	2800.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	31 ##	0.	3.065	30.	0.	41.129	6.413	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	31	68.	73.774	126.	53.	309.581	17.595	55.2	59.	89.	94.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	31	0.05	0.132	0.95	0.02	0.041	0.202	0.04	0.04	0.13	0.358
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	31	4.	12.548	95.	0.	528.256	22.984	1.	2.	12.	38.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	31 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	28	12.8	13.325	20.	9.6	4.896	2.213	10.96	11.825	14.9	16.16
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	27	4.	5.122	16.	0.3	15.296	3.911	1.	2.	8.	11.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	28	10.	12.518	37.	0.5	86.676	9.31	0.5	5.	19.25	25.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	28	135.	151.5	414.	102.	3406.111	58.362	114.3	120.	160.25	208.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	28	9.25	8.918	11.3	5.2	2.011	1.418	6.48	8.725	9.8	10.16
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	28	7.9	7.875	8.1	7.6	0.014	0.117	7.69	7.8	7.975	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	28	7.9	7.859	8.1	7.6	0.014	0.119	7.69	7.8	7.975	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	28	0.013	0.014	0.025	0.008	0.	0.004	0.01	0.011	0.016	0.02
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	28	7.9	7.843	8.5	7.	0.117	0.341	7.4	7.6	8.15	8.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	28	7.9	7.707	8.5	7.	0.136	0.369	7.4	7.6	8.15	8.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	28	0.013	0.02	0.1	0.003	0.	0.019	0.005	0.007	0.025	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	28	58.5	62.714	95.	44.	193.323	13.904	47.9	52.5	73.25	85.8

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Annual Analysis for 1992 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	35.	38.185	58.	27.	74.464	8.629	29.	32.	45.	53.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	28	2.	3.407	30.	0.	37.318	6.109	0.	0.65	3.	11.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	28 ##	0.01	0.017	0.21	0.01	0.001	0.038	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	28	0.23	0.316	0.71	0.01	0.03	0.175	0.169	0.2	0.43	0.633
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	28 ##	0.025	0.055	0.27	0.	0.006	0.08	0.	0.014	0.05	0.261
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	28	62.5	67.429	107.	40.	252.106	15.878	48.9	56.	79.5	88.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	28	21.	22.868	36.9	12.9	31.663	5.627	16.36	18.925	26.9	30.27
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	28	2.3	2.411	3.5	1.7	0.244	0.494	1.8	2.	2.8	3.11
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	28	0.81	0.969	3.	0.55	0.235	0.485	0.618	0.712	1.	1.414
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	28	0.805	1.	3.3	0.5	0.388	0.623	0.59	0.712	0.9	1.953
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	28	0.9	0.936	2.	0.6	0.106	0.326	0.6	0.8	1.	1.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	28	6.85	7.207	12.	5.9	1.686	1.298	6.09	6.425	7.55	9.01
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	28 ##	0.1	0.095	0.3	0.05	0.003	0.057	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	28 ##	5.	8.107	32.	0.	79.284	8.904	0.	5.	9.75	30.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	28 ##	5.	4.607	20.	0.	18.173	4.263	0.	0.25	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	28 ##	5.	5.911	30.	0.	37.557	6.128	0.	1.875	8.75	10.6
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	28 ##	5.	4.464	50.	0.	85.813	9.264	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	28	18.5	27.679	140.	0.	1121.782	33.493	5.	10.	29.5	84.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	28 ##	25.	20.643	70.	0.	212.905	14.591	0.	10.	25.	30.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	28 ##	5.	8.75	40.	0.	75.231	8.674	0.	5.	10.	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	28 ##	5.	3.179	5.	0.	5.041	2.245	0.	0.25	5.	5.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	28 ##	5.	4.071	16.	0.	13.772	3.711	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	28 ##	5.	10.286	50.	0.	151.915	12.325	0.	1.25	10.	31.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	28	75.	128.607	870.	5.	45420.247	213.12	5.	20.	107.5	516.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	28	32.	33.	90.	5.	807.111	28.41	5.	5.	60.	70.8
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	28	2545.	3259.571	20000.	2200.	10842151.81	3292.742	2300.	2458.5	2900.	3208.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	28 ##	5.	5.339	40.	0.	53.853	7.338	0.	1.625	5.	10.1
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	22	62.5	76.955	154.	51.	974.331	31.214	53.	58.25	89.75	139.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	28 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	28	0.05	0.09	0.62	0.02	0.021	0.145	0.02	0.03	0.07	0.209
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	28	3.	4.429	22.	2.	24.921	4.992	2.	2.	4.	8.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	22	12.3	13.209	20.	0.2	16.253	4.032	10.86	11.575	16.6	18.82
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	18	3.5	5.25	20.	0.2	33.59	5.796	0.29	0.5	8.25	17.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	22	10.	9.091	30.	2.5	34.253	5.853	3.25	5.	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	22	127.5	142.727	209.	95.	1251.351	35.374	103.3	117.	174.25	201.1
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	22	0.	0.091	1.	0.	0.087	0.294	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	22	8.55	8.423	10.	5.7	1.059	1.029	6.83	8.075	8.975	9.74
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	22	7.9	7.855	8.1	7.3	0.042	0.204	7.53	7.775	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	22	7.9	7.801	8.1	7.3	0.045	0.211	7.53	7.775	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	22	0.013	0.016	0.05	0.008	0.	0.01	0.008	0.01	0.017	0.03
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	21	7.9	7.886	8.3	7.4	0.052	0.229	7.44	7.8	8.	8.18
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	21	7.9	7.823	8.3	7.4	0.056	0.238	7.44	7.8	8.	8.18
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	21	0.013	0.015	0.04	0.005	0.	0.009	0.007	0.01	0.016	0.037
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	22	56.5	61.682	92.	30.	334.894	18.3	36.8	50.5	74.25	91.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	22 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	22	34.5	36.545	56.	6.	169.593	13.023	18.9	30.75	45.	56.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	22	3.5	11.436	138.	0.8	859.328	29.314	1.16	2.	5.5	30.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	22 ##	0.01	0.155	0.99	0.01	0.108	0.329	0.01	0.01	0.01	0.92
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	22	0.975	1.05	2.7	0.025	0.316	0.562	0.345	0.74	1.4	1.81

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Annual Analysis for 1993 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	22 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	22	64.	72.5	120.	44.	408.643	20.215	50.8	59.	94.25	100.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	22	22.2	24.968	40.4	14.7	48.671	6.976	17.42	20.25	31.7	35.28
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	22	2.25	2.582	4.2	1.7	0.701	0.837	1.9	1.975	3.525	4.04
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	22	0.9	1.018	1.8	0.6	0.139	0.373	0.6	0.7	1.35	1.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	22	0.7	0.962	5.	0.5	0.864	0.929	0.6	0.675	0.825	1.45
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	22	1.	1.05	2.	0.4	0.111	0.333	0.9	1.	1.	1.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	22	7.5	7.468	13.	0.7	4.305	2.075	6.23	6.7	8.125	9.29
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	22 ##	0.05	0.057	0.1	0.05	0.	0.018	0.05	0.05	0.05	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	22 ##	5.	5.909	20.	5.	11.039	3.322	5.	5.	5.	8.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	19 ##	5.	5.789	20.	5.	11.842	3.441	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	22 ##	5.	6.818	40.	5.	56.061	7.487	5.	5.	5.	8.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	22	10.	22.727	160.	5.	1287.446	35.881	5.	5.	22.5	72.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	22 ##	50.	47.955	50.	5.	92.045	9.594	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	21 ##	5.	9.762	80.	5.	288.69	16.991	5.	5.	5.	25.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	22 ##	5.	5.455	10.	5.	2.165	1.471	5.	5.	5.	8.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	22 ##	5.	8.636	30.	5.	59.957	7.743	5.	5.	10.	27.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	22	25.	61.818	440.	5.	10732.251	103.597	5.	5.	62.5	217.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	22 ##	5.	25.455	230.	5.	2847.403	53.361	5.	5.	20.	106.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	19	2600.	2726.316	3200.	2400.	77602.339	278.572	2400.	2500.	3100.	3100.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	22	70.	76.273	112.	37.	360.589	18.989	54.3	63.75	93.	105.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	22 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	22	0.03	0.06	0.35	0.005	0.006	0.078	0.013	0.03	0.053	0.179
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	19	2.	13.474	200.	1.	2043.708	45.207	1.	2.	5.	7.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	22 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	30	12.5	12.893	16.1	10.3	2.676	1.636	10.8	11.625	14.425	15.49
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	22	1.	2.086	11.	0.4	6.215	2.493	0.5	0.65	2.	6.1
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	29	5.	6.81	15.	2.5	18.704	4.325	2.5	2.5	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	29	130.	143.724	208.	108.	1006.564	31.726	111.	117.5	173.	191.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	30	7.25	7.08	9.3	2.	4.162	2.04	3.95	6.375	8.7	9.3
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	29	7.9	7.893	8.2	7.	0.056	0.236	7.6	7.9	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	29	7.9	7.795	8.2	7.	0.066	0.256	7.6	7.9	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	29	0.013	0.016	0.1	0.006	0.	0.018	0.008	0.01	0.013	0.025
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	30	7.9	7.87	8.1	7.6	0.019	0.137	7.61	7.8	8.	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	30	7.9	7.848	8.1	7.6	0.019	0.139	7.61	7.8	8.	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	30	0.013	0.014	0.025	0.008	0.	0.005	0.01	0.01	0.016	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	30	55.5	63.267	110.	33.	422.892	20.564	43.3	47.	84.	90.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	34.	38.667	67.	20.	157.747	12.56	26.2	29.	51.5	55.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	29	4.	9.466	73.	0.6	270.282	16.44	1.	2.	8.5	24.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	30	0.66	0.798	2.	0.28	0.162	0.403	0.501	0.563	0.813	1.49
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	30	65.5	73.033	110.	48.	323.757	17.993	53.1	58.5	88.25	99.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	30	22.6	25.117	39.	16.4	36.445	6.037	19.02	20.3	29.875	34.71
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	30	2.2	2.54	4.	1.6	0.585	0.765	1.61	1.9	3.2	3.79
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	30	0.87	0.989	2.6	0.4	0.202	0.45	0.503	0.7	1.3	1.49

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Annual Analysis for 1994 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	30	0.7	0.851	3.2	0.5	0.33	0.575	0.6	0.638	0.708	1.09
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	30	1.	1.247	3.	0.7	0.396	0.63	0.8	0.9	1.25	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	30	7.2	8.347	39.	6.2	34.162	5.845	6.4	6.775	7.725	8.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	30 ##	0.05	0.068	0.2	0.05	0.002	0.04	0.05	0.05	0.063	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	30 ##	5.	5.5	20.	5.	7.5	2.739	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	30	20.	29.667	140.	5.	1215.402	34.863	10.	10.	20.	89.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	30 ##	5.	9.833	60.	5.	200.833	14.172	5.	5.	5.	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	29 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	30 ##	5.	10.667	50.	5.	147.816	12.158	5.	5.	10.	29.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	30	25.	92.5	860.	5.	39316.81	198.285	5.	5.	70.	207.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	30 ##	5.	36.5	220.	5.	3831.293	61.897	5.	5.	42.5	173.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	30	71.5	77.933	120.	49.	361.789	19.021	59.1	61.75	95.	107.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	30	0.03	0.077	0.51	0.02	0.012	0.109	0.021	0.03	0.073	0.184
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	24	3.	7.833	46.	1.	116.493	10.793	1.	2.	9.75	26.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	30 ##	50.	51.667	100.	50.	83.333	9.129	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	25	12.7	14.036	20.4	10.3	8.662	2.943	11.36	11.8	16.8	18.58
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	19	2.	2.3	9.	0.2	6.533	2.556	0.3	0.4	3.	8.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	25	5.	5.5	15.	2.5	15.625	3.953	2.5	2.5	5.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	25	155.	169.4	312.	113.	2117.667	46.018	121.	134.	206.	223.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	25	9.	8.616	10.	4.9	1.302	1.141	6.64	8.25	9.25	9.6
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	25	7.9	7.884	8.2	7.4	0.031	0.177	7.66	7.75	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	25	7.9	7.846	8.2	7.4	0.033	0.181	7.66	7.75	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	25	0.013	0.014	0.04	0.006	0.	0.007	0.008	0.01	0.018	0.022
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	25	7.9	7.844	8.3	7.	0.092	0.303	7.36	7.75	8.	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	25	7.9	7.699	8.3	7.	0.114	0.337	7.36	7.75	8.	8.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	25	0.013	0.02	0.1	0.005	0.001	0.025	0.008	0.01	0.018	0.055
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	25	57.	64.84	110.	35.	392.64	19.815	43.8	49.5	81.5	94.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	25	2.	5.732	47.	0.5	97.229	9.86	0.92	1.	5.	17.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	25	0.7	1.211	11.	0.025	4.309	2.076	0.358	0.585	1.1	1.6
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	25 ##	0.05	0.058	0.2	0.05	0.001	0.031	0.05	0.05	0.05	0.07
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	25	69.	71.44	100.	42.	237.84	15.422	51.6	62.	79.	99.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	25	23.5	24.608	34.4	14.7	27.841	5.276	17.54	21.15	27.1	34.08
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	25	2.3	2.448	3.7	1.4	0.376	0.613	1.9	2.05	2.85	3.64
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	25	1.	1.21	2.5	0.6	0.288	0.536	0.716	0.835	1.55	2.3
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	25	0.7	0.692	0.97	0.27	0.042	0.205	0.316	0.6	0.855	0.922
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	25	2.	2.748	28.	0.8	28.319	5.322	0.96	1.	2.	3.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	25	7.5	7.456	11.	3.1	2.599	1.612	5.8	6.4	8.4	10.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	25 ##	0.05	0.058	0.2	0.05	0.001	0.031	0.05	0.05	0.05	0.07
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	25 ##	5.	6.08	32.	5.	29.16	5.4	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	25 ##	5.	5.84	26.	5.	17.64	4.2	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	25	15.	29.34	333.	5.	4179.807	64.651	5.	7.75	22.5	49.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	25 ##	5.	9.12	48.	5.	140.36	11.847	5.	5.	5.	29.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	25 ##	5.	8.64	59.	5.	151.407	12.305	5.	5.	5.	20.8
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	25 ##	5.	8.4	90.	5.	289.	17.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	25 ##	5.	25.6	439.	5.	7679.5	87.633	5.	5.	5.	37.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	25	30.	49.24	341.	5.	5337.69	73.059	5.	12.	50.5	129.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	25 ##	5.	18.84	155.	5.	1082.723	32.905	5.	5.	21.	52.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	25	78.	78.36	118.	51.	318.49	17.846	59.	63.	88.5	107.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	25	0.03	0.066	0.4	0.01	0.008	0.089	0.02	0.025	0.06	0.226
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	20	2.	6.9	67.	1.	209.568	14.476	1.	2.	6.5	10.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	21	13.3	13.119	17.	10.6	3.785	1.945	10.72	11.4	14.45	16.12
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	20	5.	9.13	60.	0.6	183.012	13.528	2.	3.25	8.25	27.5
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	21	5.	6.429	15.	2.5	12.232	3.497	3.	5.	7.5	14.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	21	138.	153.19	385.	16.	4380.162	66.183	117.	128.5	166.5	222.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	21	0.	0.143	1.	0.	0.129	0.359	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	21	8.8	8.867	10.4	7.9	0.504	0.71	8.	8.1	9.35	9.98
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	21	7.8	7.786	8.2	7.5	0.024	0.156	7.6	7.65	7.85	7.98
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	21	7.8	7.76	8.2	7.5	0.025	0.158	7.6	7.65	7.85	7.98
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	21	0.016	0.017	0.032	0.006	0.	0.006	0.011	0.014	0.023	0.025
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	21	7.8	7.79	8.2	7.	0.053	0.23	7.6	7.7	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	21	7.8	7.708	8.2	7.	0.06	0.245	7.6	7.7	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	21	0.016	0.02	0.1	0.006	0.	0.019	0.01	0.013	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	21	54.	60.762	100.	37.	354.99	18.841	39.2	47.5	78.5	91.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	21	2.	6.281	47.	0.3	126.522	11.248	0.5	0.95	8.	23.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	21 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	21	1.1	1.091	1.9	0.025	0.138	0.371	0.744	0.92	1.35	1.48
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	21	59.	69.	110.	51.	394.5	19.862	52.	54.	82.5	107.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	21	19.9	22.219	38.5	3.8	55.904	7.477	17.64	18.2	26.85	34.16
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	21	2.1	2.233	3.3	1.6	0.278	0.528	1.7	1.85	2.75	3.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	21	1.2	1.492	5.6	0.63	1.321	1.149	0.68	0.74	1.9	2.98
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	21	0.6	0.989	4.3	0.46	1.088	1.043	0.476	0.515	0.775	3.3
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	21	2.	2.19	9.	1.	4.162	2.04	1.	1.	2.	6.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	21	6.8	7.305	11.	6.2	1.72	1.312	6.3	6.45	7.65	9.64
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	21 ##	5.	5.286	11.	5.	1.714	1.309	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	21 ##	5.	7.143	50.	5.	96.429	9.82	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	21 ##	5.	12.714	48.	5.	166.114	12.889	5.	5.	18.	38.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	21 ##	5.	8.619	68.	5.	189.148	13.753	5.	5.	5.	12.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	21 ##	5.	5.619	13.	5.	4.048	2.012	5.	5.	5.	9.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	21	19.	20.19	76.	5.	325.162	18.032	5.	5.	31.5	39.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	21	35.	47.524	181.	11.	1644.762	40.556	15.2	19.	58.5	110.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	21	15.	21.619	75.	5.	389.948	19.747	5.	5.	30.	62.2
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	21	68.	87.19	298.	58.	2752.562	52.465	58.2	61.	97.	122.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	21	0.03	0.039	0.23	0.005	0.002	0.049	0.005	0.01	0.04	0.088
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	20	2.	8.7	73.	1.	321.695	17.936	1.	2.	4.75	41.1
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	1	12.3	12.3	12.3	12.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	1	133.	133.	133.	133.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	1	10.8	10.8	10.8	10.8	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/03/97	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/03/97	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/03/97	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	1	47.	47.	47.	47.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	1	66.	66.	66.	66.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	1	23.4	23.4	23.4	23.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	1	71.	71.	71.	71.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	1	86.	86.	86.	86.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	1	183.	183.	183.	183.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	1	110.	110.	110.	110.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	1	66.	66.	66.	66.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	1	68.	68.	68.	68.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	60	15.7	15.942	20.4	12.2	3.637	1.907	13.61	14.35	17.	18.68
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	57	0.8	2.717	60.	0.	74.423	8.627	0.28	0.5	2.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	60	5.	8.058	38.	0.5	55.45	7.446	2.5	2.5	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	59	181.	189.068	414.	16.	3130.995	55.955	145.	163.	207.	225.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	60	0.	0.1	1.	0.	0.092	0.303	0.	0.	0.	0.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	60	8.4	8.432	12.	4.9	2.54	1.594	6.4	7.025	9.825	10.19
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	60	7.9	7.872	8.6	7.	0.109	0.33	7.51	7.7	8.1	8.29
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	60	7.9	7.729	8.6	7.	0.13	0.36	7.51	7.7	8.1	8.29
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	60	0.013	0.019	0.1	0.003	0.	0.021	0.005	0.008	0.02	0.031
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	60	83.	82.55	120.	51.	171.608	13.1	65.1	74.25	91.	95.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	60 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	59	2.	4.4	47.	0.	82.857	9.103	0.	0.6	4.	11.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	60 ##	0.01	0.013	0.21	0.01	0.001	0.026	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	60	0.505	0.541	1.8	0.01	0.185	0.431	0.1	0.14	0.758	1.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	60 ##	0.05	0.113	0.86	0.	0.03	0.172	0.025	0.05	0.078	0.334
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	60	88.5	87.2	131.	52.	216.4	14.711	69.	78.25	97.75	100.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	60	29.9	29.75	45.	18.3	25.771	5.076	23.56	26.9	33.	35.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	60	3.1	3.133	4.4	1.6	0.35	0.591	2.31	2.8	3.6	3.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	60	1.3	1.634	15.3	0.68	3.714	1.927	0.811	1.005	1.593	2.09
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	60	0.815	0.921	3.3	0.31	0.29	0.538	0.5	0.7	0.962	1.222
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	60	1.	1.243	5.	0.6	0.475	0.689	0.81	1.	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	60	6.9	7.467	17.8	5.8	3.559	1.886	6.2	6.4	7.875	8.99
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	60 ##	0.05	0.092	0.67	0.05	0.008	0.09	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	20.5	24.917	50.	11.	100.083	10.004	12.8	20.	30.	44.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	60 ##	5.	9.25	80.	0.	176.97	13.303	0.5	5.	8.75	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	5.	3.75	10.	0.	14.205	3.769	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	60 ##	5.	4.933	26.	0.	16.368	4.046	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	60 ##	5.	5.417	50.	0.	44.315	6.657	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	60	20.	27.833	333.	0.	2138.311	46.242	5.	10.	30.	47.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	60 ##	50.	38.25	70.	0.	276.97	16.642	11.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	60 ##	5.	9.633	68.	0.	150.745	12.278	5.	5.	10.	19.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	60 ##	5.	6.933	59.	0.	74.843	8.651	0.	5.	5.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	5.	11.389	50.	0.	296.487	17.219	0.	0.	12.5	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	60 ##	5.	6.6	90.	0.	133.769	11.566	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	18 ##	0.	3.333	10.	0.	17.647	4.201	0.	0.	6.25	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	60 ##	5.	13.633	86.	0.	295.965	17.204	0.	5.	19.75	33.9
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	60	37.	60.65	490.	5.	5953.35	77.158	5.	10.25	80.	119.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	60	10.	35.85	220.	5.	1926.74	43.895	5.	5.	50.	90.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	60 ##	5.	7.583	70.	0.	157.196	12.538	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	57	92.	94.965	154.	53.	364.32	19.087	68.8	84.5	104.	117.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	60 ##	0.15	0.154	0.25	0.15	0.	0.019	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	60	0.04	0.083	1.	0.01	0.024	0.156	0.02	0.03	0.06	0.224
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	58	2.	7.862	95.	0.	323.84	17.996	1.	1.75	5.	15.7
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	60 ##	50.	65.333	100.	10.	662.599	25.741	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	42	11.7	11.814	14.9	10.1	0.907	0.952	10.8	11.375	12.325	12.94
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	37	4.	7.911	97.	0.	256.612	16.019	0.	0.85	10.	15.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	41	10.	21.402	182.	2.5	1852.028	43.035	2.5	5.	15.	50.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	42	126.5	138.024	246.	95.	1138.17	33.737	108.	116.5	155.75	191.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	42	0.	0.19	1.	0.	0.158	0.397	0.	0.	0.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	42	9.4	9.526	11.3	6.6	0.833	0.913	8.6	9.	10.4	10.6
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	42	7.9	7.833	8.4	7.4	0.04	0.2	7.6	7.7	8.	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	42	7.9	7.787	8.4	7.4	0.042	0.205	7.6	7.7	8.	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	42	0.013	0.016	0.04	0.004	0.	0.008	0.01	0.01	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	42	48.5	55.5	106.	30.	345.134	18.578	35.9	45.	64.25	90.7
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	42 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	42	3.	8.888	56.	0.	182.749	13.518	0.45	1.	9.	31.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	42 ##	0.01	0.02	0.41	0.01	0.004	0.062	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	42	0.505	0.845	11.	0.	2.803	1.674	0.1	0.2	1.02	1.4
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	42 ##	0.05	0.096	0.86	0.	0.021	0.144	0.015	0.05	0.095	0.211
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	42	59.5	63.429	110.	40.	346.592	18.617	48.	50.75	66.25	99.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	42	20.2	21.505	39.	12.9	40.892	6.395	15.79	17.15	22.4	34.42
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	42	2.1	2.326	4.	1.4	0.493	0.702	1.7	1.9	2.3	3.77
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	42	0.915	1.086	4.01	0.5	0.416	0.645	0.6	0.7	1.225	1.67
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	42	0.82	1.071	4.3	0.27	0.68	0.825	0.609	0.7	0.955	1.949
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	42	1.	1.279	4.	0.4	0.621	0.788	0.8	0.9	1.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	42	7.6	8.052	18.2	0.7	5.333	2.309	6.73	6.8	8.75	10.07
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	42 ##	0.05	0.1	0.69	0.05	0.017	0.129	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	41.429	50.	20.	139.286	11.802	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	10.	11.625	20.	5.	23.982	4.897	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	42 ##	5.	10.119	100.	0.	257.961	16.061	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	2.857	5.	0.	7.143	2.673	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	42 ##	5.	6.548	30.	0.	32.303	5.684	0.	5.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	42 ##	5.	6.667	50.	0.	95.935	9.795	0.	0.	5.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	42	20.	33.048	160.	0.	1217.315	34.89	6.5	16.	30.	87.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	42 ##	40.	34.524	100.	0.	426.597	20.654	10.	17.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	42 ##	7.5	11.024	60.	0.	111.731	10.57	5.	5.	12.5	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	42 ##	5.	5.	10.	0.	10.976	3.313	0.	5.	5.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	0.	15.	50.	0.	534.615	23.122	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	42 ##	5.	4.405	20.	0.	16.1	4.013	0.	0.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	0.	1.429	5.	0.	5.495	2.344	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	42 ##	5.	6.333	30.	0.	44.179	6.647	0.	5.	6.25	10.7
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	42	68.	170.262	1410.	5.	86007.808	293.271	5.	30.	112.5	670.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	42	35.5	50.762	210.	5.	3110.381	55.771	5.	5.	72.5	151.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	42 ##	5.	4.643	10.	0.	10.235	3.199	0.	3.75	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	39	62.	67.974	126.	37.	398.289	19.957	51.	55.	72.	102.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	42 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	0.	14.286	50.	0.	549.451	23.44	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	42	0.05	0.123	0.95	0.01	0.038	0.194	0.02	0.03	0.09	0.384
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	36	2.5	9.361	89.	0.	319.894	17.886	1.	2.	6.	40.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	42 ##	50.	71.429	100.	50.	627.178	25.044	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	32	11.55	11.147	13.5	0.2	4.523	2.127	10.39	10.925	11.9	12.24
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	25	7.	8.104	37.	0.	63.02	7.939	0.36	3.	11.	18.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	32	10.	15.672	101.	2.5	410.22	20.254	2.5	5.	15.	33.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	32	128.5	132.156	172.	109.	239.943	15.49	115.	120.	140.75	159.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	32	0.	0.344	1.	0.	0.233	0.483	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	32	9.	8.347	10.8	2.	5.857	2.42	4.05	8.5	10.	10.67
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	31	7.8	7.81	8.1	7.5	0.026	0.162	7.52	7.7	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	31	7.8	7.779	8.1	7.5	0.027	0.165	7.52	7.7	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	31	0.016	0.017	0.032	0.008	0.	0.007	0.01	0.013	0.02	0.03
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	32	51.	52.438	92.	37.	83.931	9.161	44.3	47.	56.75	59.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	32 ##	0.05	0.064	0.5	0.05	0.006	0.08	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	32	2.5	12.881	138.	0.	765.085	27.66	0.5	1.	9.	44.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	32 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	32	0.67	0.747	2.7	0.025	0.371	0.609	0.15	0.205	1.175	1.47
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	32 ##	0.05	0.07	0.29	0.	0.005	0.072	0.013	0.05	0.05	0.233
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	32	59.	61.594	110.	49.	125.346	11.196	52.	55.	65.75	71.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	32	20.05	20.109	26.7	3.8	15.013	3.875	17.07	18.55	22.4	23.94
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	32	2.	2.031	3.1	1.6	0.074	0.272	1.73	1.9	2.1	2.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	32	0.79	1.058	5.6	0.4	0.856	0.925	0.606	0.7	0.99	1.71
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	32	0.725	0.79	1.7	0.5	0.076	0.276	0.579	0.603	0.808	1.25
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	32	1.	1.675	9.	0.7	2.281	1.51	0.8	0.925	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	32	7.15	7.675	13.	6.3	1.832	1.353	6.63	6.9	8.075	8.88
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	31 ##	0.1	0.111	1.	0.05	0.029	0.17	0.05	0.05	0.1	0.18
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	10.	13.778	29.	5.	57.194	7.563	5.	10.	20.	29.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31 ##	5.	7.806	32.	0.	71.161	8.436	0.	5.	5.	28.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	4.375	5.	0.	3.125	1.768	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	32 ##	5.	4.688	20.	0.	16.028	4.004	0.	1.25	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	32 ##	5.	3.438	5.	0.	5.544	2.355	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	32	20.	43.109	160.	5.	2276.802	47.716	5.	10.	68.25	130.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	32 ##	50.	41.875	70.	0.	286.694	16.932	10.	35.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	31 ##	5.	14.065	86.	0.	458.796	21.42	1.	5.	10.	52.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	31 ##	5.	4.194	10.	0.	8.495	2.915	0.	0.	5.	9.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	50.	27.692	50.	0.	635.897	25.217	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	32 ##	5.	4.219	10.	0.	8.241	2.871	0.	1.25	5.	8.5
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	5.	6.154	40.	0.	113.141	10.637	0.	0.	5.	28.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	32 ##	5.	8.969	50.	0.	110.805	10.526	0.	5.	10.	21.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	32	75.	143.563	860.	5.	34779.673	186.493	11.5	40.	182.25	461.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	32	45.	63.719	230.	5.	4841.047	69.578	5.	5.	101.25	197.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	31 ##	5.	5.323	40.	0.	48.226	6.944	0.	5.	5.	9.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	32	65.	73.406	298.	53.	1832.184	42.804	56.3	60.	70.5	79.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	50.	26.923	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	32	0.05	0.103	0.51	0.005	0.015	0.124	0.013	0.03	0.13	0.35
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	29	4.	16.621	200.	1.	1428.53	37.796	2.	2.5	13.5	30.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	31 ##	50.	66.129	100.	50.	564.516	23.76	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	41	13.2	13.112	15.8	10.7	1.278	1.131	11.7	12.4	13.65	14.86
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	35	4.	4.486	15.	0.	11.184	3.344	0.84	2.	6.	9.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	41	8.	10.171	37.	3.	56.045	7.486	5.	5.	11.	21.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	41	130.	133.098	178.	104.	266.49	16.325	112.6	121.5	141.	159.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	41	9.2	9.02	10.5	6.4	0.989	0.994	7.44	8.5	9.9	10.16
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	41	7.9	7.9	8.5	7.	0.069	0.262	7.6	7.8	8.	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	41	7.9	7.805	8.5	7.	0.078	0.279	7.6	7.8	8.	8.2
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	41	0.013	0.016	0.1	0.003	0.	0.015	0.006	0.01	0.016	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	41	55.	56.61	83.	38.	84.144	9.173	47.	50.	63.	70.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	41	2.	3.244	14.	0.	10.022	3.166	0.12	1.	4.5	8.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	41 ##	0.01	0.088	0.99	0.01	0.062	0.25	0.01	0.01	0.01	0.362
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	41	0.67	0.65	2.	0.025	0.229	0.479	0.132	0.19	0.935	1.44
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	41 ##	0.05	0.113	0.66	0.	0.026	0.162	0.006	0.05	0.055	0.398

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	41	64.	65.268	97.	53.	90.751	9.526	55.2	58.5	70.	79.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	41	21.9	22.427	34.2	18.1	11.434	3.381	19.02	20.	24.15	27.28
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	41	2.2	2.217	3.	1.6	0.116	0.341	1.9	2.	2.4	2.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	41	0.8	0.895	3.2	0.53	0.169	0.411	0.634	0.715	0.965	1.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	41	0.73	0.83	5.	0.5	0.46	0.678	0.522	0.64	0.85	0.896
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	41	1.	1.846	28.	0.7	18.502	4.301	0.8	0.9	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	41	6.8	7.722	39.	3.1	26.241	5.123	5.92	6.35	7.65	8.96
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	41 ##	0.05	0.068	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	19.889	45.	5.	201.361	14.19	5.	7.5	30.	45.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	41 ##	5.	9.951	50.	0.	194.748	13.955	0.2	5.	5.	38.4
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	3.571	5.	0.	5.952	2.44	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	41 ##	5.	4.61	10.	0.	5.344	2.312	0.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	41 ##	5.	5.366	30.	0.	22.988	4.795	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	41	12.	16.805	80.	5.	200.811	14.171	5.	7.5	20.	34.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	41 ##	50.	39.463	80.	0.	364.455	19.091	2.8	28.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	41 ##	5.	4.951	20.	0.	15.348	3.918	0.	5.	5.	10.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	41 ##	5.	4.073	13.	0.	7.07	2.659	0.	2.	5.	5.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	5.	22.778	50.	0.	669.444	25.874	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	40 ##	5.	5.075	20.	0.	12.174	3.489	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	3.333	10.	0.	12.5	3.536	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	41 ##	5.	21.366	439.	0.	4605.238	67.862	1.	5.	20.	29.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	41	60.	74.732	870.	5.	17980.701	134.092	5.	18.	80.	118.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	41	20.	29.073	110.	5.	859.77	29.322	5.	5.	45.5	79.6
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	41 ##	5.	3.89	11.	0.	5.794	2.407	0.	1.75	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	41	66.	68.805	108.	56.	109.361	10.458	59.	61.	75.5	83.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	41	0.04	0.042	0.1	0.005	0.001	0.024	0.02	0.03	0.05	0.08
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	37	3.	3.784	13.	0.	9.396	3.065	1.	2.	4.	10.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	41 ##	50.	65.854	100.	50.	554.878	23.556	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0032

NPS Station ID: CUGA0032
LAT/LON: 36.598142/ -83.668949
Agency: 11NPSWRD
Date Created: 09/20/97
Location: GAP CREEK: TRIBUTARY (US 58)
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_GC4
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON A TRIBUTARY WHICH RECEIVES RUNOFF FROM U.S. 58; UPSTREAM FROM ITS CONFLUENCE WITH GAP CREEK AND NEXT TO THE RAILROAD. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	114	14.6	14.269	21.6	5.8	17.073	4.132	8.7	10.7	18.05	19.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	109	0.4	1.092	39.	0.	15.008	3.874	0.09	0.2	0.8	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	115	15.	63.439	1650.	0.5	44002.075	209.767	5.	8.	31.	51.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	114	350.5	344.535	621.	129.	14646.393	121.022	160.	247.	431.	515.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	115	0.	0.104	1.	0.	0.094	0.307	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	114	8.5	8.67	12.4	5.8	1.839	1.356	7.	7.9	9.425	10.7
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	91	8.	7.967	8.4	7.3	0.036	0.19	7.8	7.9	8.1	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	91	8.	7.921	8.4	7.3	0.038	0.196	7.8	7.9	8.1	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	91	0.01	0.012	0.05	0.004	0.	0.007	0.006	0.008	0.013	0.016
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	114	7.8	7.726	8.4	6.5	0.074	0.272	7.4	7.6	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	114	7.8	7.61	8.4	6.5	0.088	0.296	7.4	7.6	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	114	0.016	0.025	0.316	0.004	0.001	0.033	0.01	0.013	0.025	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	115	140.	136.643	210.	28.	1580.161	39.751	81.	100.	172.	181.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	115 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	91	85.	82.099	128.	0.	673.846	25.959	48.2	61.	105.	110.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	115	4.	49.503	3897.	0.	132804.517	364.424	0.36	2.	7.	33.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-06/14/93	67 ##	0.01	0.522	5.	0.	1.338	1.157	0.	0.01	0.3	3.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	114 ##	0.01	0.014	0.35	0.01	0.001	0.033	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	115	0.3	0.595	4.3	0.	0.533	0.73	0.006	0.1	0.83	1.616
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	115 ##	0.05	0.234	2.	0.	0.168	0.41	0.	0.04	0.26	0.812
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-08/12/96	12	2.45	7.867	25.6	0.	105.592	10.276	0.	0.125	19.775	25.12
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	115	170.	170.417	270.	45.	2480.701	49.807	106.4	139.	210.	226.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	115	50.	48.873	80.1	12.7	175.425	13.245	31.12	41.1	59.	64.18
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	115	11.	11.463	22.	0.1	20.164	4.49	6.1	8.7	15.	17.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	115	7.4	9.111	55.	1.91	41.304	6.427	4.324	6.36	10.	14.866
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	115	2.13	2.362	8.1	0.05	1.194	1.093	1.5	1.8	2.61	3.344
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	115	11.	14.365	140.	2.	224.901	14.997	5.6	9.	14.	25.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	115	32.7	34.021	98.	0.05	196.012	14.	19.16	26.	39.	50.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	115 ##	0.1	0.139	0.73	0.05	0.024	0.156	0.05	0.05	0.1	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	16 ##	35.	51.25	250.	0.	6528.333	80.798	0.	0.	50.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	20	45.	49.25	140.	0.	1016.618	31.884	6.5	30.	67.5	89.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	115	13.	31.478	260.	0.	1901.585	43.607	5.	5.	30.	100.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	19 ##	5.	3.421	10.	0.	14.035	3.746	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	115 ##	5.	7.009	70.	0.	70.044	8.369	0.	5.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	92 ##	5.	16.076	120.	0.	581.148	24.107	0.	5.	20.	50.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	115 ##	5.	5.522	50.	0.	53.673	7.326	0.	0.	5.	12.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	115	40.	58.522	380.	0.	4754.287	68.951	5.	20.	70.	110.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	115	50.	58.304	230.	0.	2053.161	45.312	20.	30.	60.	114.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	115	20.	44.783	1480.	5.	19614.382	140.051	10.	18.	30.	70.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	115	20.	20.722	90.	5.	247.08	15.719	5.	10.	20.	40.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	37 ##	0.	10.27	50.	0.	277.703	16.664	0.	0.	20.	42.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	114 ##	5.	8.746	40.	0.	63.147	7.947	1.	5.	10.	20.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	35 ##	0.	67.057	210.	0.	5941.35	77.08	0.	0.	140.	182.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	37 ##	0.	7.162	50.	0.	157.695	12.558	0.	0.	10.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	115	10.	21.243	960.	0.	7987.73	89.374	0.	5.	20.	32.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	115	147.	420.1	9100.	5.	1624041.624	1274.379	5.	40.	230.	584.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	115	60.	88.113	540.	5.	10699.592	103.439	5.	5.	123.	200.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-10/19/92	34 ##	0.	4.706	50.	0.	207.487	14.404	0.	0.	0.	30.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-10/19/92	34 ##	0.	67.353	350.	0.	9347.326	96.682	0.	0.	120.	235.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	92	2900.	3127.239	20000.	1100.	3451124.558	1857.72	2265.	2612.5	3300.	3742.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	115 ##	5.	10.87	160.	0.	321.342	17.926	0.	5.	10.	28.8
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	109	197.	197.44	388.	71.	3548.86	59.572	127.	160.5	232.	281.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	115 ##	0.15	0.22	8.	0.15	0.536	0.732	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	36 ##	0.	13.75	100.	0.	607.679	24.651	0.	0.	32.5	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	115	0.13	0.338	6.43	0.005	0.761	0.872	0.066	0.08	0.19	0.45
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	111	5.	18.937	200.	0.	2057.46	45.359	2.	3.	9.	29.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	115 ##	100.	74.522	100.	10.	693.41	26.333	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0032

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	114	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	26	0	0.00
00403	PH, LAB	Fresh Chronic	9.	91	0	0.00	32	0	0.00	19	0	0.00	14	0	0.00	26	0	0.00
		Other-Lo Lim.	6.5	91	0	0.00	32	0	0.00	19	0	0.00	14	0	0.00	26	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	114	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	26	0	0.00
		Other-Lo Lim.	6.5	114	1	0.01	42	1	0.02	27	0	0.00	19	0	0.00	26	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	114	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	26	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
		Drinking Water	250.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	16	0	0.00	8	0	0.00	2	0	0.00	2	0	0.00	4	0	0.00
		Drinking Water	50.	9 &	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	20	0	0.00	10	0	0.00	2	0	0.00	4	0	0.00	4	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12 &	3	0.25	6	2	0.33	2	1	0.50	1	0	0.00	3	0	0.00
		Drinking Water	5.	12 &	3	0.25	6	2	0.33	2	1	0.50	1	0	0.00	3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	113 &	6	0.05	40	2	0.05	27	2	0.07	19	0	0.00	27	2	0.07
		Drinking Water	1300.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0032

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	115	17	0.15	42	9	0.21	27	1	0.04	19	3	0.16	27	4	0.15
		Drinking Water	15.	61 &	56	0.92	21	20	0.95	16	15	0.94	9	7	0.78	15	14	0.93
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	114	0	0.00	42	0	0.00	27	0	0.00	18	0	0.00	27	0	0.00
		Drinking Water	100.	114	0	0.00	42	0	0.00	27	0	0.00	18	0	0.00	27	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	115	1	0.01	42	0	0.00	27	1	0.04	19	0	0.00	27	0	0.00
		Drinking Water	5000.	115	0	0.00	42	0	0.00	27	0	0.00	19	0	0.00	27	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	26 &	0	0.00	10	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
		Drinking Water	2.	26 &	0	0.00	10	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	111	9	0.08	42	2	0.05	25	4	0.16	19	2	0.11	25	1	0.04

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	15	17.3	16.16	20.	9.2	13.23	3.637	10.4	12.	19.2	19.76
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	15	0.2	0.505	3.	0.	0.71	0.843	0.	0.09	0.4	2.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	15	19.	18.8	40.	8.	88.457	9.405	8.6	11.	24.	36.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	15	381.	366.333	450.	233.	4781.952	69.152	245.6	321.	428.	441.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	15	0.	0.067	1.	0.	0.067	0.258	0.	0.	0.	0.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	15	8.7	9.053	10.4	8.2	0.607	0.779	8.26	8.4	10.1	10.28
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	15	7.8	7.793	7.9	7.6	0.008	0.088	7.66	7.7	7.9	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	15	7.8	7.785	7.9	7.6	0.008	0.089	7.66	7.7	7.9	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	15	0.016	0.016	0.025	0.013	0.	0.004	0.013	0.013	0.02	0.022
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	15	157.	150.333	182.	81.	672.095	25.925	109.8	137.	172.	179.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	15 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	15	88.	85.267	111.	0.	808.495	28.434	29.4	80.	105.	109.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	15	2.	2.467	8.	0.	5.267	2.295	0.	1.	4.	6.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	15 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	15	0.1	0.087	0.3	0.	0.008	0.092	0.	0.	0.1	0.24
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	15	0.05	0.207	0.65	0.	0.05	0.224	0.	0.01	0.4	0.56
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	15	180.	183.6	224.	104.	1048.4	32.379	134.	164.	213.	221.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	15	49.5	50.587	59.6	28.9	66.937	8.182	36.34	46.9	56.9	59.54
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	15	13.8	13.733	18.1	6.3	12.22	3.496	6.96	12.3	16.9	17.56
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	15	8.51	8.783	13.13	5.52	4.948	2.224	5.67	7.06	10.99	12.062
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	15	2.16	2.153	2.87	1.34	0.139	0.373	1.598	1.9	2.3	2.78
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	15	12.	12.8	19.	4.	13.314	3.649	7.	11.	16.	17.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	15	34.	32.567	41.	19.4	30.221	5.497	23.48	30.	35.8	40.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	15 ##	0.1	0.223	0.72	0.1	0.047	0.217	0.1	0.1	0.29	0.708
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	15	30.	28.667	60.	0.	212.381	14.573	6.	20.	30.	54.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	15	10.	8.	10.	0.	17.143	4.14	0.	10.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	15	10.	10.667	50.	0.	192.381	13.87	0.	0.	10.	38.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	15 ##	0.	3.667	25.	0.	51.667	7.188	0.	0.	10.	16.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	15	60.	60.	130.	30.	557.143	23.604	30.	50.	60.	100.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	15	50.	61.333	210.	0.	2640.952	51.39	12.	30.	70.	156.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	15	20.	22.	30.	20.	17.143	4.14	20.	20.	20.	30.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	15	20.	17.333	30.	10.	35.238	5.936	10.	10.	20.	24.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	15	10.	11.333	20.	0.	26.667	5.164	6.	10.	10.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	15	10.	9.333	30.	0.	78.095	8.837	0.	0.	10.	24.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	15	160.	172.667	360.	100.	4963.81	70.454	106.	130.	200.	312.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	15	110.	103.333	200.	40.	1866.667	43.205	46.	70.	120.	182.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	15	2980.	3045.333	3760.	1940.	212126.667	460.572	2246.	2870.	3400.	3676.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	15	20.	30.	160.	0.	1585.714	39.821	0.	10.	40.	94.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	15	199.	198.2	239.	124.	908.886	30.148	146.8	182.	222.	234.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	15 ##	0.15	0.167	0.25	0.15	0.001	0.036	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	15	0.11	0.135	0.27	0.07	0.003	0.057	0.076	0.11	0.15	0.264
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	15	3.	3.867	10.	0.	8.41	2.9	0.	2.	5.	9.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	15 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	30	14.8	13.673	20.6	5.8	17.799	4.219	7.38	9.	17.05	18.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	30	0.4	2.063	39.	0.	51.269	7.16	0.	0.1	1.	1.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	31	34.	192.935	1650.	8.	143047.129	378.216	14.2	17.	83.	760.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	30	280.5	288.2	435.	138.	7519.545	86.715	148.3	227.75	365.25	400.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	31	0.	0.161	1.	0.	0.14	0.374	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	30	9.35	9.513	12.4	6.1	2.542	1.594	7.14	8.525	10.825	11.38
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	22	8.1	8.014	8.3	7.4	0.041	0.203	7.73	7.9	8.125	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	22	8.1	7.958	8.3	7.4	0.045	0.211	7.73	7.9	8.125	8.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	22	0.008	0.011	0.04	0.005	0.	0.007	0.006	0.008	0.013	0.019
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	30	7.65	7.673	8.4	7.2	0.062	0.249	7.4	7.5	7.8	7.99
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	30	7.647	7.613	8.4	7.2	0.066	0.257	7.4	7.5	7.8	7.99
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	30	0.023	0.024	0.063	0.004	0.	0.013	0.01	0.016	0.032	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	31	123.	124.613	184.	28.	2448.712	49.484	51.2	89.	177.	181.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	31	75.	76.065	112.	17.	908.996	30.15	31.6	54.	108.	110.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	31	6.	152.265	3897.	0.	486019.561	697.151	0.08	2.	27.	155.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	31 ##	0.01	0.021	0.35	0.01	0.004	0.061	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	31	0.1	0.292	2.61	0.	0.316	0.562	0.	0.06	0.22	0.798
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	31	0.31	0.571	2.	0.	0.369	0.607	0.004	0.1	1.01	1.626
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31	136.	147.839	269.	45.	3137.74	56.016	60.	113.	202.	218.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	31	42.3	42.252	80.1	12.7	250.793	15.836	16.92	31.4	55.7	59.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	31	8.8	9.977	17.4	2.7	19.022	4.361	3.6	6.9	14.7	16.42
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	31	7.21	8.328	30.05	3.31	23.172	4.814	4.178	6.56	8.68	14.216
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	31	2.43	2.67	6.89	1.5	1.539	1.24	1.588	1.71	2.92	4.674
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	31	10.	10.29	22.	3.	17.08	4.133	4.2	8.	12.	15.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	31	29.3	31.026	80.	11.3	163.425	12.784	16.62	23.5	37.1	44.72
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	31 ##	0.1	0.176	0.69	0.1	0.026	0.162	0.1	0.1	0.2	0.484
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31	50.	68.71	260.	0.	4031.613	63.495	10.	20.	110.	160.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	31	10.	10.645	70.	0.	187.903	13.708	0.	0.	15.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	31	20.	29.355	120.	0.	1132.903	33.659	0.	0.	40.	88.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	31 ##	0.	6.129	30.	0.	71.183	8.437	0.	0.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	31	80.	105.161	380.	0.	8512.473	92.263	30.	50.	110.	262.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	31	60.	78.387	230.	0.	4733.978	68.804	12.	20.	110.	218.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	31	30.	93.871	1480.	10.	68344.516	261.428	10.	20.	70.	130.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	31	20.	30.645	90.	10.	412.903	20.32	10.	20.	40.	74.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	30	10.	13.	40.	0.	138.966	11.788	0.	0.	20.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	31	10.	44.677	960.	0.	29084.892	170.543	0.	0.	20.	38.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	31	240.	1160.645	9100.	60.	5258986.237	2293.248	116.	170.	590.	5998.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	31	140.	183.871	540.	40.	16644.516	129.014	64.	100.	230.	410.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	31	2700.	2703.871	3500.	1100.	285677.849	534.488	1958.	2400.	3100.	3380.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	31	10.	8.065	30.	0.	89.462	9.458	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	31	164.	170.258	327.	71.	3598.065	59.984	76.6	131.	223.	235.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	31	0.19	0.83	6.43	0.02	2.447	1.564	0.112	0.15	0.33	3.686
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	30	7.	42.433	200.	2.	5304.737	72.834	3.	4.	16.5	199.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	31 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	27	14.3	14.359	21.4	7.2	16.023	4.003	8.3	11.5	18.2	19.54
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	26	0.4	0.698	5.	0.06	0.94	0.969	0.17	0.2	0.8	1.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	27	19.	20.741	54.	0.5	230.18	15.172	4.1	8.	31.	45.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	27	339.	322.444	537.	137.	12464.949	111.647	141.	216.	412.	447.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	27	0.	0.111	1.	0.	0.103	0.32	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	27	8.3	8.526	11.4	6.8	1.378	1.174	7.22	7.6	9.	10.66
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	27	8.	8.037	8.4	7.3	0.048	0.219	7.78	8.	8.1	8.32
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	27	8.	7.97	8.4	7.3	0.052	0.229	7.78	8.	8.1	8.32
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	27	0.01	0.011	0.05	0.004	0.	0.009	0.005	0.008	0.01	0.017
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	27	7.8	7.774	8.3	6.8	0.112	0.335	7.38	7.5	7.9	8.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	27	7.8	7.624	8.3	6.8	0.135	0.368	7.38	7.5	7.9	8.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	27	0.016	0.024	0.158	0.005	0.001	0.029	0.005	0.013	0.032	0.042
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	27	143.	142.778	210.	79.	1002.41	31.661	93.8	126.	164.	179.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	26	86.5	86.077	128.	48.	360.554	18.988	56.9	76.	99.25	106.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	27	3.	4.641	38.	0.	55.51	7.451	0.08	1.	4.	9.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	27 ##	0.01	0.016	0.09	0.01	0.	0.02	0.01	0.01	0.01	0.024
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	27	0.3	0.431	2.59	0.	0.267	0.517	0.066	0.15	0.55	0.83
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	27 ##	0.025	0.148	0.94	0.	0.086	0.293	0.	0.01	0.07	0.839
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27	176.	174.333	266.	88.	1602.846	40.036	115.6	146.	211.	219.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	27	52.2	51.496	70.3	27.	107.411	10.364	37.28	43.9	60.8	64.14
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	27	10.5	10.574	16.	0.1	14.83	3.851	4.88	8.8	12.8	16.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	27	6.36	6.088	10.	1.91	3.827	1.956	2.752	5.4	7.2	8.606
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	27	2.16	2.505	8.1	0.05	2.473	1.573	1.01	1.81	3.02	4.36
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	27	10.	8.815	14.	2.	9.926	3.151	3.	7.	11.	12.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	27	32.5	34.089	63.	12.5	124.476	11.157	20.2	29.9	38.1	53.08
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	27 ##	0.1	0.155	0.73	0.05	0.03	0.173	0.05	0.05	0.2	0.384
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	27	10.	26.185	110.	5.	964.311	31.053	5.	8.	29.	99.2
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	27 ##	5.	5.407	40.	0.	55.558	7.454	0.	2.	5.	10.2
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	27 ##	5.	11.444	70.	0.	287.487	16.955	0.	5.	10.	42.8
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	27 ##	5.	3.704	20.	0.	18.447	4.295	0.	0.	5.	6.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	27	30.	45.407	290.	5.	2874.405	53.613	10.6	20.	50.	79.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	27	30.	46.481	170.	10.	1375.259	37.084	24.	25.	60.	104.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	27	25.	28.222	70.	5.	396.487	19.912	5.	10.	40.	62.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	27	20.	21.556	70.	5.	317.487	17.818	5.	10.	30.	60.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	27 ##	5.	8.037	30.	0.	58.114	7.623	1.6	5.	10.	22.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	27	10.	13.889	57.	0.	226.564	15.052	0.	5.	20.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	27	140.	206.481	1700.	5.	114799.644	338.821	5.	5.	230.	506.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	27	67.	67.852	200.	5.	4647.516	68.173	5.	5.	120.	174.2
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	27	2930.	3618.741	20000.	2300.	10892527.43	3300.383	2480.	2700.	3200.	3804.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	27 ##	5.	11.852	50.	0.	174.131	13.196	0.	5.	20.	36.8
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	21	192.	204.857	319.	132.	2377.129	48.756	142.2	175.5	235.5	288.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	27	0.14	0.186	1.11	0.05	0.039	0.198	0.07	0.09	0.2	0.29
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	27	4.	9.778	80.	2.	244.179	15.626	2.8	4.	7.	26.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	27 ##	50.	69.259	100.	10.	891.738	29.862	42.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	19	13.5	14.332	21.6	8.9	17.223	4.15	9.4	10.3	18.2	19.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	17	0.2	0.726	3.	0.05	0.736	0.858	0.082	0.15	1.	2.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	19	10.	12.368	35.	5.	62.135	7.883	5.	10.	15.	30.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	19	293.	323.474	550.	129.	21947.152	148.146	132.	215.	475.	523.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	19	0.	0.053	1.	0.	0.053	0.229	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	19	7.8	7.695	8.6	5.8	0.708	0.842	6.1	7.3	8.5	8.6
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	19	7.9	7.911	8.1	7.8	0.011	0.105	7.8	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	19	7.9	7.899	8.1	7.8	0.011	0.105	7.8	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	19	0.013	0.013	0.016	0.008	0.	0.003	0.008	0.01	0.016	0.016
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	19	7.7	7.695	8.	6.5	0.108	0.329	7.5	7.6	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	19	7.7	7.466	8.	6.5	0.163	0.404	7.5	7.6	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	19	0.02	0.034	0.316	0.01	0.005	0.069	0.01	0.013	0.025	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	19	130.	137.737	190.	40.	1663.76	40.789	98.	110.	180.	190.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	19 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	19	79.	84.	116.	24.	626.889	25.038	60.	67.	110.	116.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	19	5.	24.368	302.	1.	4767.579	69.048	2.	3.	9.	73.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	18 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	19	0.49	0.861	2.7	0.025	0.477	0.691	0.23	0.35	1.33	1.76

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	19 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	19	160.	180.684	270.	53.	3562.228	59.684	120.	140.	240.	260.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	19	45.9	50.937	71.1	17.	201.792	14.205	37.9	43.	64.7	69.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	19	10.	12.821	22.	2.4	34.7	5.891	6.7	8.7	19.	22.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	19	7.3	7.237	13.	2.7	6.999	2.646	2.8	5.1	8.5	11.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	19	2.	2.026	2.9	1.2	0.186	0.432	1.4	1.8	2.2	2.7
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	19	11.	11.105	20.	4.	17.211	4.149	6.	8.	14.	19.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	19	31.	34.271	98.	0.05	470.301	21.686	0.1	25.	45.	61.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	19 ##	0.05	0.097	0.3	0.05	0.009	0.096	0.05	0.05	0.05	0.3
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	19	10.	10.789	30.	5.	56.287	7.502	5.	5.	20.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	19 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	19 ##	5.	5.263	10.	5.	1.316	1.147	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	19 ##	5.	6.842	30.	5.	33.918	5.824	5.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	19	20.	44.211	270.	5.	3611.842	60.099	5.	20.	40.	100.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	19 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	19	20.	32.105	270.	5.	3656.433	60.468	5.	10.	20.	90.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	19	10.	13.158	20.	5.	47.807	6.914	5.	5.	20.	20.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	19 ##	5.	5.526	10.	5.	2.485	1.577	5.	5.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	19 ##	5.	8.158	30.	5.	42.251	6.5	5.	5.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	19	30.	108.947	810.	5.	36023.83	189.799	5.	5.	180.	240.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	19 ##	5.	22.632	290.	5.	4223.246	64.987	5.	5.	10.	20.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	19	3000.	3184.211	4300.	2200.	392514.62	626.51	2300.	2700.	3800.	4000.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	19 ##	5.	6.053	20.	5.	12.719	3.566	5.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	19	187.	200.737	302.	78.	3612.094	60.101	131.	171.	255.	291.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	19 ##	0.15	0.563	8.	0.15	3.243	1.801	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	19	0.08	0.193	1.2	0.05	0.09	0.3	0.06	0.07	0.14	0.84
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	19	4.	19.053	200.	3.	2200.053	46.905	3.	3.	8.	77.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	19 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	3	10.9	10.8	10.9	10.6	0.03	0.173	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	3	5.	20.	50.	5.	675.	25.981	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	3	432.	400.333	555.	214.	29822.333	172.691	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	3	9.4	9.1	9.5	8.4	0.37	0.608	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	3	7.9	7.9	8.1	7.7	0.04	0.2	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	3	7.9	7.87	8.1	7.7	0.041	0.203	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	3	0.013	0.013	0.02	0.008	0.	0.006	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	3	7.7	7.767	8.	7.6	0.043	0.208	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	3	7.7	7.736	8.	7.6	0.045	0.211	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	3	0.02	0.018	0.025	0.01	0.	0.008	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	3	168.	138.667	170.	78.	2761.333	52.548	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	3	2.	33.	95.	2.	2883.	53.694	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	3 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	3	1.3	2.233	4.3	1.1	3.213	1.793	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	3	230.	196.667	250.	110.	5733.333	75.719	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	3	64.6	55.333	69.6	31.8	421.613	20.533	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	3	17.	13.767	18.	6.3	42.063	6.486	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	3	13.	11.533	14.	7.6	11.853	3.443	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	3	2.7	2.467	3.	1.7	0.463	0.681	**	**	**	**

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Annual Analysis for 1995 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	3	19.	17.667	20.	14.	10.333	3.215	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	3	66.	56.	69.	33.	399.	19.975	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	3	19.	15.333	22.	5.	82.333	9.074	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	3 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	3	17.	15.333	19.	10.	22.333	4.726	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	3	11.	10.333	15.	5.	25.333	5.033	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	3	31.	22.667	32.	5.	234.333	15.308	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	3	13.	15.667	29.	5.	149.333	12.22	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	3	289.	242.333	292.	146.	6962.333	83.441	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	3 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	3	0.07	0.052	0.08	0.005	0.002	0.041	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	3 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

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Annual Analysis for 1996 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	20	13.75	14.085	20.3	7.4	21.043	4.587	7.71	9.775	18.825	20.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	19	0.5	0.989	6.	0.2	2.615	1.617	0.2	0.2	0.8	5.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	20	5.	8.875	40.	2.5	73.997	8.602	5.	5.	10.	19.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	20	484.	454.15	621.	247.	11455.608	107.031	270.5	381.5	528.	597.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	20	0.	0.1	1.	0.	0.095	0.308	0.	0.	0.	0.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	20	8.1	8.175	10.6	6.1	1.509	1.229	6.28	7.025	8.9	10.31
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	20	7.9	7.885	8.2	7.5	0.026	0.16	7.61	7.8	8.	8.09
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	20	7.9	7.855	8.2	7.5	0.026	0.163	7.61	7.8	8.	8.09
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	20	0.013	0.014	0.032	0.006	0.	0.006	0.008	0.01	0.016	0.025
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	20	7.8	7.715	8.1	7.	0.068	0.26	7.31	7.6	7.875	8.08
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	20	7.8	7.624	8.1	7.	0.076	0.276	7.31	7.6	7.875	8.08
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	20	0.016	0.024	0.1	0.008	0.	0.021	0.008	0.013	0.025	0.049
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	20	135.	135.4	200.	76.	1439.726	37.944	82.	100.	170.	189.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	20	6.	12.415	109.	0.5	569.118	23.856	0.82	2.25	12.5	28.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	20 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	20	1.15	1.17	2.2	0.43	0.304	0.551	0.544	0.625	1.55	2.
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	20	190.	176.55	240.	91.	1741.208	41.728	110.	142.5	210.	220.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	20	54.	51.38	70.2	30.7	123.608	11.118	33.31	42.5	58.7	63.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	20	13.	11.63	17.	3.4	12.844	3.584	5.83	8.85	14.	15.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	20	14.	16.065	55.	2.5	125.062	11.183	6.71	9.975	16.75	29.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	20	2.05	2.155	4.9	1.	0.646	0.804	1.32	1.8	2.2	3.06
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	20	27.	31.95	140.	3.	870.997	29.513	9.3	15.5	33.5	70.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	20	38.5	36.13	52.	8.6	140.549	11.855	21.1	26.25	46.	50.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	20 ##	5.	6.65	22.	5.	19.082	4.368	5.	5.	5.	13.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	20 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	20 ##	5.	7.25	50.	5.	101.25	10.062	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	20 ##	5.	22.9	188.	5.	1680.411	40.993	5.	5.	26.75	48.7
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	20 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	20	21.	24.6	89.	5.	294.884	17.172	11.1	14.75	27.75	38.3
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	20	14.	15.5	34.	5.	48.474	6.962	5.4	11.25	19.	26.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	20 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	20	13.	18.65	66.	5.	290.45	17.043	5.	5.	29.5	49.3
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	20	72.5	101.425	437.	21.	9077.928	95.278	24.35	38.25	143.25	203.3
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	20	14.	28.7	156.	5.	1605.484	40.068	5.	6.5	28.75	116.1
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	20 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	20	225.	221.35	388.	87.	4966.871	70.476	102.7	170.	262.75	302.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	20 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	20	0.095	0.116	0.57	0.005	0.015	0.124	0.005	0.038	0.148	0.241
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	19	5.	7.474	41.	1.	79.485	8.915	2.	4.	7.	17.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	20 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	42	18.5	18.017	21.6	12.3	3.929	1.982	14.9	17.	19.2	20.21
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	40	0.2	0.583	5.	0.	1.245	1.116	0.09	0.1	0.375	1.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	42	11.	55.893	1650.	0.5	63725.958	252.44	5.	8.75	24.25	39.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	42	413.5	392.19	557.	170.	9988.451	99.942	237.2	316.5	458.5	520.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	42	0.	0.119	1.	0.	0.107	0.328	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	42	8.	7.998	10.	5.8	0.827	0.909	7.	7.3	8.45	9.27
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	42	7.7	7.621	7.9	6.5	0.092	0.304	7.23	7.5	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	42	7.7	7.459	7.9	6.5	0.119	0.346	7.23	7.5	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	42	0.02	0.035	0.316	0.013	0.003	0.052	0.013	0.016	0.032	0.059
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	42	172.	157.143	200.	81.	1061.491	32.581	96.6	140.	180.	190.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	42 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	42	3.	100.214	3897.	0.	360491.997	600.41	0.1	0.95	5.25	25.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	42 ##	0.01	0.022	0.35	0.01	0.003	0.054	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	42	0.24	0.452	2.61	0.	0.407	0.638	0.	0.07	0.488	1.335
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	42 ##	0.05	0.214	1.64	0.	0.149	0.386	0.01	0.025	0.175	0.932
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	42	201.	193.333	270.	91.	2003.691	44.763	124.5	166.5	219.5	257.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	42	55.35	53.988	71.1	30.7	98.682	9.934	38.81	49.25	60.25	67.53
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	42	14.9	13.793	22.	3.4	22.785	4.773	5.95	10.275	16.925	19.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	42	7.35	7.721	16.	1.91	9.641	3.105	3.37	5.708	9.158	12.521
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	42	2.2	2.483	8.1	0.65	1.962	1.401	1.388	1.875	2.54	3.626
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	42	10.5	11.5	32.	2.	38.451	6.201	4.	7.	14.	19.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	42	36.45	36.087	98.	0.05	247.095	15.719	18.07	29.275	43.775	51.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	42 ##	0.1	0.161	0.7	0.05	0.02	0.143	0.05	0.05	0.263	0.3
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	10	60.	56.9	90.	29.	340.544	18.454	29.1	45.	70.	88.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	42	20.	30.5	150.	5.	1116.89	33.42	5.	10.	30.	94.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	10 ##	5.	4.	10.	0.	15.556	3.944	0.	0.	6.25	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	42 ##	5.	5.833	20.	0.	20.63	4.542	0.	5.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	42 ##	5.	6.429	50.	0.	80.836	8.991	0.	0.	5.	18.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	42	30.	49.786	290.	5.	3365.782	58.015	5.	20.	60.	80.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	42 ##	50.	61.19	210.	0.	1758.304	41.932	25.	30.	70.	120.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	42	20.	60.333	1480.	5.	50700.423	225.168	5.	10.	33.75	57.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	42	19.5	18.619	80.	5.	199.168	14.113	5.	10.	20.	38.2
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	16 ##	5.	14.688	50.	0.	294.896	17.173	0.	0.	27.5	43.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	42 ##	5.	8.81	30.	0.	36.353	6.029	5.	5.	10.	20.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	16 ##	5.	12.5	50.	0.	270.	16.432	0.	0.	27.5	43.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	42	10.	13.476	66.	0.	207.036	14.389	0.	5.	20.	33.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	42	100.	370.012	9100.	5.	1978022.079	1406.422	5.	28.375	200.	389.9
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	42	35.	66.619	410.	5.	5966.778	77.245	5.	5.	110.	137.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	42 ##	5.	13.81	160.	0.	693.67	26.338	0.	5.	10.	40.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	39	223.	221.41	319.	99.	2867.985	53.554	137.	198.	266.	291.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	42 ##	0.15	0.156	0.25	0.15	0.001	0.023	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	0.	14.286	50.	0.	549.451	23.44	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	42	0.115	0.315	6.43	0.03	0.966	0.983	0.07	0.08	0.183	0.349
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	42	4.	12.214	200.	0.	1043.197	32.299	2.	3.	7.	18.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	42 ##	50.	70.714	100.	10.	797.038	28.232	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	27	10.9	10.7	15.1	6.8	4.646	2.155	7.56	9.1	12.	14.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	26	0.4	0.627	3.	0.	0.607	0.779	0.	0.175	0.925	1.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	27	17.	110.407	1020.	5.	70620.866	265.746	5.	8.	38.	730.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	27	301.	322.556	555.	137.	14265.564	119.439	143.6	247.	401.	532.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	27	0.	0.111	1.	0.	0.103	0.32	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	27	9.5	9.53	12.3	6.1	2.197	1.482	7.4	8.5	10.5	11.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	27	7.8	7.77	8.4	7.4	0.044	0.209	7.48	7.7	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	27	7.8	7.725	8.4	7.4	0.046	0.214	7.48	7.7	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	27	0.016	0.019	0.04	0.004	0.	0.009	0.01	0.013	0.02	0.033
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	27	120.	119.963	210.	50.	1645.345	40.563	73.6	83.	140.	177.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	27	3.	23.844	236.	0.	2732.023	52.269	0.64	2.	6.	98.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	27 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	27	0.3	0.681	4.3	0.	0.789	0.888	0.08	0.1	1.1	1.608
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	27 ##	0.05	0.155	0.65	0.	0.039	0.196	0.	0.04	0.25	0.59
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27	146.	150.481	250.	59.	2461.336	49.612	83.2	119.	176.	222.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	27	42.9	43.785	70.3	16.6	208.221	14.43	24.84	35.3	52.6	65.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	27	8.8	9.733	18.	0.1	20.632	4.542	3.54	6.8	12.3	16.68
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	27	7.06	9.407	55.	2.2	91.448	9.563	3.998	6.49	9.67	14.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	27	2.16	2.361	4.9	0.05	0.951	0.975	1.516	1.86	2.7	3.814
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	27	10.	15.593	140.	3.	652.558	25.545	3.	8.	14.	22.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	27	30.2	35.404	69.	15.1	206.031	14.354	18.44	26.2	45.	63.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	27 ##	0.1	0.161	0.72	0.05	0.04	0.201	0.05	0.05	0.1	0.674
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	2	35.	35.	40.	30.	50.	7.071	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	27	20.	27.741	130.	0.	893.507	29.892	5.	5.	40.	72.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	2 ##	5.	5.	10.	0.	50.	7.071	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	27 ##	5.	9.259	70.	0.	172.507	13.134	0.	5.	10.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	27 ##	5.	6.296	30.	0.	66.524	8.156	0.	0.	10.	18.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	27	50.	75.444	380.	0.	8862.872	94.143	5.	20.	90.	180.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	27	50.	48.519	210.	10.	1424.644	37.744	20.	25.	60.	72.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	27	20.	40.074	210.	5.	2218.533	47.101	9.	17.	30.	114.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	27	20.	26.37	90.	5.	466.242	21.593	5.	12.	30.	64.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	0.	4.444	30.	0.	102.778	10.138	0.	0.	5.	30.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	27 ##	5.	7.407	30.	0.	48.789	6.985	0.	5.	10.	20.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	0.	3.333	20.	0.	50.	7.071	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	27	10.	44.741	960.	0.	33531.815	183.117	0.	5.	10.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	27	160.	738.37	7360.	5.	3611814.704	1900.477	5.	32.	230.	3532.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	27	60.	108.556	540.	5.	19220.179	138.637	5.	5.	140.	352.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	27 ##	5.	8.333	40.	0.	88.462	9.405	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	24	174.	183.292	388.	73.	4829.433	69.494	100.	141.5	218.5	290.5
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	9 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	27	0.13	0.559	5.04	0.005	1.519	1.233	0.058	0.08	0.21	2.594
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	25	4.	30.68	200.	2.	4010.977	63.332	2.	3.	10.	189.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	27 ##	100.	79.63	100.	50.	626.781	25.036	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	19	10.3	9.695	12.7	5.8	3.448	1.857	7.2	8.1	11.2	12.
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	18	0.95	3.744	39.	0.2	82.431	9.079	0.38	0.575	2.	12.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	19	15.	49.474	541.	5.	14576.152	120.732	5.	5.	35.	83.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	19	259.	292.368	621.	129.	19375.357	139.195	138.	212.	339.	602.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	19	0.	0.211	1.	0.	0.175	0.419	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	19	8.9	9.421	12.4	7.9	1.6	1.265	8.	8.5	10.6	11.
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	19	7.7	7.684	8.	7.3	0.034	0.183	7.4	7.6	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	19	7.7	7.646	8.	7.3	0.035	0.187	7.4	7.6	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	19	0.02	0.023	0.05	0.01	0.	0.01	0.013	0.016	0.025	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	19	100.	101.474	154.	28.	1314.93	36.262	40.	76.	130.	143.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	19 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	19	6.	28.053	302.	0.	4963.164	70.45	1.	2.	9.	105.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	19 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	19	0.87	0.932	2.7	0.04	0.676	0.822	0.07	0.12	1.4	2.
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	19 ##	0.05	0.178	0.94	0.	0.08	0.283	0.01	0.05	0.24	0.94
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	19	140.	132.316	200.	45.	2074.895	45.551	53.	110.	160.	200.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	19	40.4	38.784	57.6	12.7	180.549	13.437	15.5	30.4	48.8	57.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	19	8.9	8.416	13.	2.4	9.213	3.035	2.7	6.9	9.8	13.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	19	7.82	10.783	30.	2.7	57.785	7.602	2.8	6.4	16.	27.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	19	2.	2.018	3.1	1.2	0.25	0.5	1.5	1.6	2.25	2.9
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	19	12.	19.211	74.	4.	281.398	16.775	5.	10.	22.	43.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	19	27.	28.405	47.	11.3	90.607	9.519	16.4	23.3	32.1	46.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	19 ##	0.05	0.074	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	4	25.	21.5	31.	5.	145.667	12.069	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	19	10.	20.	110.	0.	988.889	31.447	5.	5.	10.	100.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	3 ##	5.	3.333	5.	0.	8.333	2.887	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	19 ##	5.	6.316	40.	0.	77.339	8.794	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	19 ##	5.	2.632	5.	0.	6.579	2.565	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	19	50.	72.421	270.	5.	6109.924	78.166	5.	19.	100.	270.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	19 ##	50.	54.211	170.	0.	1370.175	37.016	10.	40.	50.	100.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	19	20.	43.158	270.	5.	3874.14	62.243	10.	14.	40.	130.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	19	17.	21.263	70.	5.	309.427	17.591	9.	10.	20.	60.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	7 ##	0.	14.286	50.	0.	595.238	24.398	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	18 ##	5.	8.056	30.	0.	50.408	7.1	0.	5.	10.	21.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	7 ##	0.	2.143	10.	0.	15.476	3.934	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	19	10.	11.947	40.	0.	127.719	11.301	0.	5.	14.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	19	207.	307.316	2140.	5.	232718.895	482.409	5.	77.	270.	810.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	19	60.	109.316	410.	5.	14780.45	121.575	5.	16.	140.	340.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	19 ##	5.	7.632	20.	0.	39.912	6.318	0.	5.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	19	170.	154.947	262.	71.	2758.053	52.517	75.	123.	191.	228.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	19 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	7 ##	0.	14.286	50.	0.	595.238	24.398	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	19	0.16	0.303	2.03	0.005	0.239	0.489	0.005	0.09	0.25	1.2
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	19	6.	26.316	200.	2.	2619.784	51.184	3.	4.	21.	130.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	19 ##	50.	73.684	100.	50.	657.895	25.649	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	26	15.9	15.265	20.2	8.9	9.126	3.021	11.05	12.75	17.45	19.23
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	25	0.5	0.482	2.	0.	0.161	0.401	0.084	0.2	0.6	0.88
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	27	19.	38.037	494.	5.	8533.729	92.378	5.	10.	31.	54.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	26	353.5	328.5	519.	132.	14361.46	119.839	135.5	230.75	419.	489.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	27	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	26	8.5	8.315	10.9	6.1	1.405	1.185	6.38	7.75	8.9	9.89
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	26	7.8	7.881	8.3	7.4	0.067	0.259	7.57	7.7	8.1	8.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	26	7.8	7.81	8.3	7.4	0.072	0.269	7.57	7.7	8.1	8.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	26	0.016	0.015	0.04	0.005	0.	0.009	0.005	0.008	0.02	0.027
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	27	149.	146.185	184.	91.	732.618	27.067	101.	130.	170.	183.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	27	6.	11.37	167.	0.	976.396	31.247	0.8	4.	7.	10.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	26 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	27	0.39	0.495	2.2	0.	0.305	0.552	0.	0.11	0.58	1.334
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	27 ##	0.05	0.384	2.	0.	0.374	0.612	0.	0.05	0.5	1.63
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	27	177.	181.519	269.	108.	1369.567	37.008	123.4	160.	211.	220.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	27	52.4	53.104	80.1	31.4	118.227	10.873	34.84	45.9	63.1	64.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	27	11.5	11.715	17.	6.7	6.744	2.597	8.52	9.9	13.3	15.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	27	8.33	9.799	30.05	4.7	28.701	5.357	5.02	6.36	12.	15.36
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	27	2.1	2.418	5.13	1.3	0.905	0.951	1.48	1.8	2.92	4.266
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	27	12.	14.185	35.	7.	46.08	6.788	8.	10.	14.	27.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	27	33.	33.378	80.	0.1	168.673	12.987	21.72	27.7	38.1	42.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	27 ##	0.1	0.129	0.73	0.05	0.029	0.169	0.05	0.05	0.1	0.384
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	4	60.	65.	140.	0.	3566.667	59.722	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	27	10.	44.815	260.	5.	4701.311	68.566	5.	5.	50.	164.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	4 ##	0.	1.25	5.	0.	6.25	2.5	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	27 ##	5.	7.074	30.	0.	40.687	6.379	0.	5.	10.	16.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	27 ##	5.	5.37	20.	0.	28.704	5.358	0.	0.	5.	12.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	27	30.	45.407	190.	5.	1704.866	41.29	5.	20.	70.	102.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	27	50.	66.481	230.	0.	3661.798	60.513	28.	40.	50.	222.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	27	20.	26.444	120.	10.	385.41	19.632	17.8	20.	30.	32.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	27	20.	17.963	30.	5.	40.422	6.358	9.	13.	20.	27.6
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	5 ##	0.	1.	5.	0.	5.	2.236	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	27 ##	5.	10.444	40.	0.	130.179	11.41	1.6	5.	10.	32.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	5 ##	0.	4.	20.	0.	80.	8.944	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	27 ##	5.	16.37	70.	0.	317.781	17.826	0.	5.	30.	40.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	27	190.	259.111	1290.	5.	83226.872	288.491	17.	77.	260.	712.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	27	70.	86.185	230.	5.	6539.003	80.864	5.	11.	160.	222.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	27 ##	5.	11.111	50.	0.	170.641	13.063	0.	5.	10.	36.8
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	27	210.	205.296	327.	127.	1937.909	44.022	137.2	183.	236.	249.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	27 ##	0.15	0.441	8.	0.15	2.282	1.511	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	6 ##	30.	32.5	100.	0.	1347.5	36.708	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	27	0.14	0.18	1.16	0.005	0.051	0.225	0.017	0.08	0.16	0.382
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	25	5.	12.88	190.	0.	1368.027	36.987	2.2	4.	7.	10.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	27 ##	100.	75.926	100.	50.	648.148	25.459	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0033

NPS Station ID: CUGA0033
LAT/LON: 36.635865/ -83.669365
Agency: 11NPSWRD
Date Created: 09/20/97
Location: DARK RIDGE CREEK: NEAR SUGAR RUN
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_DR9
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1160
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO NORTH; KENTUCKY 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON DARK RIDGE CREEK NEAR ITS CONFLUENCE WITH SUGAR RUN AT THE PARK BOUNDARY. IT IS LOCATED NORTH OF THE BUS TURN-AROUND AT THE SUGAR RUN PICNIC AREA.
DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848.
TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525.
TEL (970)225-3516.

Parameter Inventory for Station: CUGA0033

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/24/90-08/23/93	50	12.1	12.95	22.2	3.1	23.217	4.818	7.42	8.775	16.575	20.
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/24/90-08/23/93	50	0.065	0.611	13.	0.	4.857	2.204	0.01	0.01	0.225	0.77
00080	COLOR (PLATINUM-COBALT UNITS)	12/24/90-08/23/93	50	31.	39.34	131.	10.	723.249	26.893	11.5	22.5	47.25	74.9
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/24/90-08/23/93	50	68.5	70.42	127.	5.	592.983	24.351	44.2	54.	91.5	102.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/24/90-08/23/93	50	0.	0.14	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/24/90-08/23/93	50	9.1	8.806	11.9	4.1	3.781	1.944	5.91	7.575	10.5	11.19
00403	PH, LAB, STANDARD UNITS SU	04/10/91-08/23/93	39	7.2	7.259	7.8	7.	0.039	0.198	7.	7.1	7.4	7.5
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-08/23/93	39	7.2	7.219	7.8	7.	0.041	0.202	7.	7.1	7.4	7.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-08/23/93	39	0.063	0.06	0.1	0.016	0.001	0.024	0.032	0.04	0.079	0.1
00406	PH, FIELD, STANDARD UNITS SU	12/24/90-08/23/93	50	6.8	6.902	7.8	5.7	0.222	0.471	6.41	6.6	7.325	7.6
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/24/90-08/23/93	50	6.8	6.662	7.8	5.7	0.281	0.53	6.41	6.6	7.325	7.6
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/24/90-08/23/93	50	0.158	0.218	1.995	0.016	0.091	0.302	0.025	0.048	0.251	0.39
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/24/90-08/23/93	50	24.	27.	104.	7.	259.959	16.123	12.2	16.	36.25	43.9
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/24/90-08/23/93	50 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	12/24/90-08/23/93	49	15.	16.163	63.	0.	103.056	10.152	6.	10.	22.5	27.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/24/90-08/23/93	50	4.	10.916	122.	0.	367.626	19.174	1.	2.75	8.75	32.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/24/90-08/10/92	46 ##	0.01	0.465	14.03	0.	4.43	2.105	0.	0.01	0.01	0.815
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/24/90-08/23/93	50 ##	0.01	0.016	0.31	0.01	0.002	0.042	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/24/90-08/23/93	50 ##	0.015	0.164	4.92	0.	0.485	0.697	0.	0.	0.103	0.199

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0033

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/24/90-08/23/93	50	0.038	0.097	0.48	0.	0.015	0.124	0.	0.014	0.158	0.317
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/25/91-06/29/92	6 ##	0.75	0.883	2.8	0.	1.082	1.04	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/24/90-08/23/93	50	28.	31.12	107.	14.	235.781	15.355	17.1	20.	40.25	44.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/24/90-08/23/93	50	8.15	9.044	34.2	3.4	24.776	4.978	4.62	5.6	11.95	13.08
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/24/90-08/23/93	50	1.75	1.912	5.1	1.	0.538	0.733	1.11	1.4	2.45	2.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/24/90-08/23/93	50	2.065	2.232	10.86	0.94	1.781	1.335	1.325	1.77	2.323	2.692
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/24/90-08/23/93	50	1.025	1.178	2.43	0.1	0.221	0.47	0.752	0.847	1.4	1.97
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/24/90-08/23/93	50	3.	3.2	15.	1.	3.388	1.841	2.	3.	3.	4.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/24/90-08/23/93	50	5.5	5.564	14.	0.	4.172	2.043	3.51	4.7	6.3	7.91
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/24/90-08/23/93	50 ##	0.1	0.127	0.9	0.05	0.018	0.135	0.055	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/24/90-06/29/92	7 ##	35.	81.429	250.	0.	13505.952	116.215	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/24/90-06/29/92	9	20.	25.556	60.	0.	352.778	18.782	0.	15.	40.	60.
01020	BORON, DISSOLVED (UG/L AS B)	12/24/90-08/23/93	50 ##	5.	7.59	30.	0.	75.201	8.672	0.	0.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/24/90-06/29/92	9 ##	0.	1.667	10.	0.	12.5	3.536	0.	0.	2.5	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/24/90-08/23/93	50 ##	1.5	4.3	40.	0.	43.561	6.6	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	12/24/90-08/23/93	50 ##	3.5	4.46	20.	0.	30.743	5.545	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	12/24/90-08/23/93	50 ##	0.	2.9	20.	0.	24.582	4.958	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	12/24/90-08/23/93	50	116.	124.4	280.	0.	2519.51	50.195	80.	87.5	142.5	199.
01049	LEAD, DISSOLVED (UG/L AS PB)	12/24/90-08/23/93	50 ##	18.	21.84	150.	0.	698.26	26.425	0.	0.	30.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	12/24/90-08/23/93	50	40.	70.52	350.	10.	5560.459	74.568	20.	27.5	82.5	169.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/24/90-08/23/93	50	32.5	53.64	290.	0.	2675.827	51.728	10.	20.	72.5	129.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/24/90-06/29/92	18 ##	0.	1.944	20.	0.	26.879	5.185	0.	0.	0.	11.
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/24/90-08/23/93	50 ##	0.	2.42	20.	0.	18.942	4.352	0.	0.	5.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/24/90-06/29/92	18 ##	10.	22.222	100.	0.	865.359	29.417	0.	0.	32.5	82.
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/24/90-06/29/92	18 ##	0.	1.111	10.	0.	10.458	3.234	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/24/90-08/23/93	50 ##	5.	5.48	20.	0.	44.581	6.677	0.	0.	10.	19.9
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/24/90-08/23/93	50	130.	183.48	780.	20.	27706.418	166.452	70.	90.	197.5	414.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/24/90-08/23/93	50	60.	68.58	220.	5.	2291.024	47.865	11.	40.	80.	129.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/24/90-06/29/92	18 ##	0.	1.111	10.	0.	10.458	3.234	0.	0.	0.	10.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/24/90-06/29/92	18 ##	5.	15.556	100.	0.	614.379	24.787	0.	0.	22.5	46.
01140	SILICON, DISSOLVED (UG/L AS SI)	12/24/90-08/23/93	50	2605.	2905.86	20000.	1680.	6290090.858	2508.005	1814.	2277.5	2900.	3280.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/24/90-08/23/93	50 ##	0.	2.95	20.	0.	20.737	4.554	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/24/90-08/23/93	47	36.	39.404	137.	22.	328.855	18.134	24.	29.	47.	55.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/24/90-08/23/93	50 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/24/90-06/29/92	17 ##	0.	11.471	100.	0.	677.39	26.027	0.	0.	12.5	48.
74010	IRON, TOTAL (MG/L AS FE)	12/24/90-08/23/93	50	0.22	0.278	0.73	0.09	0.023	0.15	0.14	0.17	0.39	0.534
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/24/90-08/23/93	50	5.5	8.1	44.	1.	60.214	7.76	2.1	4.	10.	17.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/24/90-08/23/93	50 ##	100.	93.	100.	50.	307.143	17.525	50.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0033

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
00403	PH, LAB	Fresh Chronic	9.	39	0	0.00	14	0	0.00	8	0	0.00	4	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	39	0	0.00	14	0	0.00	8	0	0.00	4	0	0.00	13	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	50	10	0.20	14	1	0.07	12	7	0.58	11	0	0.00	13	2	0.15
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
		Drinking Water	250.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	7	0	0.00				3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	50.	5 &	0	0.00				3	0	0.00	1	0	0.00	1	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	9	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	8 &	1	0.13	2	1	0.50	3	0	0.00	1	0	0.00	2	0	0.00
		Drinking Water	5.	8 &	1	0.13	2	1	0.50	3	0	0.00	1	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0033

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	50	1	0.02	14	0	0.00	12	1	0.08	11	0	0.00	13	0	0.00
		Drinking Water	1300.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	50	1	0.02	14	0	0.00	12	0	0.00	11	0	0.00	13	1	0.08
		Drinking Water	15.	44 &	20	0.45	9	7	0.78	11	6	0.55	11	4	0.36	13	3	0.23
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
		Drinking Water	100.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
		Drinking Water	5000.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	13 &	0	0.00				5	0	0.00	7	0	0.00	1	0	0.00
		Drinking Water	2.	13 &	0	0.00				5	0	0.00	7	0	0.00	1	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	50	0	0.00	14	0	0.00	12	0	0.00	11	0	0.00	13	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0034

NPS Station ID: CUGA0034 LAT/LON: 36.597003/ -83.670170 Agency: 11NPSWRD Date Created: 07/12/97
Location: GAP CREEK - 0.25 MILES SOUTH OF IRON FURNACE FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CMRC_GC5
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1300 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON GAP CREEK APPROXIMATELY 0.25 MILE SOUTH OF THE IRON FURNACE AND 300 FEET SOUTH OF THE NORTHERN MOST UNNAMED BRANCH OF GAP CREEK.
THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0034

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	132916.667	1050000.	0.	101447644927.536	318508.469	0.	0.	0.	810000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.98	6.021	0.	5.018	2.24	0.	0.	0.	5.896
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			9.559								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	3470.833	83300.	0.	289120416.667	17003.541	0.	0.	0.	0.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.205	4.921	0.	1.009	1.004	0.	0.	0.	0.
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			1.603								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	34.708	833.	0.	28912.042	170.035	0.	0.	0.	0.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1063.875	10500.	0.	8131302.984	2851.544	0.	0.	0.	7100.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	41666.667	1000000.	0.	41666666666.667	204124.145	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.25	6.	0.	1.5	1.225	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.778								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	54166.667	700000.	0.	33894927536.232	184105.751	0.	0.	0.	300000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.484	5.845	0.	2.692	1.641	0.	0.	0.	2.889
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			3.05								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0034

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	4	0.17	8	0	0.00	6	0	0.00	3	2	0.67	7	2	0.29

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0035

NPS Station ID: CUGA0035 LAT/LON: 36.600281/ -83.670087 Agency: 11NPSWRD Date Created: 09/20/97
Location: GAP CREEK TRIBUTARY WITHIN TOWN OF CUGA FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_TD1
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1300 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON A A SMALL GAP CREEK TRIBUTARY WITHIN THE TOWN OF CUMBERLAND GAP. THE STATION IS LOCATED IN THE AREA OF AN OLD DUMP FOR THE TOWN OF CUMBERLAND GAP. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT: RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 INDICATES WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	178	13.5	14.09	20.9	6.9	9.911	3.148	9.89	12.	16.625	18.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	161	0.08	0.532	12.	0.	2.618	1.618	0.01	0.03	0.3	0.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	178	10.	26.146	535.	2.5	3018.238	54.938	5.	5.	28.	48.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	178	285.	281.382	435.	8.	4845.119	69.607	193.7	238.	331.25	373.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	178	0.	0.157	1.	0.	0.133	0.365	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	178	7.85	7.409	10.6	1.9	3.401	1.844	4.69	6.175	8.8	9.61
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	150	7.8	7.812	8.3	7.1	0.058	0.241	7.5	7.7	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	150	7.8	7.735	8.3	7.1	0.064	0.253	7.5	7.7	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	150	0.016	0.018	0.079	0.005	0.	0.014	0.008	0.01	0.02	0.032
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	178	7.6	7.56	8.6	6.	0.112	0.334	7.2	7.4	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	178	7.6	7.383	8.6	6.	0.143	0.379	7.2	7.4	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	178	0.025	0.041	1.	0.003	0.007	0.083	0.013	0.016	0.04	0.063
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	178	124.5	126.764	230.	38.	639.119	25.281	94.	110.	142.	160.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	178 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	131	79.	77.748	140.	0.	345.251	18.581	56.2	67.	89.	98.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	178	7.	11.962	287.	0.	565.013	23.77	2.	4.	12.	25.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	87 ##	0.01	0.657	12.2	0.	3.479	1.865	0.	0.	0.3	2.34
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	178 ##	0.01	0.048	2.96	0.01	0.059	0.244	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	178	0.355	0.548	3.1	0.	0.306	0.553	0.08	0.12	0.82	1.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	178 ##	0.05	0.158	1.32	0.	0.074	0.272	0.025	0.05	0.053	0.582
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	28	1.6	6.418	34.5	0.	104.453	10.22	0.	0.775	6.025	30.1
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	178	148.	143.966	221.	82.	736.586	27.14	105.8	123.75	160.75	178.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	178	50.1	49.31	70.8	28.8	78.357	8.852	36.56	42.65	56.	61.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	178	4.8	4.813	8.3	1.8	2.874	1.695	2.6	3.375	5.9	7.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	178	1.835	2.355	10.	0.37	3.627	1.905	0.619	1.005	2.9	4.62
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	178	0.965	1.16	5.	0.4	0.602	0.776	0.67	0.798	1.2	1.6
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	178	2.	3.708	46.	0.05	36.178	6.015	0.8	1.	3.	9.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	178	13.	15.833	41.	1.3	72.558	8.518	7.6	9.	21.	29.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	178 ##	0.1	0.161	0.9	0.05	0.024	0.154	0.05	0.05	0.2	0.324
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	50.161	250.	0.	3454.14	58.772	0.	0.	50.	90.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	29.5	31.289	130.	0.	597.617	24.446	5.	20.	40.	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	177 ##	5.	16.268	140.	0.	683.463	26.143	5.	5.	10.	52.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	35 ##	5.	3.571	10.	0.	8.193	2.862	0.	0.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	178 ##	5.	6.242	70.	0.	57.766	7.6	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	99 ##	5.	13.212	80.	0.	324.414	18.011	0.	5.	20.	40.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	178 ##	5.	5.562	50.	0.	45.445	6.741	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	178	50.	58.685	300.	5.	2261.855	47.559	12.9	30.	70.	127.3
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	178 ##	50.	46.494	150.	0.	324.274	18.008	20.	40.	50.	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	178	20.	32.483	890.	5.	4986.229	70.613	5.	10.	35.5	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	177	10.	16.565	101.	0.	244.088	15.623	5.	5.	20.	40.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	7.5	20.185	50.	0.	505.625	22.486	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	177 ##	5.	6.633	30.	0.	36.131	6.011	0.	5.	5.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39	20.	68.	210.	0.	5869.684	76.614	0.	0.	150.	172.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	53 ##	0.	5.849	110.	0.	246.861	15.712	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	178	7.5	12.781	63.	0.	176.658	13.291	0.	5.	20.	32.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	178	106.	163.506	3190.	5.	83024.997	288.141	5.	43.	182.5	311.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	178	26.	58.152	470.	0.	5028.129	70.909	5.	5.	92.5	150.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	5.526	50.	0.	241.607	15.544	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	5.	59.211	290.	0.	7007.468	83.711	0.	0.	92.5	210.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	99	2800.	2995.152	20000.	1770.	3162070.13	1778.221	2210.	2520.	3100.	3500.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	178 ##	5.	5.801	30.	0.	32.622	5.712	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	172	147.	163.07	2489.	85.	32929.2	181.464	104.	124.25	171.75	198.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	178 ##	0.15	0.163	1.	0.15	0.009	0.094	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	23.113	100.	0.	685.795	26.188	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	178	0.18	0.245	2.17	0.005	0.064	0.253	0.09	0.13	0.26	0.441
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	161	7.	10.484	200.	0.	316.339	17.786	2.	4.	11.	20.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	178 ##	50.	66.685	100.	10.	599.686	24.488	50.	50.	100.	100.

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EPA Water Quality Criteria Analysis for Station: CUGA0035

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	178	8	0.04	62	3	0.05	44	0	0.00	31	3	0.10	41	2	0.05
00403	PH, LAB	Fresh Chronic	9.	150	0	0.00	50	0	0.00	35	0	0.00	25	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	150	0	0.00	50	0	0.00	35	0	0.00	25	0	0.00	40	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
		Other-Lo Lim.	6.5	178	2	0.01	62	2	0.03	44	0	0.00	31	0	0.00	41	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	178	1	0.01	62	1	0.02	44	0	0.00	31	0	0.00	41	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
		Drinking Water	250.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	1	0.09	5	0	0.00	3	1	0.33	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	14 &	2	0.14	7	1	0.14	3	1	0.33	1	0	0.00	3	0	0.00
		Drinking Water	5.	14 &	2	0.14	7	1	0.14	3	1	0.33	1	0	0.00	3	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0035

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	175 &	4	0.02	60	1	0.02	44	1	0.02	30	0	0.00	41	2	0.05
		Drinking Water	1300.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	178	6	0.03	62	2	0.03	44	2	0.05	31	0	0.00	41	2	0.05
		Drinking Water	15.	63 &	58	0.92	21	19	0.90	18	18	1.00	10	9	0.90	14	12	0.86
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	177	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	40	0	0.00
		Drinking Water	100.	177	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	40	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
		Drinking Water	5000.	178	0	0.00	62	0	0.00	44	0	0.00	31	0	0.00	41	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	1	0.03	11	0	0.00	10	1	0.10	6	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	1	0.03	11	0	0.00	10	1	0.10	6	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	161	3	0.02	59	0	0.00	37	1	0.03	28	2	0.07	37	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	17	15.4	14.859	17.8	10.9	4.969	2.229	11.22	13.15	16.85	17.72
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	17	0.05	0.409	5.	0.	1.446	1.202	0.	0.03	0.15	1.72
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	17	32.	37.118	131.	15.	645.86	25.414	19.	27.	36.5	64.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	17	298.	285.765	340.	188.	1228.066	35.044	224.	275.	303.5	318.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	17	8.2	8.471	10.	7.8	0.517	0.719	7.88	7.9	9.05	9.84
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	17	7.6	7.629	7.8	7.3	0.013	0.116	7.46	7.6	7.7	7.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	17	7.6	7.613	7.8	7.3	0.014	0.117	7.46	7.6	7.7	7.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	17	0.025	0.024	0.05	0.016	0.	0.008	0.016	0.02	0.025	0.035
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	17	142.	136.765	149.	83.	247.941	15.746	114.2	132.	146.	147.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	87.	78.118	90.	0.	493.36	22.212	40.8	79.5	88.5	90.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	17	8.	7.824	18.	1.	19.029	4.362	1.8	4.	11.	13.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	17 ##	0.01	0.879	8.9	0.	5.564	2.359	0.	0.01	0.205	5.54
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	17	0.1	0.135	0.2	0.1	0.002	0.049	0.1	0.1	0.2	0.2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	17	0.03	0.161	0.72	0.	0.046	0.214	0.	0.005	0.325	0.512
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	17	148.	144.353	166.	82.	384.368	19.605	113.2	140.5	158.	160.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	17	51.	50.459	56.5	28.8	45.395	6.738	39.68	49.4	54.85	56.42
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	17	4.3	4.294	5.9	2.1	0.717	0.847	3.3	3.75	4.85	5.18
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	17	1.17	1.191	1.74	0.5	0.119	0.346	0.572	0.97	1.48	1.596
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	17	0.9	0.876	1.23	0.63	0.026	0.161	0.662	0.73	0.965	1.126
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	17	1.	1.076	2.	0.8	0.124	0.353	0.88	0.9	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	17	8.1	9.871	28.	6.4	25.355	5.035	6.72	7.25	10.75	15.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	17 ##	0.1	0.184	0.48	0.1	0.016	0.127	0.1	0.1	0.31	0.384
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	17	10.	13.529	60.	0.	286.765	16.934	0.	0.	20.	44.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	17	10.	6.471	20.	0.	36.765	6.063	0.	0.	10.	12.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	17	10.	9.412	60.	0.	218.382	14.778	0.	0.	10.	28.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	17 ##	0.	4.118	10.	0.	25.735	5.073	0.	0.	10.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	17	60.	61.765	130.	30.	640.441	25.307	38.	45.	65.	114.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	17	50.	44.706	90.	10.	476.471	21.828	10.	30.	55.	82.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	17	20.	27.059	50.	10.	122.059	11.048	18.	20.	30.	50.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	17	20.	15.294	30.	0.	63.971	7.998	0.	10.	20.	22.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	17	10.	6.471	30.	0.	61.765	7.859	0.	0.	10.	14.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	17 ##	0.	7.647	30.	0.	119.118	10.914	0.	0.	15.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	17	190.	232.353	960.	110.	36919.118	192.143	134.	155.	240.	400.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	17	100.	107.647	220.	0.	2919.118	54.029	48.	70.	135.	204.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	17	2590.	2564.706	3200.	1770.	130488.971	361.233	2010.	2345.	2820.	3040.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	17 ##	0.	8.824	30.	0.	123.529	11.114	0.	0.	20.	30.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	17	142.	138.294	171.	85.	311.221	17.641	111.4	132.	147.	153.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	17	0.16	0.205	0.57	0.12	0.013	0.112	0.12	0.14	0.23	0.386
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	17	6.	6.765	28.	0.	42.566	6.524	0.	2.5	9.	14.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1991 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	32	13.65	14.241	17.6	11.5	3.597	1.897	12.1	12.525	15.975	16.91
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	32	0.08	1.073	12.	0.	8.997	2.999	0.	0.023	0.3	5.14
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	32	40.	82.563	535.	5.	12181.351	110.369	24.3	28.25	85.	219.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	32	239.5	241.344	321.	70.	2832.62	53.222	185.4	205.5	286.75	308.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	32	0.	0.188	1.	0.	0.157	0.397	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	32	8.6	8.566	10.3	5.8	1.547	1.244	6.82	7.55	9.6	10.
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	22	8.	7.995	8.2	7.8	0.013	0.113	7.8	7.9	8.1	8.17

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Annual Analysis for 1991 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	22	8.	7.981	8.2	7.8	0.013	0.114	7.8	7.9	8.1	8.17
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	22	0.01	0.01	0.016	0.006	0.	0.003	0.007	0.008	0.013	0.016
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	32	7.6	7.581	8.6	6.4	0.129	0.36	7.2	7.4	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	32	7.6	7.393	8.6	6.4	0.166	0.407	7.2	7.4	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	32	0.025	0.04	0.398	0.003	0.005	0.067	0.013	0.016	0.04	0.063
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	32	115.	118.406	184.	88.	597.797	24.45	91.	96.	138.5	146.7
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	32 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	32	70.	72.594	112.	54.	229.604	15.153	56.	59.	85.	89.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	32	8.	11.731	71.	0.4	187.847	13.706	1.3	3.25	15.	27.8
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	32 ##	0.01	0.383	5.	0.	1.381	1.175	0.01	0.01	0.01	1.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	32 ##	0.01	0.029	0.62	0.01	0.012	0.108	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	32	0.095	0.209	2.8	0.	0.239	0.489	0.06	0.08	0.133	0.467
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	32	0.34	0.501	1.32	0.	0.185	0.43	0.003	0.198	0.793	1.297
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	32	120.5	125.031	167.	93.	555.902	23.578	94.6	104.5	148.	153.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	32	42.5	43.669	58.4	32.8	60.919	7.805	33.4	37.025	51.025	52.82
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	32	3.45	3.644	5.5	2.3	1.138	1.067	2.4	2.6	4.8	5.11
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	32	0.895	1.188	3.05	0.48	0.446	0.668	0.528	0.653	1.88	2.119
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	32	0.825	0.963	2.21	0.6	0.129	0.36	0.659	0.75	1.105	1.545
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	32	1.	1.113	2.	0.6	0.16	0.4	0.8	1.	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	32	9.	11.025	41.	7.4	39.626	6.295	7.53	8.075	11.7	14.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	32 ##	0.1	0.227	0.69	0.1	0.04	0.199	0.1	0.1	0.275	0.568
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	32	40.	47.969	140.	0.	1673.967	40.914	1.5	12.5	77.5	110.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	32 ##	5.	9.375	70.	0.	238.306	15.437	0.	0.	10.	27.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	32	20.	23.438	80.	0.	616.835	24.836	0.	0.	37.5	67.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	32 ##	2.5	8.281	50.	0.	152.596	12.353	0.	0.	10.	27.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	32	60.	78.438	300.	30.	3245.867	56.973	33.	50.	85.	150.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	32	40.	47.031	150.	5.	1117.515	33.429	20.	20.	67.5	97.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	32	25.	29.375	90.	10.	483.468	21.988	10.	10.	40.	71.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	32	10.	18.125	60.	0.	183.468	13.545	10.	10.	20.	37.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	32	10.	11.25	30.	0.	101.613	10.08	0.	0.	20.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	32	10.	12.969	40.	0.	152.999	12.369	0.	0.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	32	200.	400.625	3190.	70.	313844.758	560.218	113.	162.5	480.	782.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	32	110.	134.375	470.	60.	6231.855	78.942	63.	90.	167.5	207.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	32	2700.	2626.563	3100.	1890.	112571.673	335.517	2093.	2425.	2900.	3000.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	32 ##	0.	5.	30.	0.	70.968	8.424	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	32	119.5	123.719	173.	92.	577.822	24.038	95.6	101.25	145.25	158.3
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	32 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	32	0.215	0.333	2.17	0.07	0.145	0.381	0.083	0.13	0.4	0.652
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	32	8.	13.25	77.	0.	250.129	15.815	2.	5.25	15.	32.1
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	32 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	28	13.4	14.204	20.9	8.3	11.8	3.435	9.4	11.2	17.7	18.52
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	26	0.065	0.131	0.6	0.01	0.024	0.155	0.01	0.028	0.225	0.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	28	12.5	16.643	42.	5.	99.053	9.953	6.8	10.	24.	34.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	28	305.	278.036	348.	8.	5657.888	75.219	187.3	238.75	333.25	346.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	28	6.8	6.625	9.8	3.9	2.225	1.492	4.58	5.25	7.8	8.33
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	28	7.9	7.921	8.3	7.6	0.037	0.193	7.6	7.8	8.075	8.21
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	28	7.9	7.881	8.3	7.6	0.039	0.197	7.6	7.8	8.075	8.21
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	28	0.013	0.013	0.025	0.005	0.	0.006	0.006	0.008	0.016	0.025
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	28	7.5	7.539	8.5	6.6	0.173	0.416	7.	7.3	7.9	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	28	7.5	7.354	8.5	6.6	0.208	0.456	7.	7.3	7.9	8.1

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Annual Analysis for 1992 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	28	0.032	0.044	0.251	0.003	0.002	0.049	0.008	0.013	0.05	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	28	132.5	132.179	170.	38.	710.522	26.656	108.4	118.5	150.	163.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	82.	83.111	104.	63.	163.103	12.771	66.	73.	96.	101.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	28	5.	6.293	42.	0.	61.304	7.83	0.09	2.	8.	11.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	20 ##	0.01	1.074	12.2	0.	7.446	2.729	0.	0.	1.038	2.48
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	28 ##	0.01	0.115	2.96	0.01	0.311	0.557	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	28	0.285	0.339	0.93	0.01	0.055	0.235	0.099	0.14	0.538	0.752
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	28 ##	0.028	0.155	0.73	0.	0.063	0.252	0.	0.025	0.092	0.66
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	28	158.5	149.107	221.	103.	786.099	28.037	114.8	121.5	170.25	177.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	28	54.95	51.879	63.7	36.2	71.485	8.455	40.75	43.2	59.65	61.34
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	28	4.8	4.346	5.9	2.6	1.179	1.086	2.9	3.3	5.3	5.61
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	28	2.535	2.146	3.12	0.74	0.639	0.799	0.815	1.49	2.8	2.917
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	28	1.04	1.575	5.	0.7	1.834	1.354	0.85	0.91	1.233	4.811
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	28	2.	1.593	3.	0.8	0.385	0.621	0.8	0.9	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	28	10.7	13.671	31.	7.4	43.169	6.57	7.69	8.5	19.45	23.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	28 ##	0.1	0.209	0.68	0.05	0.037	0.192	0.05	0.1	0.3	0.565
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	28	10.	19.768	80.	0.	716.842	26.774	0.	5.	17.75	71.9
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	28 ##	5.	6.25	40.	0.	58.12	7.624	0.	3.5	5.	11.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	28 ##	5.	10.286	40.	0.	143.026	11.959	0.	5.	17.25	31.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	28 ##	5.	3.571	20.	0.	18.254	4.272	0.	0.	5.	5.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	28	56.5	67.464	180.	5.	1517.888	38.96	35.3	40.	93.	122.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	28 ##	25.	34.321	80.	0.	358.374	18.931	20.	25.	47.5	70.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	28	21.5	30.143	122.	10.	589.09	24.271	10.	12.5	39.25	62.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	28	12.5	22.714	101.	5.	471.767	21.72	5.	10.	30.	52.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	28 ##	5.	5.857	20.	0.	25.386	5.038	0.	5.	5.	12.8
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	28	10.	14.679	51.	0.	262.226	16.193	0.	5.	20.	50.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	28	75.	95.607	270.	5.	6970.321	83.488	5.	8.75	180.	200.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	28	20.	53.964	150.	5.	3035.221	55.093	5.	5.	106.75	141.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	28	3020.	3598.929	20000.	2200.	10504809.921	3241.112	2490.	2617.5	3392.5	3610.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	28 ##	5.	6.875	20.	0.	27.4	5.235	0.	5.	9.25	18.2
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	22	125.5	257.773	2489.	108.	250549.613	500.549	109.2	114.75	196.5	247.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	28 ##	0.15	0.18	1.	0.15	0.026	0.161	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	28	0.18	0.215	1.	0.05	0.032	0.179	0.109	0.113	0.228	0.441
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	28	5.	5.429	12.	2.	7.069	2.659	2.	3.	7.	10.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	25	13.2	13.576	19.8	8.4	13.24	3.639	9.04	10.25	16.85	19.26
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	22	0.03	0.523	7.	0.005	2.509	1.584	0.01	0.01	0.065	2.34
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	25	10.	14.7	75.	2.5	211.625	14.547	5.	10.	12.5	32.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	25	287.	307.24	395.	223.	3081.94	55.515	241.6	253.	365.5	380.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	25	0.	0.08	1.	0.	0.077	0.277	0.	0.	0.	0.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	25	5.5	5.648	8.9	2.5	2.49	1.578	3.82	4.4	6.65	8.28
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	25	7.8	7.74	8.2	7.1	0.052	0.227	7.4	7.65	7.85	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	25	7.8	7.675	8.2	7.1	0.056	0.237	7.4	7.65	7.85	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	25	0.016	0.021	0.079	0.006	0.	0.015	0.01	0.014	0.023	0.04
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	25	7.5	7.5	7.9	7.1	0.043	0.206	7.2	7.35	7.65	7.78
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	25	7.5	7.454	7.9	7.1	0.045	0.211	7.2	7.35	7.65	7.78
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	25	0.032	0.035	0.079	0.013	0.	0.017	0.017	0.023	0.045	0.063
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	25	140.	143.04	230.	96.	812.707	28.508	110.	120.	160.	170.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	25	85.	84.84	140.	12.	527.14	22.96	63.8	73.	98.	104.

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Annual Analysis for 1993 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	25	9.	22.52	287.	2.	3116.76	55.828	2.6	5.	20.	29.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	6	0.55	1.233	4.	0.	2.579	1.606	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	25 ##	0.01	0.134	0.7	0.01	0.054	0.232	0.01	0.01	0.18	0.54
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	25	0.69	0.867	3.1	0.025	0.56	0.748	0.156	0.29	1.15	2.24
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25	150.	160.	200.	110.	575.	23.979	140.	140.	180.	194.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	25	53.4	55.96	70.8	39.	72.508	8.515	46.56	49.2	64.2	67.76
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	25	4.8	4.952	6.5	2.6	1.107	1.052	3.6	4.2	5.8	6.44
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	25	1.9	2.024	2.9	0.49	0.597	0.772	0.86	1.4	2.85	2.9
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	25	0.9	0.904	2.3	0.4	0.12	0.346	0.5	0.7	1.	1.08
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	25	2.	1.724	3.	0.05	0.529	0.727	0.62	1.	2.	2.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	25	17.	17.192	32.	1.3	37.826	6.15	10.4	13.	21.5	24.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	25	0.2	0.202	0.4	0.05	0.01	0.098	0.05	0.15	0.3	0.3
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	24 ##	5.	6.458	20.	5.	11.911	3.451	5.	5.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	25 ##	5.	5.6	20.	5.	9.	3.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	25 ##	5.	5.2	10.	5.	1.	1.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	25	70.	87.4	230.	5.	3719.	60.984	20.	50.	125.	194.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	25	40.	80.2	890.	5.	30301.	174.072	10.	20.	60.	148.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	25	20.	27.8	70.	5.	412.667	20.314	5.	10.	45.	60.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	25 ##	5.	5.2	10.	5.	1.	1.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	25 ##	5.	11.8	40.	5.	97.667	9.883	5.	5.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	25	20.	85.	770.	5.	29935.417	173.019	5.	5.	65.	274.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	25 ##	5.	25.4	240.	5.	4062.333	63.736	5.	5.	5.	122.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	22	3000.	3095.455	3600.	2400.	130930.736	361.844	2700.	2800.	3500.	3600.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	25 ##	5.	6.	30.	5.	25.	5.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	25	165.	167.2	205.	127.	443.917	21.069	141.6	150.5	184.	200.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	25	0.22	0.294	0.89	0.08	0.044	0.21	0.106	0.135	0.4	0.628
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	21	5.	15.143	200.	2.	1805.029	42.486	2.	3.5	8.5	13.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	30	13.45	13.727	18.6	7.9	8.149	2.855	10.1	11.8	16.475	17.68
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	25	0.1	0.566	4.	0.	1.255	1.12	0.01	0.025	0.55	2.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	30	7.5	7.583	20.	2.5	19.605	4.428	2.5	4.375	10.	14.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	30	244.	241.6	345.	72.	3761.628	61.332	174.7	202.25	285.	330.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	30	6.4	6.373	10.4	1.9	4.617	2.149	3.76	4.675	8.4	9.06
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	29	7.8	7.831	8.1	7.5	0.019	0.139	7.7	7.75	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	29	7.8	7.808	8.1	7.5	0.02	0.141	7.7	7.75	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	29	0.016	0.016	0.032	0.008	0.	0.006	0.01	0.013	0.018	0.02
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	30	7.7	7.647	8.1	7.1	0.053	0.23	7.3	7.5	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	30	7.7	7.585	8.1	7.1	0.057	0.238	7.3	7.5	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	30	0.02	0.026	0.079	0.008	0.	0.016	0.013	0.016	0.032	0.05
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	30	120.	118.467	180.	77.	848.051	29.121	81.4	93.	132.5	160.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	73.	72.3	110.	47.	317.321	17.813	49.3	57.	80.5	98.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	30	7.5	12.267	85.	3.	242.754	15.581	3.	4.	14.5	26.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-11/14/94	12 ##	0.	0.092	0.6	0.	0.046	0.215	0.	0.	0.	0.57
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	30	0.345	0.395	1.4	0.025	0.079	0.281	0.077	0.18	0.538	0.688

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Annual Analysis for 1994 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	30	130.	133.133	180.	87.	694.326	26.35	92.4	117.5	152.5	170.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	30	44.65	45.953	65.	32.	80.275	8.96	33.24	39.95	50.65	60.01
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	30	3.6	4.423	8.	1.8	4.754	2.18	1.93	2.375	7.2	7.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	30	1.	1.448	4.3	0.37	1.221	1.105	0.412	0.575	2.55	3.17
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	30	0.8	1.142	4.1	0.5	0.762	0.873	0.6	0.638	1.4	2.31
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	30	1.	1.883	7.	0.6	2.423	1.557	0.7	0.875	3.	4.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	30	11.	12.94	26.	7.2	28.036	5.295	7.92	8.75	15.25	22.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	30	0.1	0.103	0.3	0.05	0.005	0.068	0.05	0.05	0.125	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	30 ##	5.	5.333	10.	5.	1.609	1.269	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	30	50.	56.	220.	10.	1583.448	39.793	30.	30.	60.	115.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	30	10.	18.833	60.	5.	314.971	17.747	5.	5.	22.5	58.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	29 ##	5.	9.828	30.	5.	77.648	8.812	5.	5.	10.	30.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	29 ##	5.	5.172	10.	5.	0.862	0.928	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	30 ##	5.	11.833	60.	5.	156.006	12.49	5.	5.	12.5	29.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	30	50.	100.667	920.	5.	28596.092	169.104	5.	27.5	120.	179.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	30 ##	5.	35.5	310.	5.	4373.017	66.129	5.	5.	40.	142.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	30	137.5	140.433	194.	94.	862.875	29.375	101.3	117.25	166.	186.3
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	30 ##	0.15	0.172	0.8	0.15	0.014	0.119	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	30	0.165	0.237	2.	0.06	0.119	0.345	0.072	0.118	0.223	0.387
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	24	7.	9.917	22.	2.	41.819	6.467	3.5	5.	15.5	21.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	25	13.2	14.392	20.7	7.9	14.207	3.769	8.7	12.65	17.75	20.36
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	19	0.1	0.288	2.	0.03	0.229	0.478	0.04	0.06	0.2	1.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	25	5.	6.	15.	2.5	13.021	3.608	2.5	3.75	7.5	12.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	25	306.	293.32	386.	101.	4481.56	66.944	196.6	260.	341.	369.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	25	8.5	8.252	10.2	6.1	1.476	1.215	6.36	7.1	9.15	9.76
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	25	7.8	7.788	8.2	7.5	0.044	0.209	7.5	7.6	8.	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	25	7.8	7.742	8.2	7.5	0.046	0.214	7.5	7.6	8.	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	25	0.016	0.018	0.032	0.006	0.	0.008	0.009	0.01	0.025	0.032
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	25	7.6	7.604	8.6	6.8	0.113	0.336	7.3	7.4	7.8	7.94
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	25	7.6	7.486	8.6	6.8	0.127	0.357	7.3	7.4	7.8	7.94
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	25	0.025	0.033	0.158	0.003	0.001	0.03	0.012	0.016	0.04	0.05
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	25	120.	117.6	140.	100.	102.333	10.116	100.	110.	120.	130.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	25	8.	11.32	44.	1.	129.227	11.368	1.6	4.	15.	33.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	25	0.83	0.895	2.2	0.025	0.244	0.494	0.328	0.51	1.1	1.74
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	25 ##	0.05	0.052	0.1	0.05	0.	0.01	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25	150.	143.2	180.	100.	472.667	21.741	110.	130.	160.	170.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	25	48.	47.388	58.2	32.5	55.079	7.422	34.6	44.6	52.6	56.22
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	25	5.8	5.952	8.3	3.	2.59	1.609	3.7	4.55	7.5	7.84
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	25	2.7	3.38	7.8	1.2	3.28	1.811	1.32	2.15	4.25	6.4
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	25	1.	1.131	1.7	0.67	0.117	0.342	0.702	0.84	1.5	1.6
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	25	4.	6.76	46.	1.	79.023	8.89	2.	2.5	7.5	12.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	25	19.	20.952	40.	2.8	72.508	8.515	13.2	16.	27.	36.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	25 ##	0.05	0.114	0.9	0.05	0.03	0.173	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	25 ##	5.	5.32	13.	5.	2.56	1.6	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	25 ##	5.	5.24	11.	5.	1.44	1.2	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	25	20.	30.24	127.	5.	760.357	27.575	9.2	14.	35.	71.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	25 ##	5.	11.68	59.	5.	169.393	13.015	5.	5.	13.	31.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	25 ##	5.	7.68	49.	5.	80.727	8.985	5.	5.	5.	13.4
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	25 ##	5.	6.2	30.	5.	25.583	5.058	5.	5.	5.	7.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	25 ##	5.	9.	36.	5.	72.583	8.52	5.	5.	10.	26.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	25	79.	94.8	328.	5.	5246.083	72.43	20.8	49.	127.5	204.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	25 ##	5.	20.12	74.	5.	430.193	20.741	5.	5.	36.5	54.2
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	25	154.	155.56	201.	127.	437.09	20.907	132.2	137.	169.5	187.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	25 ##	0.15	0.176	0.8	0.15	0.017	0.13	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	25	0.15	0.179	0.53	0.07	0.011	0.103	0.082	0.105	0.23	0.306
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	19	11.	11.842	36.	2.	67.251	8.201	3.	5.	15.	23.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	21	14.5	13.857	19.5	6.9	16.219	4.027	7.4	10.75	17.6	18.56
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	20	0.2	0.49	4.	0.06	0.754	0.868	0.071	0.1	0.55	0.98
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	21	5.	8.095	25.	2.5	30.565	5.529	3.	5.	10.	18.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	21	375.	355.143	435.	197.	3640.129	60.333	262.6	314.	397.	417.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	21	0.	0.143	1.	0.	0.129	0.359	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	21	8.4	8.405	10.6	6.	1.459	1.208	6.76	7.4	9.4	9.88
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/23/96	21	7.6	7.562	8.1	7.1	0.099	0.315	7.12	7.25	7.8	8.06
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/23/96	21	7.6	7.46	8.1	7.1	0.11	0.332	7.12	7.25	7.8	8.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/23/96	21	0.025	0.035	0.079	0.008	0.001	0.023	0.009	0.016	0.057	0.076
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	21	7.5	7.395	7.9	6.	0.228	0.478	6.84	7.1	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	21	7.5	7.032	7.9	6.	0.367	0.606	6.84	7.1	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	21	0.032	0.093	1.	0.013	0.045	0.211	0.013	0.016	0.079	0.147
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	21	130.	127.571	170.	72.	466.457	21.598	99.6	120.	140.	160.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	21	7.	10.986	51.	0.7	163.404	12.783	2.4	4.5	11.	38.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	21 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	21	1.	1.104	2.1	0.41	0.153	0.391	0.528	0.925	1.35	1.6
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	21	170.	162.952	210.	92.	537.048	23.174	140.	150.	175.	188.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	21	54.3	52.714	61.6	31.7	46.472	6.817	44.42	48.75	57.7	60.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	21	7.	6.671	8.1	3.2	1.954	1.398	4.06	6.35	7.75	8.06
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	21	6.3	5.819	10.	1.7	5.355	2.314	2.7	3.8	7.45	9.18
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	21	1.2	1.502	4.6	0.74	0.663	0.814	1.02	1.1	1.5	2.44
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	21	16.	13.952	27.	1.	65.648	8.102	5.	6.	20.5	25.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	21	29.	27.286	40.	11.	70.014	8.367	16.	20.	34.5	38.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	21 ##	0.05	0.071	0.2	0.05	0.003	0.054	0.05	0.05	0.05	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	21 ##	5.	5.381	13.	5.	3.048	1.746	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	21 ##	5.	7.143	50.	5.	96.429	9.82	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	21	13.	17.905	44.	5.	214.29	14.639	5.	5.	30.5	41.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	21	18.	32.19	185.	5.	1749.862	41.831	10.6	15.	26.5	102.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	21	13.	13.524	46.	5.	84.562	9.196	5.	5.	16.5	20.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	21	13.	21.143	63.	5.	325.129	18.031	5.	5.	36.	46.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	21	97.	102.	205.	44.	1740.6	41.72	48.2	75.	112.5	171.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	21	23.	24.143	55.	5.	139.029	11.791	7.6	16.	33.	36.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	21	192.	180.238	214.	98.	979.79	31.302	115.6	169.5	202.	207.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	21	0.21	0.215	0.72	0.005	0.027	0.164	0.005	0.13	0.28	0.398
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	20	8.	10.8	46.	2.	106.274	10.309	2.1	3.25	14.75	21.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	62	17.3	17.021	20.9	12.2	3.931	1.983	14.06	15.7	18.325	19.71
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	57	0.04	0.081	0.8	0.	0.022	0.148	0.01	0.02	0.085	0.12
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	62	10.	19.492	133.	2.5	474.602	21.785	2.5	5.	28.25	46.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	62	315.	314.21	435.	101.	2930.759	54.136	262.3	281.5	346.5	375.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	62	0.	0.097	1.	0.	0.089	0.298	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	62	6.7	6.613	8.5	3.7	2.085	1.444	4.46	5.35	8.	8.3
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	62	7.4	7.358	8.1	6.	0.095	0.308	7.1	7.2	7.6	7.6
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	62	7.4	7.175	8.1	6.	0.129	0.359	7.1	7.2	7.6	7.6
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	62	0.04	0.067	1.	0.008	0.017	0.131	0.025	0.025	0.063	0.079
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	62	140.5	143.258	180.	118.	270.391	16.444	120.	130.	160.	170.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	62 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	62	8.	11.955	51.	0.1	120.592	10.981	3.	5.	16.	28.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	62 ##	0.01	0.058	2.96	0.01	0.14	0.375	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	62	0.2	0.402	2.2	0.01	0.189	0.435	0.08	0.1	0.69	0.987
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	62 ##	0.05	0.145	1.32	0.	0.069	0.262	0.015	0.03	0.05	0.495
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	62	154.5	156.081	221.	100.	493.78	22.221	130.	143.	170.25	180.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	62	52.5	52.955	70.8	32.5	75.468	8.687	40.29	47.725	60.175	63.98
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	62	5.2	5.618	8.1	3.6	1.542	1.242	4.2	4.8	6.525	7.67
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	62	2.6	2.497	6.6	0.87	1.236	1.112	1.223	1.595	2.9	3.84
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	62	1.	1.226	5.	0.67	0.695	0.833	0.7	0.825	1.4	1.6
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	62	2.	2.873	17.	0.05	10.288	3.207	0.93	1.	3.	6.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	62	14.45	15.506	38.	1.3	55.296	7.436	7.4	9.875	21.	26.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	62 ##	0.1	0.173	0.69	0.05	0.024	0.156	0.05	0.05	0.2	0.444
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	40.	41.	50.	30.	59.818	7.734	30.	32.5	48.75	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	62 ##	5.	14.274	130.	0.	524.465	22.901	1.5	5.	10.	40.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	2.5	2.917	10.	0.	11.174	3.343	0.	0.	5.	8.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	62 ##	5.	5.726	30.	0.	17.907	4.232	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	62 ##	5.	6.532	50.	0.	69.335	8.327	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	62	50.	59.968	180.	5.	1336.36	36.556	20.	40.	70.	121.9
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	62 ##	50.	46.048	110.	10.	282.899	16.82	25.	37.5	50.	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	62	30.	54.242	890.	5.	12642.35	112.438	10.	20.	50.	87.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	62	20.	24.726	101.	5.	405.612	20.14	5.	10.	30.	57.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	5.	14.167	50.	0.	321.324	17.925	0.	0.	30.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	62 ##	5.	6.532	30.	0.	33.269	5.768	0.	5.	6.25	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	17 ##	0.	4.706	30.	0.	70.221	8.38	0.	0.	5.	22.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	62	10.	14.194	63.	0.	203.7	14.272	0.	5.	20.5	36.7
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	62	99.	119.935	670.	5.	13846.881	117.673	6.5	28.5	182.5	234.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	62	16.	43.177	190.	0.	2743.132	52.375	5.	5.	90.	120.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	62 ##	5.	5.887	30.	0.	40.594	6.371	0.	5.	5.	17.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	59	154.	204.542	2489.	108.	92435.701	304.032	136.	142.	189.	207.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	62 ##	0.15	0.168	1.	0.15	0.012	0.109	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	62	0.23	0.295	1.	0.09	0.033	0.183	0.15	0.17	0.363	0.537
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	59	8.	10.695	46.	0.	68.526	8.278	4.	6.	11.	22.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	62 ##	50.	65.645	100.	10.	664.331	25.775	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	44	11.5	11.334	16.5	7.9	3.	1.732	8.6	10.275	12.575	13.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	39	0.2	0.638	7.	0.	1.983	1.408	0.01	0.04	0.5	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	44	10.	32.693	359.	2.5	3696.282	60.797	2.5	5.	30.75	82.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	44	290.5	278.75	395.	70.	4370.75	66.112	196.	241.	316.	364.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	44	0.	0.182	1.	0.	0.152	0.39	0.	0.	0.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	44	8.85	8.334	10.4	4.7	2.568	1.602	5.65	7.225	9.6	10.
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	44	7.7	7.68	8.6	7.2	0.061	0.247	7.35	7.5	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	44	7.7	7.618	8.6	7.2	0.065	0.255	7.35	7.5	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	44	0.02	0.024	0.063	0.003	0.	0.013	0.013	0.016	0.032	0.045
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	44	120.	124.227	184.	72.	581.668	24.118	95.5	109.	140.	157.5
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	44 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	44	5.	10.159	71.	1.	171.858	13.109	1.5	3.	11.75	24.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	44 ##	0.01	0.024	0.62	0.01	0.008	0.092	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	44	0.54	0.637	2.8	0.	0.393	0.627	0.055	0.15	0.918	1.55
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	44 ##	0.05	0.151	1.29	0.	0.061	0.247	0.015	0.05	0.115	0.5
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	44	150.	143.432	210.	82.	874.251	29.568	99.5	117.75	160.	180.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	44	51.1	48.811	69.5	28.8	85.093	9.225	35.2	40.925	55.3	58.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	44	4.85	4.766	8.3	2.1	2.873	1.695	2.6	3.125	5.575	7.65
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	44	1.7	2.01	7.8	0.49	2.373	1.54	0.595	0.823	2.775	3.45
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	44	1.01	1.437	4.8	0.63	1.096	1.047	0.805	0.918	1.4	3.25
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	44	2.	2.591	14.	0.7	7.624	2.761	0.9	1.	2.75	6.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	44	16.	17.63	41.	7.5	78.648	8.868	8.5	10.35	22.875	31.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	44 ##	0.1	0.198	0.9	0.05	0.035	0.186	0.05	0.05	0.3	0.5
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	50.714	100.	20.	603.571	24.568	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	24.5	35.5	130.	5.	1526.286	39.068	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	44 ##	5.	17.864	140.	0.	720.911	26.85	2.5	5.	18.25	55.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	4.286	10.	0.	11.905	3.45	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	44 ##	5.	8.523	70.	0.	183.232	13.536	0.	5.	5.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	44 ##	5.	5.341	50.	0.	59.765	7.731	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	44	60.	71.591	300.	5.	3256.015	57.062	17.	30.	98.25	145.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	44 ##	50.	45.455	90.	20.	325.37	18.038	20.	25.	50.	70.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	44	20.	25.159	80.	5.	380.509	19.507	5.	10.	35.25	50.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	43	10.	14.791	60.	0.	181.122	13.458	5.	5.	20.	36.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	0.	17.857	50.	0.	556.593	23.592	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	44 ##	5.	6.364	30.	0.	41.121	6.413	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	2.5	11.786	110.	0.	833.104	28.864	0.	0.	10.	65.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	44 ##	7.5	10.386	40.	0.	101.545	10.077	0.	5.	11.5	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	44	75.	219.432	3190.	5.	249871.739	499.872	5.	41.5	187.5	510.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	44	35.5	69.341	470.	5.	8578.555	92.62	5.	5.	97.5	205.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	44 ##	5.	6.25	30.	0.	36.192	6.016	0.	5.	5.	15.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	41	147.	146.756	205.	85.	1015.689	31.87	101.4	116.5	169.	194.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	44 ##	0.15	0.165	0.8	0.15	0.01	0.098	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	0.	16.429	50.	0.	547.802	23.405	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	44	0.17	0.269	2.17	0.05	0.109	0.331	0.09	0.12	0.358	0.52
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	37	4.	8.459	77.	0.	178.755	13.37	2.	2.5	8.	18.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	44 ##	50.	69.318	100.	50.	606.501	24.627	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	31	12.4	11.494	14.2	6.9	3.75	1.936	7.98	10.	12.9	13.26
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	27	0.3	1.709	12.	0.	10.552	3.248	0.05	0.1	1.	7.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	31	10.	28.71	241.	2.5	2398.18	48.971	2.5	5.	28.	82.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	31	223.	227.968	398.	8.	5662.166	75.247	180.2	191.	262.	343.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	31	0.	0.323	1.	0.	0.226	0.475	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	31	8.4	7.571	10.3	1.9	5.522	2.35	3.86	6.3	9.5	9.8
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	31	7.7	7.694	8.1	6.6	0.077	0.278	7.5	7.6	7.9	7.98
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	31	7.7	7.549	8.1	6.6	0.099	0.314	7.5	7.6	7.9	7.98
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	31	0.02	0.028	0.251	0.008	0.002	0.043	0.011	0.013	0.025	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	31	100.	107.419	230.	78.	719.185	26.818	88.	91.	112.	128.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	31	7.	20.465	287.	0.4	2691.982	51.884	2.2	4.	11.	29.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	31 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	31	0.53	0.785	3.1	0.07	0.532	0.729	0.1	0.2	1.3	2.
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	31 ##	0.05	0.124	0.72	0.	0.028	0.167	0.05	0.05	0.19	0.346
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31	120.	123.581	170.	92.	494.652	22.241	94.4	110.	140.	160.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	31	42.7	43.258	55.6	32.9	46.027	6.784	33.3	39.	48.5	54.16
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	31	3.	3.552	7.3	1.9	2.133	1.461	2.22	2.5	4.2	6.38
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	31	1.01	2.156	10.	0.37	7.363	2.713	0.456	0.57	2.3	8.28
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	31	0.82	0.946	2.5	0.5	0.197	0.444	0.61	0.7	1.	1.442
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	31	1.	4.502	27.	0.05	58.272	7.634	0.72	0.9	3.	20.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	31	12.	15.255	40.	7.4	90.605	9.519	8.32	8.6	20.	35.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	31 ##	0.1	0.127	0.4	0.05	0.007	0.084	0.05	0.05	0.2	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	17.778	25.	5.	38.194	6.18	5.	15.	20.	25.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31 ##	5.	12.419	80.	0.	299.785	17.314	5.	5.	10.	30.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	4.375	5.	0.	3.125	1.768	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	31 ##	5.	5.484	20.	0.	22.258	4.718	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	31 ##	5.	4.355	20.	0.	14.57	3.817	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	31	40.	62.161	230.	5.	4402.74	66.353	5.	20.	70.	206.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	31 ##	50.	45.323	80.	5.	198.226	14.079	20.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	31	10.	20.645	220.	5.	1496.503	38.685	5.	5.	20.	30.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	31 ##	5.	7.548	20.	5.	11.723	3.424	5.	5.	10.	10.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	50.	27.692	50.	0.	635.897	25.217	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	31 ##	5.	5.968	20.	0.	20.699	4.55	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	5.	2.692	5.	0.	6.731	2.594	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	31 ##	5.	10.129	50.	0.	107.649	10.375	1.	5.	13.	20.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	31	130.	231.871	1060.	5.	79144.249	281.326	5.	70.	200.	794.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	31	40.	78.	310.	5.	7007.733	83.712	5.	5.	110.	222.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	31 ##	5.	6.129	30.	0.	41.183	6.417	0.	5.	5.	18.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	31	126.	130.	204.	92.	1052.133	32.437	95.6	102.	150.	191.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	50.	26.923	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	31	0.13	0.236	2.	0.005	0.129	0.359	0.07	0.1	0.22	0.476
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	28	7.5	17.214	200.	2.	1393.508	37.33	2.	3.	16.	27.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	31 ##	50.	66.129	100.	50.	564.516	23.76	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	41	14.5	14.578	18.2	7.3	4.682	2.164	12.82	13.45	16.25	17.44
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/23/96	38	0.085	0.263	4.	0.	0.426	0.653	0.01	0.04	0.225	0.62
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	41	10.	27.244	535.	5.	6737.689	82.083	5.	5.	25.	33.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	41	260.	274.951	405.	174.	4093.548	63.981	197.4	229.5	326.5	385.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	41	7.9	7.498	10.6	2.5	3.018	1.737	4.56	6.55	8.7	9.26
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	41	7.7	7.637	8.6	6.8	0.127	0.356	7.2	7.4	7.8	7.98
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	41	7.7	7.5	8.6	6.8	0.146	0.382	7.2	7.4	7.8	7.98
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	41	0.02	0.032	0.158	0.003	0.001	0.029	0.011	0.016	0.04	0.063
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	41	120.	119.171	160.	38.	473.195	21.753	94.	110.	130.	149.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	41	7.	7.48	28.	0.	32.356	5.688	1.2	3.5	10.	15.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	41 ##	0.01	0.086	0.7	0.01	0.036	0.19	0.01	0.01	0.01	0.52
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	41	0.4	0.494	1.2	0.025	0.154	0.393	0.07	0.14	0.895	1.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	41 ##	0.05	0.213	1.31	0.	0.133	0.364	0.05	0.05	0.101	0.85

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	41	140.	141.634	190.	87.	640.138	25.301	107.2	122.5	161.5	170.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	41	49.3	48.907	61.6	32.	56.231	7.499	38.22	43.55	55.2	58.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	41	4.1	4.6	8.1	1.8	3.39	1.841	2.62	3.3	6.9	7.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	41	1.6	2.66	7.8	0.41	5.805	2.409	0.646	0.81	4.25	7.16
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	41	0.84	0.926	1.53	0.4	0.095	0.308	0.552	0.675	1.2	1.4
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	41	1.	5.571	46.	0.6	86.001	9.274	0.8	0.9	6.5	19.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	41	11.	14.834	35.	2.8	79.244	8.902	7.44	7.9	20.	30.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	41 ##	0.1	0.13	0.68	0.05	0.022	0.148	0.05	0.05	0.1	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	28.111	100.	0.	932.111	30.53	0.	7.5	39.	100.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	40 ##	5.	20.588	110.	0.	1198.473	34.619	1.85	5.	8.75	106.1
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	41 ##	5.	5.146	11.	0.	6.828	2.613	0.6	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	41 ##	5.	5.244	20.	0.	17.439	4.176	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	41	40.	40.268	130.	5.	625.701	25.014	6.4	21.	51.5	68.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	41 ##	50.	49.171	150.	0.	495.145	22.252	21.2	50.	50.	52.4
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	41	17.	16.39	40.	5.	86.144	9.281	5.	10.	20.	30.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	41	10.	12.902	40.	5.	73.09	8.549	5.	5.	20.	28.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	20.	25.	50.	0.	600.	24.495	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	40 ##	5.	7.6	30.	0.	48.349	6.953	1.4	5.	8.75	20.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	3.333	10.	0.	12.5	3.536	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	41 ##	5.	15.22	60.	0.	260.226	16.132	5.	5.	25.	40.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	41	110.	117.683	320.	5.	6141.422	78.367	22.	46.	169.5	232.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	41	33.	53.78	180.	5.	2778.276	52.709	5.	5.	79.	148.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	41 ##	5.	4.939	18.	0.	11.577	3.403	0.	5.	5.	9.4
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	41	142.	144.707	207.	94.	932.862	30.543	104.8	120.5	166.5	193.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	41 ##	0.15	0.166	0.8	0.15	0.01	0.102	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	41	0.14	0.151	0.4	0.005	0.005	0.071	0.064	0.11	0.195	0.228
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	37	6.	7.081	18.	0.	20.243	4.499	2.	3.5	10.	14.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	41 ##	50.	65.854	100.	50.	554.878	23.556	50.	50.	100.	100.

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Station Inventory for Station: CUGA0036

NPS Station ID: CUGA0036
LAT/LON: 36.595337/ -83.670504
Agency: 11NPSWRD
Date Created: 09/20/97
Location: GAP CREEK: SOUTH OF TRIBUTARY
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_GC5
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON GAP CREEK APPROXIMATELY 0.25 MILES SOUTH OF ITS CONFLUENCE WITH THE TRIBUTARY RECEIVING RUNOFF FROM U.S. 58 AND DOWNSTREAM OF THE NEW WASTE WATER TREATMENT PLANT. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-08/10/92	60	14.35	14.437	21.8	8.3	10.375	3.221	10.61	11.5	17.1	18.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/10/92	60	3.	6.023	50.	0.	63.459	7.966	0.07	1.	9.5	15.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-08/10/92	60	26.5	92.233	1660.	4.	58884.555	242.661	10.	17.	43.	161.3
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-08/10/92	60	191.5	212.567	353.	40.	6117.233	78.213	140.3	158.25	276.5	333.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-08/10/92	60	0.	0.067	1.	0.	0.063	0.252	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-08/10/92	60	9.4	9.455	11.9	7.1	0.813	0.902	8.41	8.9	10.1	10.39
00403	PH, LAB, STANDARD UNITS SU	04/10/91-08/10/92	36	8.	7.958	8.3	7.6	0.023	0.15	7.77	7.9	8.	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-08/10/92	36	8.	7.932	8.3	7.6	0.023	0.152	7.77	7.9	8.	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-08/10/92	36	0.01	0.012	0.025	0.005	0.	0.004	0.006	0.01	0.013	0.017
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-08/10/92	60	7.8	7.745	8.5	6.8	0.091	0.302	7.4	7.525	7.9	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-08/10/92	60	7.8	7.635	8.5	6.8	0.103	0.322	7.4	7.525	7.9	8.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-08/10/92	60	0.016	0.023	0.158	0.003	0.	0.022	0.008	0.013	0.03	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-08/10/92	60	83.5	92.483	312.	44.	1595.169	39.94	60.	65.	115.25	136.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	60 ##	0.05	0.066	1.	0.05	0.015	0.123	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-08/10/92	59	48.	55.203	190.	0.	646.923	25.435	35.	38.	69.	83.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-08/10/92	60	4.	79.413	3975.	0.	262613.627	512.458	0.	2.	8.75	25.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-08/10/92	59 ##	0.01	0.206	4.8	0.	0.507	0.712	0.	0.01	0.01	1.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-08/10/92	60 ##	0.01	0.026	0.44	0.01	0.005	0.07	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-08/10/92	60	0.4	0.518	1.67	0.01	0.141	0.376	0.2	0.273	0.668	1.084

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-08/10/92	60	0.24	0.336	1.57	0.	0.123	0.351	0.002	0.066	0.5	0.866
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-06/29/92	6 ##	0.5	2.683	13.8	0.	29.886	5.467	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	60	98.5	102.75	166.	53.	1202.835	34.682	66.1	70.25	130.	160.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-08/10/92	60	31.85	32.263	49.8	17.	96.649	9.831	21.15	22.925	40.7	47.58
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-08/10/92	60	4.4	5.157	10.5	0.	6.795	2.607	2.7	3.025	6.875	9.47
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-08/10/92	60	2.985	3.902	9.84	0.9	6.303	2.511	1.514	1.853	5.385	8.336
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-08/10/92	60	1.35	1.667	6.44	0.81	0.91	0.954	0.94	1.08	2.083	2.698
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-08/10/92	60	3.	4.2	12.	1.	6.976	2.641	2.	2.	5.75	8.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-08/10/92	60	13.5	16.352	48.2	8.9	62.451	7.903	9.62	10.525	19.475	27.29
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-08/10/92	60 ##	0.1	0.179	1.17	0.05	0.038	0.195	0.1	0.1	0.2	0.387
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-06/29/92	11 ##	0.	51.818	250.	0.	9791.364	98.951	0.	0.	35.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-06/29/92	13	40.	30.769	60.	0.	307.692	17.541	4.	15.	40.	56.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-08/10/92	60	20.	29.767	130.	0.	840.521	28.992	0.	10.	40.	79.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-06/29/92	13 ##	0.	3.462	20.	0.	39.103	6.253	0.	0.	7.5	16.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-08/10/92	60 ##	2.5	7.333	40.	0.	107.684	10.377	0.	0.	10.	29.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-08/10/92	60	10.	14.467	100.	0.	426.694	20.657	0.	0.	20.	40.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-08/10/92	60 ##	0.	6.25	90.	0.	183.581	13.549	0.	0.	10.	14.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-08/10/92	60	47.	56.917	300.	10.	2309.501	48.057	21.2	30.	60.	117.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-08/10/92	60	30.	54.433	940.	0.	14879.029	121.98	0.	10.	60.	110.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-08/10/92	60	20.	59.	1970.	10.	63531.186	252.054	10.	10.	30.	69.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-08/10/92	60	10.	18.433	100.	0.	277.199	16.649	5.1	10.	20.	39.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-06/29/92	31 ##	0.	4.355	40.	0.	91.237	9.552	0.	0.	5.	18.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-08/10/92	60 ##	5.	6.783	30.	0.	56.376	7.508	0.	0.	10.	20.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-06/29/92	31 ##	0.	52.581	220.	0.	4786.452	69.184	0.	0.	110.	170.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-06/29/92	31 ##	0.	2.581	30.	0.	46.452	6.816	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-08/10/92	60	9.	10.392	100.	0.	251.831	15.869	0.	0.	10.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-08/10/92	60	150.	433.5	7450.	30.	1218206.186	1103.724	100.	120.	200.	624.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-08/10/92	60	80.	100.583	460.	0.	6350.586	79.691	40.	60.	110.	219.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-06/29/92	31 ##	0.	1.29	20.	0.	18.28	4.275	0.	0.	0.	8.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-06/29/92	31 ##	0.	42.903	190.	0.	3547.957	59.565	0.	0.	80.	140.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-08/10/92	60	2585.	2898.017	20000.	1700.	5177903.813	2275.501	2200.	2400.	2887.5	3100.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-08/10/92	60	10.	11.017	150.	0.	443.542	21.06	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-08/10/92	58	94.5	112.121	291.	56.	2021.511	44.961	71.	77.	139.75	175.3
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-08/10/92	60 ##	0.15	0.222	1.05	0.15	0.044	0.209	0.15	0.15	0.15	0.559
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-06/29/92	30 ##	0.	6.5	100.	0.	407.155	20.178	0.	0.	0.	34.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-08/10/92	60	0.125	0.353	6.39	0.02	0.831	0.912	0.07	0.09	0.19	0.421
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-08/10/92	60	6.	22.433	200.	0.	2356.555	48.544	3.1	4.	11.	40.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-08/10/92	60 ##	100.	96.667	100.	50.	158.192	12.577	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0036

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00403	PH, LAB	Fresh Chronic	9.	36	0	0.00	13	0	0.00	6	0	0.00	4	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	36	0	0.00	13	0	0.00	6	0	0.00	4	0	0.00	13	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
		Other-Lo Lim.	6.5	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
		Drinking Water	250.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	11	0	0.00	4	0	0.00	3	0	0.00				4	0	0.00
		Drinking Water	50.	9 &	0	0.00	4	0	0.00	3	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	13	0	0.00	6	0	0.00	3	0	0.00				4	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12 &	3	0.25	6	2	0.33	3	1	0.33				3	0	0.00
		Drinking Water	5.	12 &	3	0.25	6	2	0.33	3	1	0.33				3	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0036

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	59 &	3	0.05	22	2	0.09	15	0	0.00	8	1	0.13	14	0	0.00
		Drinking Water	1300.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	60	8	0.13	23	4	0.17	15	1	0.07	8	1	0.13	14	2	0.14
		Drinking Water	15.	56 &	37	0.66	20	14	0.70	15	10	0.67	7	5	0.71	14	8	0.57
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
		Drinking Water	100.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
		Drinking Water	5000.	60	0	0.00	23	0	0.00	15	0	0.00	8	0	0.00	14	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	26 &	0	0.00	10	0	0.00	10	0	0.00	4	0	0.00	2	0	0.00
		Drinking Water	2.	26 &	0	0.00	10	0	0.00	10	0	0.00	4	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	60	5	0.08	23	4	0.17	15	1	0.07	8	0	0.00	14	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0037

NPS Station ID: CUGA0037 LAT/LON: 36.590753/ -83.674866 Agency: 11NPSWRD Date Created: 09/20/97
Location: GAP CREEK:0.3 MILES UPSTREAM FROM PARK BOUNDARY FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_GC7
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 06010206 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1300 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 06010206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON GAP CREEK DOWNSTREAM OF CUNHP 25-E CONSTRUCTION LIMITS AND NEAR THE RAILROAD BRIDGE. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	181	13.5	13.799	21.4	6.5	10.366	3.22	10.1	11.2	16.65	18.18
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	160	4.	7.728	132.	0.	213.421	14.609	0.51	1.	8.	18.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	181	10.	45.5	1430.	2.5	21000.369	144.915	5.	5.	30.	64.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	181	199.	220.834	470.	16.	6301.95	79.385	141.2	165.	274.5	331.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	181	0.	0.155	1.	0.	0.131	0.363	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	181	8.8	8.636	11.5	1.8	2.067	1.438	6.92	8.1	9.4	10.2
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	153	7.9	7.855	8.3	6.6	0.045	0.212	7.7	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	153	7.9	7.773	8.3	6.6	0.052	0.227	7.7	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	153	0.013	0.017	0.251	0.005	0.	0.022	0.008	0.01	0.016	0.02
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	181	7.7	7.736	9.1	6.5	0.068	0.261	7.5	7.6	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	181	7.7	7.637	9.1	6.5	0.078	0.279	7.5	7.6	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	181	0.02	0.023	0.316	0.001	0.001	0.028	0.01	0.013	0.025	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	181	76.	85.729	185.	23.	793.499	28.169	57.2	64.5	110.	130.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	181 ##	0.05	0.057	0.5	0.05	0.003	0.058	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	129	48.	52.915	113.	0.	361.985	19.026	34.	38.5	67.5	79.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	181	5.	19.345	387.	0.	2256.662	47.504	2.	3.	14.	39.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	81 ##	0.01	0.766	21.	0.	6.964	2.639	0.	0.005	0.225	1.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	181 ##	0.01	0.031	1.	0.01	0.013	0.114	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	181	1.1	1.449	15.	0.	2.287	1.512	0.262	0.475	1.9	2.784
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	181 ##	0.05	0.153	1.56	0.	0.051	0.226	0.05	0.05	0.16	0.399
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	27	1.9	5.333	28.7	0.	55.127	7.425	0.	1.1	6.8	16.
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	181	95.	104.641	220.	34.	1186.565	34.447	69.2	79.	130.	157.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	181	30.9	33.232	63.	17.4	94.349	9.713	22.84	25.55	39.65	47.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	181	4.4	5.223	13.	2.2	5.559	2.358	3.	3.5	6.55	8.98
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	181	3.1	3.754	10.	0.85	4.072	2.018	1.802	2.3	4.9	7.058
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	181	1.3	1.69	8.	0.05	1.266	1.125	0.884	1.085	2.	2.898
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	181	4.	4.744	36.	0.05	11.717	3.423	2.	3.	6.	8.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	181	15.	18.407	68.	9.	96.15	9.806	10.92	13.	20.	28.88
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	178 ##	0.1	0.137	1.13	0.05	0.023	0.152	0.05	0.05	0.2	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	47.419	250.	0.	3424.785	58.522	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	20.	26.658	80.	0.	296.772	17.227	5.	18.75	40.	50.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	2 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	178	10.	18.225	294.	0.	845.102	29.071	5.	5.	20.	40.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	35 ##	5.	3.571	10.	0.	8.193	2.862	0.	0.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	181 ##	5.	5.718	80.	0.	57.237	7.566	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	97 ##	5.	10.134	80.	0.	226.492	15.05	0.	0.	10.	30.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	181 ##	5.	5.972	50.	0.	51.638	7.186	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	181	34.	53.691	480.	5.	4113.493	64.137	10.4	20.	60.	111.8
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	181 ##	50.	44.669	170.	0.	499.39	22.347	16.	30.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	181	20.	28.249	270.	5.	1494.521	38.659	5.	10.	30.	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	181	10.	12.436	80.	4.	132.836	11.525	5.	5.	13.	25.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	5.	21.389	90.	0.	618.318	24.866	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	180 ##	5.	5.678	30.	0.	24.421	4.942	0.	5.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39 ##	0.	64.256	240.	0.	5536.038	74.405	0.	0.	120.	160.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	54 ##	0.	5.	30.	0.	66.981	8.184	0.	0.	5.	15.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	181	10.	14.566	120.	0.	321.39	17.927	0.	5.	20.	40.
01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	2 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	181	120.	292.05	11760.	5.	944645.414	971.929	20.	56.	232.	426.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	181	31.	61.901	570.	5.	6962.779	83.443	5.	5.	90.	148.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	6.579	50.	0.	239.331	15.47	0.	0.	2.5	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	10.	43.158	190.	0.	2973.542	54.53	0.	0.	72.5	131.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	97	2700.	2933.722	20000.	1700.	3265100.807	1806.959	2298.	2500.	3005.	3520.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	178 ##	5.	6.197	40.	0.	38.17	6.178	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	175	107.	119.023	292.	11.	1994.367	44.658	76.	87.	143.	183.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	178 ##	0.15	0.172	1.05	0.15	0.014	0.118	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	22.547	100.	0.	694.829	26.36	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	181	0.13	0.265	3.58	0.005	0.189	0.435	0.07	0.1	0.24	0.508
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	165	7.	21.794	200.	0.	1591.872	39.898	3.6	5.	16.5	49.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	178 ##	50.	66.124	100.	10.	589.973	24.289	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0037

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	181	3	0.02	63	0	0.00	44	0	0.00	33	3	0.09	41	0	0.00
00403	PH, LAB	Fresh Chronic	9.	153	0	0.00	51	0	0.00	35	0	0.00	27	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	153	0	0.00	51	0	0.00	35	0	0.00	27	0	0.00	40	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	181	1	0.01	63	0	0.00	44	1	0.02	33	0	0.00	41	0	0.00
		Other-Lo Lim.	6.5	181	1	0.01	63	1	0.02	44	0	0.00	33	0	0.00	41	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	181	1	0.01	63	0	0.00	44	0	0.00	33	0	0.00	41	1	0.02
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	181	1	0.01	63	0	0.00	44	1	0.02	33	0	0.00	41	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	0	0.00							2	0	0.00			
		Drinking Water	0.2	2	0	0.00							2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
		Drinking Water	250.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	178	0	0.00	63	0	0.00	43	0	0.00	31	0	0.00	41	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0037

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	0	0.00	5	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00							2	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	14 &	2	0.14	7	2	0.29	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	5.	14 &	2	0.14	7	2	0.29	3	0	0.00	1	0	0.00	3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	177 &	7	0.04	60	4	0.07	43	2	0.05	33	0	0.00	41	1	0.02
		Drinking Water	1300.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	181	5	0.03	63	2	0.03	44	1	0.02	33	1	0.03	41	1	0.02
		Drinking Water	15.	59 &	42	0.71	20	18	0.90	16	12	0.75	10	7	0.70	13	5	0.38
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	180	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	40	0	0.00
		Drinking Water	100.	180	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	40	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	2	0	0.00							2	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	181	1	0.01	63	0	0.00	44	0	0.00	33	0	0.00	41	1	0.02
		Drinking Water	5000.	181	0	0.00	63	0	0.00	44	0	0.00	33	0	0.00	41	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00							2	0	0.00			
		Drinking Water	50.	2	0	0.00							2	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	165	16	0.10	61	7	0.11	37	4	0.11	30	4	0.13	37	1	0.03

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	17	16.1	15.182	19.1	8.7	11.568	3.401	9.58	12.	18.1	18.62
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	17	2.	11.153	132.	0.	999.169	31.61	0.	0.95	5.	44.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	17	37.	56.059	234.	7.	3611.559	60.096	15.	25.	54.5	194.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	17	252.	244.	332.	122.	3748.125	61.222	155.6	181.	289.	326.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	17	8.8	9.182	10.6	8.2	0.665	0.816	8.28	8.55	10.2	10.44
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	17	7.7	7.741	8.	7.5	0.018	0.133	7.5	7.7	7.8	7.92
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	17	7.7	7.722	8.	7.5	0.018	0.134	7.5	7.7	7.8	7.92
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	17	0.02	0.019	0.032	0.01	0.	0.006	0.012	0.016	0.02	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	17	98.	95.588	126.	45.	591.257	24.316	55.4	82.5	117.	125.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	59.	53.765	76.	0.	392.566	19.813	21.6	41.	66.5	75.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	17	5.	18.882	213.	1.	2562.235	50.619	1.	2.	10.	69.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	17 ##	0.01	0.438	6.3	0.	2.34	1.53	0.008	0.01	0.01	2.06
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	17	0.4	0.524	1.4	0.2	0.084	0.291	0.28	0.3	0.65	1.
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	17	0.21	0.241	0.61	0.	0.039	0.198	0.	0.07	0.37	0.594
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17	117.	111.588	151.	53.	854.257	29.228	63.4	91.5	135.	147.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	17	37.9	35.	46.7	17.4	76.783	8.763	20.2	29.2	41.95	43.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	17	5.5	5.729	9.	2.2	3.431	1.852	3.	4.35	7.1	8.36
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	17	4.2	4.502	8.3	0.85	4.467	2.113	1.65	3.005	6.015	7.948
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	17	1.76	1.965	4.68	1.	0.789	0.888	1.088	1.415	2.2	3.296
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	17	5.	5.235	10.	1.	7.316	2.705	1.8	3.	7.	10.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	17	18.5	17.976	35.	9.	35.312	5.942	11.56	13.75	20.75	26.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	17 ##	0.1	0.291	1.13	0.1	0.095	0.307	0.1	0.1	0.465	0.922
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	17	20.	22.353	70.	10.	231.618	15.219	10.	10.	30.	46.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	17 ##	0.	4.706	10.	0.	26.471	5.145	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	17 ##	0.	3.529	10.	0.	24.265	4.926	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	17 ##	0.	8.529	40.	0.	136.765	11.695	0.	0.	15.	28.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	17	60.	68.824	260.	40.	2648.529	51.464	40.	40.	70.	124.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	17	30.	37.059	120.	0.	897.059	29.951	8.	10.	60.	80.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	17	20.	31.176	180.	10.	1511.029	38.872	10.	20.	30.	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	17	10.	17.647	80.	10.	281.618	16.781	10.	10.	20.	32.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	17 ##	0.	4.118	10.	0.	25.735	5.073	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	17	10.	7.059	20.	0.	34.559	5.879	0.	0.	10.	12.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	17	180.	281.765	1410.	120.	90327.941	300.546	160.	175.	240.	650.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	17	80.	93.529	300.	40.	4049.265	63.634	48.	50.	115.	196.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	17	2570.	2595.294	3350.	1880.	144263.971	379.821	2080.	2310.	2860.	3134.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	17	10.	8.824	30.	0.	98.529	9.926	0.	0.	20.	22.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	17	124.	121.176	165.	57.	988.529	31.441	71.4	98.	148.	161.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	17 ##	0.15	0.339	1.05	0.15	0.102	0.319	0.15	0.15	0.455	0.962
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	17	0.21	0.27	1.38	0.12	0.086	0.293	0.128	0.145	0.245	0.572
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	17	7.	21.412	200.	0.	2218.882	47.105	3.2	5.	14.5	76.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	30	13.45	13.483	18.7	7.4	9.39	3.064	9.23	10.8	15.85	18.01
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	30	3.	7.76	53.	0.	123.796	11.126	0.	0.975	13.25	18.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	30	65.5	190.3	1430.	11.	100890.424	317.633	14.5	29.75	160.5	636.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	30	168.	214.667	350.	138.	6269.609	79.181	141.	151.75	313.5	339.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	30	0.	0.167	1.	0.	0.144	0.379	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	30	9.65	9.537	11.5	7.2	0.977	0.988	8.41	8.775	10.2	10.78
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	20	8.	7.995	8.2	7.8	0.012	0.11	7.9	7.9	8.1	8.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	20	8.	7.982	8.2	7.8	0.012	0.111	7.9	7.9	8.1	8.19
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	20	0.01	0.01	0.016	0.006	0.	0.003	0.006	0.008	0.013	0.013
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	30	7.7	7.72	9.1	7.3	0.096	0.31	7.5	7.5	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	30	7.7	7.654	9.1	7.3	0.101	0.317	7.5	7.5	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	30	0.02	0.022	0.05	0.001	0.	0.01	0.013	0.016	0.032	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	30	68.5	88.767	144.	47.	1176.875	34.306	58.	60.	127.75	140.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	41.5	54.167	88.	29.	435.868	20.877	35.	37.	78.	85.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	30	11.	34.467	387.	0.	5537.016	74.411	2.	4.	29.75	123.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	30 ##	0.01	0.711	7.8	0.	3.123	1.767	0.01	0.01	0.01	2.95
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	30 ##	0.01	0.022	0.38	0.01	0.005	0.068	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	30	0.28	0.385	1.45	0.	0.088	0.297	0.161	0.2	0.495	0.794
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	30	0.26	0.44	1.56	0.01	0.147	0.383	0.074	0.13	0.737	0.928
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30	79.5	102.3	172.	61.	1531.252	39.131	65.	70.75	145.75	163.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	30	26.2	32.167	51.5	19.2	125.754	11.214	20.95	22.95	46.025	48.88
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	30	3.4	5.1	10.3	2.5	8.181	2.86	2.51	2.975	8.375	9.99
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	30	2.53	3.493	8.37	1.33	5.188	2.278	1.416	1.64	4.833	7.715
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	30	1.27	1.651	3.	0.76	0.517	0.719	0.913	1.035	2.333	2.609
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	30	3.	3.8	8.	1.	4.579	2.14	2.	2.	6.	7.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	30	13.7	16.433	29.8	9.4	48.249	6.946	9.7	10.5	23.025	27.78
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	30 ##	0.1	0.196	0.68	0.1	0.031	0.176	0.1	0.1	0.205	0.587
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	30	30.	40.667	140.	0.	1130.575	33.624	10.	17.5	70.	89.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	30 ##	2.5	9.667	80.	0.	298.161	17.267	0.	0.	10.	29.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	30	10.	17.833	80.	0.	461.523	21.483	0.	0.	30.	50.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	30 ##	5.	6.167	30.	0.	61.523	7.844	0.	0.	10.	19.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	30	55.	85.333	380.	30.	7570.575	87.009	40.	47.5	70.	249.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	30	45.	47.167	170.	0.	1752.902	41.868	0.5	20.	60.	89.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	30	30.	42.667	240.	10.	2889.195	53.751	10.	20.	32.5	135.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	30	10.	15.333	40.	10.	67.126	8.193	10.	10.	20.	30.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	30	10.	9.	30.	0.	85.172	9.229	0.	0.	10.	29.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	30	10.	14.	120.	0.	530.	23.022	0.	0.	11.25	39.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	30	290.	940.	11760.	110.	5026579.31	2242.003	122.	177.5	457.5	3410.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	30	110.	147.	570.	50.	14276.897	119.486	61.	90.	150.	322.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	30	2630.	2597.333	3600.	1700.	136723.678	369.762	2036.	2400.	2825.	3000.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	30 ##	0.	7.333	30.	0.	89.195	9.444	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	30	85.5	110.2	181.	68.	1769.476	42.065	71.	76.5	161.75	174.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	30 ##	0.15	0.175	0.69	0.15	0.011	0.105	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	30	0.26	0.561	3.58	0.07	0.738	0.859	0.102	0.15	0.365	2.387
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	30	20.5	41.733	200.	3.	3215.995	56.71	4.1	8.	40.5	145.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	30 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	28	12.6	13.814	19.9	6.5	12.72	3.566	9.98	11.2	16.925	19.32
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	27	5.	7.037	35.	1.	47.883	6.92	1.	3.	9.	15.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	28	14.5	20.036	40.	5.	146.999	12.124	9.5	10.	30.75	39.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	28	202.5	211.5	400.	84.	5148.111	71.75	132.8	160.5	244.75	325.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	28	8.85	8.954	11.5	6.8	0.991	0.995	7.74	8.5	9.35	10.3
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	28	7.9	7.918	8.3	7.5	0.033	0.183	7.7	7.8	8.	8.21
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	28	7.9	7.882	8.3	7.5	0.035	0.186	7.7	7.8	8.	8.21
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	28	0.013	0.013	0.032	0.005	0.	0.005	0.006	0.01	0.016	0.02
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	28	7.8	7.754	8.4	6.7	0.111	0.334	7.29	7.625	7.9	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	28	7.8	7.588	8.4	6.7	0.14	0.374	7.29	7.625	7.9	8.2

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Annual Analysis for 1992 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	28	0.016	0.026	0.2	0.004	0.001	0.036	0.006	0.013	0.024	0.051
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	28	80.	87.071	185.	60.	692.513	26.316	62.	70.	101.25	120.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	49.	53.185	113.	37.	265.618	16.298	38.	43.	63.	73.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	28	4.	12.975	123.	0.	775.749	27.852	0.09	2.	5.75	42.9
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	20	0.45	1.587	21.	0.	21.35	4.621	0.	0.	1.1	2.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	28 ##	0.01	0.036	0.4	0.01	0.009	0.097	0.01	0.01	0.01	0.045
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	28	0.555	0.796	3.95	0.01	0.643	0.802	0.269	0.385	0.86	1.757
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	28	0.05	0.103	0.56	0.	0.022	0.148	0.018	0.025	0.101	0.415
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28	93.	101.429	164.	66.	882.254	29.703	70.8	77.25	124.5	152.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	28	29.75	31.939	50.	21.5	71.908	8.48	23.3	24.525	39.175	46.17
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	28	4.35	5.204	10.2	2.9	4.729	2.175	3.08	3.55	6.55	9.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	28	2.635	3.285	7.6	1.48	2.737	1.654	1.818	2.02	4.25	6.135
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	28	1.32	2.144	8.	1.02	2.859	1.691	1.048	1.2	2.48	4.854
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	28	3.	3.057	8.	0.6	2.506	1.583	1.9	2.	4.	5.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	28	14.75	19.882	61.6	10.2	193.157	13.898	10.59	11.275	19.825	45.34
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	28 ##	0.1	0.121	0.5	0.05	0.011	0.106	0.05	0.05	0.1	0.3
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	28	10.	16.536	60.	0.	272.11	16.496	0.	5.	22.	44.6
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	28 ##	5.	4.643	20.	0.	23.794	4.878	0.	0.25	5.	7.4
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	28 ##	5.	8.5	50.	0.	146.556	12.106	0.	2.75	5.	31.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	28 ##	5.	3.964	30.	0.	33.739	5.809	0.	0.	5.	5.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	28	30.5	63.964	480.	10.	9553.147	97.74	20.	25.5	47.5	163.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	28 ##	25.	26.429	90.	0.	414.921	20.37	6.3	13.25	25.	62.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	28	10.	28.107	160.	5.	1336.47	36.558	5.	10.	27.5	90.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	28	10.	14.964	60.	4.	192.036	13.858	5.	5.	20.	32.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	28 ##	5.	5.429	25.	0.	38.847	6.233	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	28	10.	10.482	40.	0.	93.805	9.685	0.	5.	18.25	21.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	28	155.	250.893	1800.	5.	142320.47	377.254	5.	55.	240.	540.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	28	49.5	62.607	350.	5.	6669.581	81.668	5.	5.	87.5	144.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	28	2700.	3422.536	20000.	2200.	10740924.48	3277.335	2300.	2510.	3100.	3744.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	28 ##	5.	7.607	40.	0.	82.247	9.069	0.	5.	8.75	21.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	22	93.	122.955	292.	73.	4200.712	64.813	74.9	81.25	165.5	246.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	28 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	28	0.135	0.307	1.4	0.09	0.126	0.354	0.1	0.11	0.348	0.899
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	28	7.	24.357	200.	3.	2101.201	45.839	3.9	6.	9.75	98.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	25	12.9	13.8	21.4	9.8	11.853	3.443	10.12	10.85	16.75	19.48
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	20	2.5	6.575	30.	0.5	72.809	8.533	0.51	0.725	9.5	24.1
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	25	10.	13.8	40.	5.	73.5	8.573	5.	10.	15.	29.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	25	180.	237.48	453.	18.	12407.427	111.389	127.8	161.5	343.	403.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	25	0.	0.08	1.	0.	0.077	0.277	0.	0.	0.	0.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	25	8.4	8.24	10.	6.5	0.765	0.875	7.06	7.5	8.7	9.44
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	25	7.9	7.852	8.1	7.	0.052	0.228	7.56	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	25	7.9	7.765	8.1	7.	0.06	0.244	7.56	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	25	0.013	0.017	0.1	0.008	0.	0.018	0.008	0.01	0.016	0.028
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	25	7.8	7.74	8.1	6.5	0.091	0.301	7.5	7.7	7.9	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	25	7.8	7.535	8.1	6.5	0.135	0.367	7.5	7.7	7.9	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	25	0.016	0.029	0.316	0.008	0.004	0.06	0.01	0.013	0.02	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	25	73.	87.36	140.	23.	1187.323	34.458	50.6	60.	125.	130.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	25	45.	54.48	104.	14.	524.427	22.9	31.	36.5	79.	81.4

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Annual Analysis for 1993 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	25	6.	25.56	381.	3.	5626.257	75.008	3.6	4.5	11.5	46.4
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	3 ##	0.	0.5	1.5	0.	0.75	0.866	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	25 ##	0.01	0.118	1.	0.01	0.071	0.266	0.01	0.01	0.01	0.644
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	25	2.	2.514	6.	0.24	1.719	1.311	1.2	1.75	3.45	4.52
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	25 ##	0.05	0.096	0.3	0.05	0.005	0.073	0.05	0.05	0.15	0.2
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25	95.	119.32	220.	62.	2548.81	50.486	74.6	80.5	160.	204.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	25	30.2	36.852	63.	20.	188.416	13.726	24.46	26.	49.3	58.76
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	25	4.4	6.12	13.	2.9	10.106	3.179	3.22	3.6	8.65	12.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	25	2.8	4.416	10.	1.4	8.321	2.885	1.86	2.4	7.35	9.48
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	25	1.2	1.736	5.	0.8	0.989	0.995	0.9	1.	2.35	3.06
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	25	4.	5.282	13.	0.05	10.105	3.179	2.	3.	8.	10.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	25	18.	23.36	68.	11.	187.157	13.681	12.6	15.	27.	45.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	25	0.1	0.144	0.3	0.05	0.011	0.106	0.05	0.05	0.25	0.3
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	25 ##	5.	13.	30.	5.	112.5	10.607	5.	5.	25.	30.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	22 ##	5.	6.818	40.	5.	56.061	7.487	5.	5.	5.	8.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	25 ##	5.	5.8	20.	5.	9.75	3.122	5.	5.	5.	7.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	25	30.	41.8	170.	5.	1331.	36.483	16.	20.	50.	104.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	25	10.	28.6	270.	5.	2776.083	52.689	5.	10.	20.	58.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	25 ##	5.	12.8	70.	5.	281.417	16.775	5.	5.	10.	42.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	25 ##	5.	5.2	10.	5.	1.	1.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	25 ##	5.	14.6	50.	5.	191.5	13.838	5.	5.	20.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	25	100.	154.2	1100.	5.	47445.167	217.819	30.	55.	140.	368.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	25 ##	5.	30.6	280.	5.	3879.833	62.288	5.	5.	20.	118.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	22	2800.	3031.818	3700.	2400.	234653.68	484.411	2500.	2600.	3525.	3670.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	25 ##	5.	5.2	10.	5.	1.	1.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	25	99.	134.68	255.	79.	3142.56	56.059	86.2	89.5	182.	221.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	25	0.12	0.207	1.5	0.02	0.087	0.294	0.052	0.075	0.215	0.424
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	21	5.	17.619	200.	3.	1859.648	43.124	3.2	4.5	8.	45.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	30	12.65	13.207	20.2	7.5	9.154	3.026	9.14	11.225	15.425	17.
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	23	2.	5.848	21.	0.3	46.124	6.791	0.48	0.9	10.	19.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	30	10.	8.75	30.	2.5	38.254	6.185	2.5	2.5	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	30	197.	206.467	339.	16.	5584.878	74.732	140.2	162.5	257.	312.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	30	7.35	7.15	10.	1.8	4.475	2.115	3.82	5.9	8.925	9.29
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	29	7.8	7.824	8.	7.3	0.028	0.166	7.5	7.8	7.95	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	29	7.8	7.787	8.	7.3	0.029	0.17	7.5	7.8	7.95	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	29	0.016	0.016	0.05	0.01	0.	0.008	0.01	0.011	0.016	0.032
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	30	7.7	7.74	8.1	7.2	0.052	0.228	7.41	7.6	7.9	8.09
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	30	7.7	7.679	8.1	7.2	0.056	0.237	7.41	7.6	7.9	8.09
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	30	0.02	0.021	0.063	0.008	0.	0.012	0.008	0.013	0.025	0.039
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	30	73.	81.333	130.	32.	702.299	26.501	50.1	61.25	110.	120.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	45.	49.633	79.	20.	257.757	16.055	31.	37.5	67.	73.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	30	6.	14.123	74.	0.7	321.291	17.925	3.	4.	19.25	44.5
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/19/94	11 ##	0.	0.005	0.05	0.	0.	0.015	0.	0.	0.	0.04
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	30	1.4	1.637	4.4	0.58	0.845	0.919	0.763	0.93	2.075	2.79

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	30 ##	0.05	0.06	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30	99.	104.433	170.	34.	1052.254	32.438	68.1	82.25	130.	150.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	30	31.85	33.757	54.	22.	79.089	8.893	22.12	26.8	40.825	45.83
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	30	4.45	5.14	9.7	2.3	4.539	2.131	2.54	3.425	6.925	8.39
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	30	3.15	3.603	8.2	1.3	3.084	1.756	1.45	2.175	4.975	6.17
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	30	1.2	1.723	7.7	0.77	2.145	1.465	0.9	1.075	1.7	3.95
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	30	4.	4.7	14.	2.	6.7	2.588	2.	3.	5.25	8.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	30	16.	17.9	47.	12.	52.438	7.241	12.	13.75	19.25	24.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	30 ##	0.05	0.093	0.3	0.05	0.005	0.068	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	30 ##	5.	9.667	20.	5.	37.816	6.149	5.	5.	12.5	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	30 ##	5.	5.167	10.	5.	0.833	0.913	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	30	30.	53.	170.	10.	2345.862	48.434	20.	20.	67.5	159.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	30	10.	18.333	80.	5.	331.609	18.21	5.	5.	20.	57.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	30 ##	5.	7.833	30.	5.	33.937	5.826	5.	5.	10.	19.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	29 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	30 ##	7.5	15.167	80.	5.	319.799	17.883	5.	5.	20.	49.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	30	60.	123.167	1100.	5.	42192.213	205.407	5.5	20.	125.	297.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	30 ##	5.	38.5	220.	5.	4165.776	64.543	5.	5.	32.5	169.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	30	108.	117.3	197.	68.	1283.252	35.823	71.2	89.75	142.75	169.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	30	0.11	0.184	0.96	0.06	0.032	0.179	0.09	0.098	0.223	0.359
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	24	5.5	14.542	68.	3.	281.998	16.793	3.5	4.	22.75	41.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	25	13.7	14.196	20.5	9.1	11.802	3.435	10.56	11.05	17.2	20.02
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	19	2.	3.611	21.	0.5	24.427	4.942	0.5	0.6	4.	10.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	25	5.	6.5	30.	2.5	36.458	6.038	2.5	5.	5.	14.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	25	222.	246.	470.	96.	6551.583	80.942	170.4	191.	288.	382.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	25	8.8	8.568	10.2	5.9	1.334	1.155	6.48	8.1	9.25	10.04
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	25	7.8	7.812	8.2	7.2	0.041	0.203	7.52	7.75	7.9	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	25	7.8	7.757	8.2	7.2	0.044	0.21	7.52	7.75	7.9	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	25	0.016	0.017	0.063	0.006	0.	0.011	0.009	0.013	0.018	0.031
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	25	7.8	7.792	8.1	7.4	0.027	0.166	7.6	7.7	7.95	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	25	7.8	7.761	8.1	7.4	0.028	0.169	7.6	7.7	7.95	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	25	0.016	0.017	0.04	0.008	0.	0.007	0.01	0.011	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	25	81.	89.68	150.	53.	699.06	26.44	60.2	70.	115.	130.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	25	4.	11.16	101.	1.	419.223	20.475	1.6	2.	11.	26.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	25	2.	2.17	5.1	0.66	1.355	1.164	0.96	1.3	2.65	4.4
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	25 ##	0.05	0.064	0.2	0.05	0.002	0.042	0.05	0.05	0.05	0.14
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25	100.	106.76	200.	78.	781.607	27.957	85.	91.5	110.	160.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	25	32.2	34.376	60.9	25.2	66.545	8.158	27.68	29.85	35.05	50.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	25	4.6	5.396	13.	3.5	4.715	2.171	3.76	4.05	5.5	9.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	25	3.3	3.916	9.7	1.9	3.038	1.743	2.38	2.8	4.75	6.42
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	25	1.2	1.286	3.1	0.05	0.336	0.58	0.696	1.045	1.4	2.12
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	25	4.	6.44	36.	3.	42.173	6.494	3.	4.	6.5	10.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	25	15.	19.44	56.	11.	99.007	9.95	12.6	14.	22.	34.4

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Annual Analysis for 1995 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	25 ##	0.05	0.084	0.3	0.05	0.005	0.072	0.05	0.05	0.05	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	25 ##	5.	17.32	294.	5.	3327.393	57.684	5.	5.	5.	11.6
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	25	28.	36.48	150.	5.	1101.26	33.185	11.2	18.	40.5	81.8
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	25	14.	24.04	154.	5.	880.457	29.672	8.	11.	22.	51.6
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	25 ##	5.	10.48	32.	5.	67.927	8.242	5.	5.	13.	27.4
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	25 ##	5.	11.32	73.	5.	216.227	14.705	5.	5.	10.5	27.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	25	61.	109.	736.	5.	28438.667	168.638	21.2	32.	80.	344.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	25	13.	32.52	131.	5.	1426.177	37.765	5.	5.	50.5	100.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	25	115.	121.8	248.	11.	1911.917	43.725	86.6	98.5	135.	190.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	25	0.11	0.149	0.77	0.05	0.025	0.157	0.062	0.08	0.135	0.324
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	20	6.	8.95	27.	3.	57.418	7.577	3.	3.25	13.25	25.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	22	13.1	13.459	17.9	9.8	7.563	2.75	10.03	11.075	16.225	17.34
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	21	5.	13.214	95.	0.5	447.214	21.147	1.2	3.	14.5	35.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	22	5.	7.614	30.	2.5	40.76	6.384	5.	5.	6.25	18.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	22	197.	197.364	282.	99.	3095.576	55.638	104.1	163.25	251.25	269.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	22	0.	0.136	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	22	9.	8.945	10.5	7.4	0.792	0.89	7.86	8.	9.775	10.17
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	22	7.8	7.736	8.1	6.6	0.085	0.292	7.53	7.7	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	22	7.8	7.557	8.1	6.6	0.119	0.345	7.53	7.7	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	22	0.016	0.028	0.251	0.008	0.003	0.05	0.01	0.013	0.02	0.03
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	22	7.7	7.7	8.1	7.	0.057	0.239	7.36	7.6	7.825	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	22	7.7	7.623	8.1	7.	0.063	0.252	7.36	7.6	7.825	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	22	0.02	0.024	0.1	0.008	0.	0.019	0.01	0.015	0.025	0.045
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	22	68.5	74.045	110.	47.	352.331	18.77	51.9	60.75	91.5	107.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	22 ##	0.05	0.07	0.5	0.05	0.009	0.096	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	22	5.5	15.477	97.	0.5	634.583	25.191	1.3	2.75	20.25	65.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	22 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	22	1.55	2.164	15.	1.	8.397	2.898	1.1	1.2	1.825	2.58
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	22 ##	0.05	0.052	0.1	0.05	0.	0.011	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	22	84.	89.091	130.	63.	354.944	18.84	67.8	73.75	100.25	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	22	26.75	29.1	40.6	21.5	35.905	5.992	22.21	24.2	32.7	39.24
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	22	3.85	4.073	6.3	2.3	1.146	1.07	3.	3.25	4.675	5.88
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	22	3.2	3.382	6.5	1.8	1.645	1.283	1.83	2.3	4.15	5.28
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	22	1.015	1.23	3.9	0.64	0.542	0.736	0.692	0.77	1.35	2.07
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	22	5.	5.364	13.	2.	6.242	2.498	3.	4.	6.	9.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	22	13.5	13.832	23.	9.3	10.118	3.181	10.3	11.	16.	17.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	21 ##	0.05	0.064	0.2	0.05	0.002	0.045	0.05	0.05	0.05	0.17
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	21 ##	5.	5.857	15.	5.	7.429	2.726	5.	5.	5.	11.4
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	22 ##	5.	9.091	50.	5.	175.325	13.241	5.	5.	5.	36.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	22 ##	5.	18.318	112.	5.	619.656	24.893	5.	5.	23.75	51.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	22 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	22	16.	24.227	123.	5.	801.041	28.303	5.	8.75	23.75	69.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	22 ##	5.	8.864	25.	5.	26.79	5.176	5.	5.	12.25	14.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	22 ##	14.5	21.364	66.	5.	360.052	18.975	5.	5.	34.	50.7
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	22	76.5	94.864	344.	5.	6171.838	78.561	14.6	48.5	111.75	224.7
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	22	16.5	25.682	94.	5.	563.846	23.745	5.	11.75	32.	70.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	22	104.	108.727	200.	76.	869.065	29.48	78.1	84.75	128.5	142.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	22	0.095	0.114	0.42	0.005	0.013	0.112	0.005	0.04	0.125	0.35
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	21	6.	14.286	73.	3.	428.314	20.696	3.2	4.5	9.	63.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1997 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	4	13.75	14.025	17.2	11.4	6.749	2.598	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	3	5.	4.	6.	1.	7.	2.646	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	4	15.	18.75	40.	5.	239.583	15.478	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	4	175.5	209.5	323.	164.	5763.	75.914	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	4	0.	0.25	1.	0.	0.25	0.5	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	4	9.6	9.7	10.2	9.4	0.12	0.346	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	4	7.85	7.875	8.	7.8	0.009	0.096	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	4	7.847	7.867	8.	7.8	0.009	0.096	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	4	0.014	0.014	0.016	0.01	0.	0.003	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	4	7.55	7.525	7.9	7.1	0.109	0.33	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	4	7.547	7.43	7.9	7.1	0.121	0.348	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	4	0.028	0.037	0.079	0.013	0.001	0.029	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	4	69.5	74.	99.	58.	311.333	17.645	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	4 ##	0.275	0.275	0.5	0.05	0.068	0.26	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	4	8.5	25.25	80.	4.	1340.917	36.619	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	4	1.15	1.403	2.5	0.81	0.576	0.759	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	4 ##	0.05	0.113	0.3	0.05	0.016	0.125	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	4	89.	97.25	130.	81.	491.583	22.172	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	4	29.2	31.775	40.9	27.8	37.502	6.124	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	4	3.8	4.375	7.2	2.7	3.823	1.955	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	4	3.45	3.85	6.1	2.4	2.51	1.584	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	4	2.25	2.175	2.7	1.5	0.263	0.512	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	4	4.5	4.5	7.	2.	4.333	2.082	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	4	12.5	16.25	29.	11.	72.917	8.539	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	2 ##	0.175	0.175	0.3	0.05	0.031	0.177	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	4	57.5	61.75	111.	21.	1842.25	42.921	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	4	30.	29.25	46.	11.	210.917	14.523	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	4 ##	14.	15.	27.	5.	136.	11.662	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	4 ##	50.	57.5	100.	30.	891.667	29.861	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	4	139.5	121.	186.	19.	5944.667	77.102	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	4 ##	22.	38.25	104.	5.	2178.25	46.672	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	4	98.	108.75	155.	84.	994.25	31.532	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	2 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	4	0.23	0.283	0.63	0.04	0.062	0.249	**	**	**	**

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Annual Analysis for 1997 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	4	9.5	25.	79.	2.	1322.	36.359	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	2 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	63	17.2	16.951	21.4	10.1	4.283	2.07	14.06	15.7	18.2	19.56
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	59	1.	4.108	95.	0.	168.359	12.975	0.5	0.7	3.	5.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	63	10.	29.484	335.	2.5	2924.435	54.078	2.5	5.	30.	65.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	63	280.	284.778	470.	99.	4225.079	65.001	197.4	246.	325.	372.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	63	0.	0.095	1.	0.	0.088	0.296	0.	0.	0.	0.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	63	8.2	7.975	9.6	5.9	0.889	0.943	6.5	7.3	8.7	9.1
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	51	7.9	7.869	8.3	7.5	0.03	0.174	7.62	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	51	7.9	7.834	8.3	7.5	0.031	0.177	7.62	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	51	0.013	0.015	0.032	0.005	0.	0.006	0.008	0.01	0.016	0.024
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	63	7.7	7.629	8.1	6.5	0.08	0.284	7.3	7.5	7.8	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	63	7.7	7.491	8.1	6.5	0.1	0.316	7.3	7.5	7.8	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	63	0.02	0.032	0.316	0.008	0.002	0.045	0.013	0.016	0.032	0.05
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	63	111.	112.381	185.	60.	441.046	21.001	87.8	96.	126.	137.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	63 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	63	5.	15.338	213.	0.1	1066.369	32.655	2.	3.	11.	29.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	63 ##	0.01	0.022	0.4	0.01	0.004	0.065	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	63	1.5	1.702	6.	0.01	1.865	1.366	0.394	0.6	2.5	4.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	63	0.1	0.205	1.56	0.	0.083	0.289	0.025	0.05	0.21	0.62
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	63	130.	132.587	220.	63.	854.343	29.229	98.8	111.	151.	164.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	63	40.5	41.133	60.9	21.5	62.393	7.899	31.88	36.9	46.7	49.92
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	63	6.9	7.087	13.	2.3	4.282	2.069	4.64	5.5	8.6	9.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	63	4.8	5.134	9.9	1.9	3.636	1.907	2.952	3.6	6.4	7.828
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	63	1.9	2.126	8.	0.05	1.716	1.31	0.954	1.3	2.6	3.24
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	63	5.	5.454	10.	0.6	4.829	2.197	3.	4.	7.	9.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	63	18.9	23.014	61.6	9.3	130.101	11.406	13.2	15.5	27.	43.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	63 ##	0.1	0.184	1.13	0.05	0.036	0.19	0.05	0.05	0.23	0.466
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	40.	36.75	50.	15.	98.75	9.937	18.9	28.5	40.	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	63	15.	25.651	294.	5.	1779.908	42.189	5.	5.	30.	50.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	5.	3.75	10.	0.	14.205	3.769	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	63 ##	5.	5.873	50.	0.	42.371	6.509	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	63 ##	5.	7.222	50.	0.	78.047	8.834	0.	5.	5.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	63	40.	46.698	280.	5.	2153.698	46.408	20.	20.	50.	70.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	63 ##	50.	47.54	170.	0.	489.414	22.123	25.	40.	50.	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	63	20.	32.857	180.	5.	1336.157	36.553	5.	10.	30.	82.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	63	10.	15.968	80.	5.	223.322	14.944	5.	5.	20.	30.6
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	5.	13.611	50.	0.	331.781	18.215	0.	0.	25.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	63 ##	5.	6.429	30.	0.	25.346	5.034	2.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	18 ##	0.	6.944	30.	0.	123.938	11.133	0.	0.	10.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	63	10.	18.048	100.	0.	433.433	20.819	0.	5.	22.	47.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	63	100.	178.206	1410.	5.	57300.844	239.376	14.	40.	230.	360.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	63	13.	46.19	300.	5.	3861.028	62.137	5.	5.	80.	126.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	63 ##	5.	6.429	30.	0.	47.926	6.923	0.	5.	5.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	60	150.5	155.533	292.	76.	1708.795	41.338	109.4	128.5	174.	208.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	63 ##	0.15	0.192	1.05	0.15	0.028	0.167	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	63	0.15	0.235	1.38	0.01	0.055	0.235	0.09	0.11	0.27	0.412
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	61	7.	21.131	200.	0.	1562.216	39.525	4.	5.	16.	68.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	63 ##	50.	64.603	100.	10.	641.372	25.325	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	44	11.1	11.159	14.8	8.1	1.775	1.332	9.65	10.325	11.95	12.7
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	38	5.	10.726	132.	0.	476.67	21.833	0.36	1.75	12.5	23.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	44	15.	72.352	1430.	2.5	52849.321	229.89	2.5	6.25	35.	135.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	44	178.	208.886	453.	84.	6696.987	81.835	128.5	164.25	254.5	339.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	44	0.	0.159	1.	0.	0.137	0.37	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	44	9.45	9.559	11.5	7.2	0.775	0.88	8.6	9.	10.2	10.55
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	35	7.8	7.749	8.2	6.6	0.088	0.297	7.36	7.7	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	35	7.8	7.582	8.2	6.6	0.117	0.342	7.36	7.7	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	35	0.016	0.026	0.251	0.006	0.002	0.042	0.01	0.013	0.02	0.044
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	44	7.7	7.773	9.1	7.3	0.063	0.251	7.55	7.7	7.8	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	44	7.7	7.726	9.1	7.3	0.065	0.255	7.55	7.7	7.8	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	44	0.02	0.019	0.05	0.001	0.	0.008	0.01	0.016	0.02	0.028
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	44	70.5	77.295	144.	32.	749.934	27.385	52.	58.25	84.75	125.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	44 ##	0.05	0.06	0.5	0.05	0.005	0.068	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	44	5.5	26.818	387.	1.	3981.687	63.101	2.	4.	16.75	75.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	44 ##	0.01	0.018	0.38	0.01	0.003	0.056	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	44	0.975	1.632	15.	0.	5.506	2.346	0.265	0.408	1.9	3.345
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	44 ##	0.05	0.109	0.7	0.	0.019	0.137	0.05	0.05	0.108	0.245
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	44	84.5	98.841	210.	53.	1465.207	38.278	65.5	72.	100.	165.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	44	27.	31.125	63.	17.4	123.039	11.092	20.9	23.3	32.5	50.35
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	44	4.1	5.095	13.	2.2	6.926	2.632	2.95	3.25	5.275	9.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	44	2.54	3.494	10.	0.85	5.138	2.267	1.565	1.94	4.275	8.135
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	44	1.4	1.931	7.7	0.83	1.782	1.335	1.005	1.133	2.283	4.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	44	3.	4.432	14.	1.	9.786	3.128	2.	2.25	6.	9.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	44	17.	20.252	68.	9.	122.011	11.046	11.75	14.025	21.75	32.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	43 ##	0.1	0.139	0.87	0.05	0.026	0.162	0.05	0.05	0.1	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	38.571	50.	0.	339.286	18.42	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	20.	18.875	30.	5.	64.411	8.026	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	43	10.	15.977	70.	0.	258.595	16.081	5.	5.	22.	36.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	2.857	5.	0.	7.143	2.673	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	44 ##	5.	6.364	80.	0.	142.283	11.928	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	44 ##	5.	6.25	50.	0.	73.401	8.567	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	44	50.	68.818	380.	5.	5356.059	73.185	20.	30.	70.	137.5
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	44 ##	50.	40.795	120.	0.	395.283	19.882	15.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	44	20.	31.955	240.	5.	1814.556	42.598	5.	10.	30.	74.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	44	10.	12.5	40.	5.	65.093	8.068	5.	5.	19.5	23.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	0.	20.714	90.	0.	930.22	30.5	0.	0.	50.	70.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	44 ##	5.	4.318	10.	0.	8.827	2.971	0.	1.25	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	0.	3.929	30.	0.	66.071	8.128	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	44 ##	5.	11.068	50.	0.	162.018	12.729	0.	5.	10.	35.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	44	130.	548.545	11760.	5.	3348211.323	1829.812	12.5	56.	250.	640.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	44	33.5	74.273	570.	5.	12919.877	113.666	5.	5.	112.5	150.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	43 ##	5.	5.93	20.	0.	22.924	4.788	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	41	101.	111.805	255.	57.	2008.511	44.816	71.8	79.5	127.	188.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	43 ##	0.15	0.18	0.92	0.15	0.017	0.129	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	0.	14.286	50.	0.	549.451	23.44	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	44	0.14	0.348	2.81	0.05	0.335	0.578	0.07	0.093	0.3	0.92
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	37	7.	26.216	200.	3.	2350.452	48.481	3.	5.	27.5	69.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	43 ##	50.	68.605	100.	50.	598.007	24.454	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	33	11.	10.733	15.	6.5	2.812	1.677	7.86	10.2	11.55	12.56
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	26	9.5	12.538	53.	0.	141.298	11.887	2.1	4.	15.5	30.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	33	15.	71.621	942.	2.5	37420.25	193.443	3.5	5.	37.	173.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	33	165.	168.879	251.	65.	1473.985	38.393	127.8	146.	195.	221.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	33	0.	0.333	1.	0.	0.229	0.479	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	33	9.1	8.503	11.5	1.8	5.825	2.414	4.18	8.45	10.	10.52
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	27	7.9	7.859	8.2	7.2	0.037	0.193	7.66	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	27	7.9	7.807	8.2	7.2	0.04	0.2	7.66	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	27	0.013	0.016	0.063	0.006	0.	0.011	0.008	0.01	0.016	0.022
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	33	7.7	7.724	8.1	7.1	0.042	0.205	7.5	7.6	7.8	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	33	7.7	7.673	8.1	7.1	0.045	0.211	7.5	7.6	7.8	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	33	0.02	0.021	0.079	0.008	0.	0.013	0.01	0.016	0.025	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	33	62.	62.758	78.	46.	77.752	8.818	48.2	58.5	70.	74.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	33 ##	0.05	0.077	0.5	0.05	0.012	0.109	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	33	7.	30.864	381.	0.	4694.364	68.515	1.4	2.5	32.	72.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	33 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	33	1.1	1.143	3.4	0.1	0.633	0.795	0.182	0.385	1.65	2.248
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	33 ##	0.05	0.108	0.56	0.	0.018	0.134	0.05	0.05	0.09	0.336
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	33	81.	80.121	100.	61.	119.672	10.939	66.	71.	90.5	94.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	33	26.8	26.315	33.1	19.2	13.585	3.686	21.58	23.4	29.55	31.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	33	3.4	3.43	4.5	2.5	0.325	0.57	2.64	2.95	3.9	4.36
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	33	2.5	2.892	6.5	1.33	1.728	1.315	1.438	2.17	3.4	5.26
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	33	1.1	1.196	2.7	0.68	0.157	0.396	0.832	1.	1.2	1.8
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	33	4.	4.668	10.	0.05	7.09	2.663	2.	2.5	5.5	9.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	33	13.3	13.882	27.	9.7	11.739	3.426	10.2	11.35	15.5	17.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	31 ##	0.1	0.121	0.59	0.05	0.012	0.109	0.05	0.05	0.2	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	24.	80.	5.	472.75	21.743	5.	15.	20.5	80.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	31 ##	5.	10.645	60.	0.	164.57	12.828	5.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	4.375	5.	0.	3.125	1.768	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	33 ##	5.	5.	20.	0.	20.313	4.507	0.	5.	5.	8.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	33 ##	5.	3.939	10.	0.	5.871	2.423	0.	2.5	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	33	31.	63.121	260.	5.	4412.735	66.428	5.	19.	110.	166.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	33 ##	50.	46.818	90.	0.	302.841	17.402	14.	50.	50.	56.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	33	11.	31.03	270.	5.	2959.655	54.403	5.	10.	28.	66.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	33 ##	5.	10.	70.	5.	135.938	11.659	5.	5.	10.	20.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	50.	30.769	50.	0.	641.026	25.318	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	33 ##	5.	5.152	20.	0.	21.07	4.59	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	5.	3.077	10.	0.	10.577	3.252	0.	0.	5.	8.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	33 ##	10.	12.091	50.	0.	161.773	12.719	2.	5.	15.	33.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	33	180.	377.576	4050.	5.	534732.939	731.254	7.4	65.	305.	1088.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	33	60.	88.182	330.	5.	7983.091	89.348	5.	14.5	145.	238.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	31 ##	5.	6.129	20.	0.	21.183	4.602	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	33	90.	93.424	200.	71.	532.752	23.081	71.8	78.5	98.	113.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	50.	26.923	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	33	0.14	0.364	3.58	0.005	0.446	0.668	0.044	0.085	0.26	1.044
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	30	10.5	31.933	200.	2.	2362.409	48.605	3.1	4.75	36.75	138.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	31 ##	50.	66.129	100.	50.	564.516	23.76	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	41	13.9	14.259	19.9	9.8	4.567	2.137	11.76	12.85	15.6	17.16
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	37	5.	7.041	21.	0.	35.172	5.931	1.8	3.	9.	18.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	41	10.	20.268	144.	5.	806.951	28.407	5.	5.	26.5	43.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	41	177.	177.22	293.	16.	2657.826	51.554	118.6	157.	203.5	233.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	41	8.8	8.771	10.5	6.1	0.77	0.878	7.6	8.55	9.2	9.78

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	04/10/91-09/24/97	40	7.9	7.928	8.3	7.7	0.019	0.138	7.8	7.8	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-09/24/97	40	7.9	7.907	8.3	7.7	0.019	0.139	7.8	7.8	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-09/24/97	40	0.013	0.012	0.02	0.005	0.	0.004	0.008	0.01	0.016	0.016
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	41	7.9	7.873	8.4	7.5	0.042	0.204	7.6	7.7	8.	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	41	7.9	7.828	8.4	7.5	0.044	0.209	7.6	7.7	8.	8.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	41	0.013	0.015	0.032	0.004	0.	0.007	0.008	0.01	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	41	72.	72.317	110.	23.	202.022	14.213	60.2	65.	80.5	89.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	41	5.	8.212	74.	0.	143.086	11.962	1.	3.5	9.	17.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	41 ##	0.01	0.076	1.	0.01	0.045	0.213	0.01	0.01	0.01	0.37
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	41	1.	1.109	3.7	0.18	0.644	0.803	0.252	0.435	1.65	2.24
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	41 ##	0.05	0.154	0.91	0.	0.057	0.239	0.05	0.05	0.1	0.534
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	41	87.	87.659	140.	34.	285.78	16.905	72.	78.	100.	109.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	41	28.9	28.92	45.2	22.	22.98	4.794	23.46	25.5	32.1	35.42
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	41	3.8	3.937	7.1	2.3	0.831	0.912	2.94	3.3	4.5	4.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	41	2.4	2.607	5.4	1.3	0.752	0.867	1.656	1.96	3.3	3.82
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	41	1.1	1.16	2.4	0.72	0.142	0.377	0.782	0.9	1.24	1.78
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	41	3.	4.049	36.	1.	27.648	5.258	2.	2.	4.	5.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	41	12.2	12.988	22.	9.4	6.293	2.509	10.34	11.	15.	16.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	41 ##	0.05	0.076	0.3	0.05	0.002	0.043	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	22.778	70.	0.	469.444	21.667	0.	7.5	35.	70.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	41 ##	5.	14.902	80.	0.	437.64	20.92	5.	5.	10.	56.8
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	41 ##	5.	5.366	30.	0.	21.638	4.652	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	41 ##	5.	5.39	30.	0.	21.494	4.636	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	41	30.	40.61	480.	5.	5307.044	72.849	10.	18.	40.	58.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	41 ##	50.	42.683	170.	0.	784.122	28.002	7.2	22.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	41	10.	14.951	60.	5.	99.748	9.987	5.	10.	20.	29.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	41	5.	8.902	30.	4.	35.54	5.962	5.	5.	10.	18.6
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	20.	24.444	50.	0.	627.778	25.055	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	40 ##	5.	6.425	30.	0.	40.969	6.401	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	5.556	20.	0.	40.278	6.346	0.	0.	7.5	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	41 ##	5.	14.963	120.	0.	433.08	20.811	1.4	5.	20.	38.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	41	100.	122.878	360.	10.	6823.81	82.606	40.	58.5	165.	236.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	41	39.	51.61	350.	5.	3837.094	61.944	5.	5.	79.5	103.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	41 ##	5.	6.171	40.	0.	54.495	7.382	0.	5.	5.	12.4
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	41	92.	93.415	156.	11.	454.599	21.321	74.	83.	107.	113.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	41	0.11	0.144	0.63	0.005	0.016	0.125	0.054	0.08	0.145	0.288
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	37	6.	10.243	68.	3.	151.023	12.289	3.8	5.	10.	24.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	41 ##	50.	65.854	100.	50.	554.878	23.556	50.	50.	100.	100.

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Station Inventory for Station: CUGA0038

NPS Station ID: CUGA0038
LAT/LON: 36.598253/ -83.675365
Agency: 11NPSWRD
Date Created: 09/20/97
Location: TUNNEL - TENNESSEE SIDE
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /CANAL/TYPA/AMBNT
STORET Station ID(s): CUGA_CPSU_TNN
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 2300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS IN THE TUNNEL ON THE TENNESSEE SIDE APPROXIMATELY 1000 FEET SOUTH OF THE VIRGINIA BORDER. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0038

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/09/92-03/09/92	1	19.8	19.8	19.8	19.8	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/09/92-03/09/92	1	255.	255.	255.	255.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/09/92-03/09/92	1	153.	153.	153.	153.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	03/09/92-03/09/92	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/09/92-03/09/92	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/09/92-03/09/92	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/09/92-03/09/92	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/09/92-03/09/92	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/09/92-03/09/92	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/09/92-03/09/92	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/09/92-03/09/92	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	03/09/92-03/09/92	1	324.	324.	324.	324.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	03/09/92-03/09/92	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/09/92-03/09/92	1	198.	198.	198.	198.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/09/92-03/09/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/09/92-03/09/92	1	1.45	1.45	1.45	1.45	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/09/92-03/09/92	1	4.53	4.53	4.53	4.53	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/09/92-03/09/92	1	113.	113.	113.	113.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/09/92-03/09/92	1	42.6	42.6	42.6	42.6	0.	0.	**	**	**	**

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Parameter Inventory for Station: CUGA0038

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/09/92-03/09/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/09/92-03/09/92	1	53.99	53.99	53.99	53.99	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/09/92-03/09/92	1	23.2	23.2	23.2	23.2	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/09/92-03/09/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/09/92-03/09/92	1	21.1	21.1	21.1	21.1	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/09/92-03/09/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/09/92-03/09/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/09/92-03/09/92	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/09/92-03/09/92	1	130.	130.	130.	130.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/09/92-03/09/92	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/09/92-03/09/92	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/09/92-03/09/92	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/09/92-03/09/92	1	1630.	1630.	1630.	1630.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	03/09/92-03/09/92	1	1070.	1070.	1070.	1070.	0.	0.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	03/09/92-03/09/92	1	4300.	4300.	4300.	4300.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	03/09/92-03/09/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	03/09/92-03/09/92	1	314.	314.	314.	314.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/09/92-03/09/92	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/09/92-03/09/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	03/09/92-03/09/92	1	140.	140.	140.	140.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	03/09/92-03/09/92	1 ##	100.	100.	100.	100.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: CUGA0038

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	1	1	1.00							1	1	1.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	1	1	1.00							1	1	1.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	1	1.00							1	1	1.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	1	1.00							1	1	1.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00							1	0	0.00			
		Drinking Water	5000.	1	0	0.00							1	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0039

NPS Station ID: CUGA0039 | LAT/LON: 36.597477/ -83.675281 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: CAVERN AT CONSTRUCTION SITE | FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /CANAL/TYPA/AMBNT | STORET Station ID(s): CUGA_CPSU_CAVE
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 2300 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS THE CAVERN WHICH WAS PENETRATED DURING CONSTRUCTION OF THE TUNNEL. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURINGA RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0039

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/22/93-12/19/94	34	13.55	13.735	21.7	10.4	3.864	1.966	11.85	12.725	14.175	15.75
00061	FLOW, STREAM, INSTANTANEOUS CFS	07/06/93-06/27/94	10	0.7	1.22	3.	0.	1.38	1.175	0.01	0.175	2.25	3.
00080	COLOR (PLATINUM-COBALT UNITS)	02/22/93-12/19/94	33	10.	8.561	40.	2.5	52.356	7.236	2.5	2.5	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/22/93-12/19/94	34	205.	215.324	307.	92.	1851.316	43.027	182.	189.75	248.	268.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	02/22/93-12/19/94	34	0.	0.265	1.	0.	0.201	0.448	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/22/93-12/19/94	34	7.05	6.676	9.6	1.4	4.195	2.048	3.95	5.3	8.45	8.95
00403	PH, LAB, STANDARD UNITS SU	02/22/93-12/19/94	33	7.9	7.827	8.1	7.2	0.037	0.192	7.7	7.7	7.9	8.06
00403	CONVERTED PH, LAB, STANDARD UNITS	02/22/93-12/19/94	33	7.9	7.775	8.1	7.2	0.04	0.2	7.7	7.7	7.9	8.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/22/93-12/19/94	33	0.013	0.017	0.063	0.008	0.	0.011	0.009	0.013	0.02	0.02
00406	PH, FIELD, STANDARD UNITS SU	02/22/93-12/19/94	34	7.7	7.679	8.1	7.4	0.028	0.168	7.4	7.5	7.8	7.85
00406	CONVERTED PH, FIELD, STANDARD UNITS	02/22/93-12/19/94	34	7.7	7.648	8.1	7.4	0.029	0.171	7.4	7.5	7.8	7.85
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/22/93-12/19/94	34	0.02	0.022	0.04	0.008	0.	0.009	0.014	0.016	0.032	0.04
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	02/22/93-12/19/94	34	97.5	101.382	140.	11.	721.758	26.866	71.	89.25	120.	140.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	02/22/93-12/19/94	34 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	02/22/93-12/19/94	34	59.5	61.735	85.	7.	265.049	16.28	43.	54.5	73.	85.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/22/93-12/19/94	34	4.	12.044	120.	0.3	516.028	22.716	0.95	2.75	8.25	36.5
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/12/93-12/12/93	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/22/93-12/19/94	34 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/22/93-12/19/94	34	0.565	0.607	1.9	0.025	0.171	0.413	0.12	0.268	0.87	1.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	02/22/93-12/19/94	34 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/05/93-11/28/94	10	1.2	1.83	5.2	0.	2.542	1.594	0.07	0.775	2.975	5.03
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/22/93-12/19/94	34	110.	110.853	160.	11.	790.25	28.111	88.5	98.	130.	145.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0039

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/22/93-12/19/94	34	39.4	41.1	55.9	21.4	56.284	7.502	33.45	35.825	46.625	51.85
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/22/93-12/19/94	34	2.75	2.835	5.	1.6	0.698	0.836	1.8	2.2	3.3	4.15
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/22/93-12/19/94	34	0.6	0.751	1.6	0.37	0.108	0.328	0.415	0.5	0.95	1.3
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/22/93-12/19/94	34	0.7	0.966	2.6	0.5	0.286	0.535	0.5	0.623	1.025	1.8
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/22/93-12/19/94	34	1.	1.165	6.	0.1	0.892	0.944	0.75	0.8	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/22/93-12/19/94	34	7.	7.291	11.	0.5	3.927	1.982	5.85	6.2	8.325	10.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/22/93-12/19/94	34 ##	0.05	0.09	0.3	0.05	0.005	0.068	0.05	0.05	0.1	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/05/93-11/28/94	9 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/05/93-11/28/94	10	10.	9.5	20.	5.	19.167	4.378	5.	5.	10.	19.
01020	BORON, DISSOLVED (UG/L AS B)	02/22/93-12/19/94	34 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/05/93-11/28/94	9 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/22/93-12/19/94	34 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	02/22/93-07/06/93	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	02/22/93-12/19/94	34 ##	5.	5.294	10.	5.	1.426	1.194	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	02/22/93-12/19/94	34	20.	42.794	170.	5.	2248.775	47.421	5.	5.	90.	115.
01049	LEAD, DISSOLVED (UG/L AS PB)	02/22/93-12/19/94	34 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	02/22/93-12/19/94	34 ##	5.	9.853	60.	5.	134.069	11.579	5.	5.	10.	20.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	02/22/93-12/19/94	34 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/05/93-11/28/94	9 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	02/22/93-12/19/94	33 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/05/93-11/28/94	9 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	02/22/93-12/19/94	34 ##	5.	17.059	120.	5.	559.269	23.649	5.	5.	20.	45.
01105	ALUMINUM, TOTAL (UG/L AS AL)	02/22/93-12/19/94	34	65.	198.971	1800.	5.	134349.666	366.537	5.	5.	185.	705.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	02/22/93-12/19/94	34	20.	44.412	230.	5.	3499.643	59.158	5.	5.	55.	145.
01140	SILICON, DISSOLVED (UG/L AS SI)	02/22/93-07/06/93	2	3200.	3200.	3800.	2600.	720000.	848.528	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	02/22/93-12/19/94	34 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	02/22/93-12/19/94	34	114.5	117.441	160.	70.	418.436	20.456	94.5	102.75	131.5	148.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/22/93-12/19/94	34 ##	0.15	0.154	0.3	0.15	0.001	0.026	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/05/93-11/28/94	9 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	02/22/93-12/19/94	34	0.055	0.179	2.4	0.005	0.18	0.424	0.015	0.02	0.133	0.385
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	02/22/93-12/19/94	24	3.5	7.25	67.	1.	182.022	13.492	1.	2.	5.	16.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	02/22/93-12/19/94	34 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0039

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	34	4	0.12	9	0	0.00	9	0	0.00	8	4	0.50	8	0	0.00
00403	PH, LAB	Fresh Chronic	9.	33	0	0.00	8	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
		Other-Lo Lim.	6.5	33	0	0.00	8	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
		Other-Lo Lim.	6.5	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
		Drinking Water	250.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	9	0	0.00				2	0	0.00	4	0	0.00	3	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	10	0	0.00				3	0	0.00	4	0	0.00	3	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
		Drinking Water	1300.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
		Drinking Water	15.	0 &	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0039

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	33	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	7	0	0.00
		Drinking Water	100.	33	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	7	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	34	1	0.03	9	0	0.00	9	0	0.00	8	0	0.00	8	1	0.13
		Drinking Water	5000.	34	0	0.00	9	0	0.00	9	0	0.00	8	0	0.00	8	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	24	1	0.04	7	0	0.00	5	0	0.00	5	1	0.20	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0040

NPS Station ID: CUGA0040
LAT/LON: 36.654727/ -83.676393
Agency: 21KY
Date Created: 10/19/85
Location: YELLOW CREEK OFF KY 188
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): SUD012 /2
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101046
RF1 Mile Point: 10.000
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 05130101053800.00
RF3 Mile Point: 0.26
Distance from RF3: 0.06
On/Off RF3:
Description:
TOPOGRAPHIC MAP NO 2-51, MIDDLESBORO NORTH, KY QUADRANGLE SAMPLE COLLECTED AT KY RT 188
AND THE INTERSECTION OF YELLOW CREEK ON 18 MAY 1982 IN BELL COUNTY, STREAM ORDER 4, RMI 10.0
BIOLOGICAL AND PHYSICOCHEMICAL STATION UPPER CUMBERLAND RIVER BASIN

Parameter Inventory for Station: CUGA0040

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/82-05/18/82	1	586.	586.	586.	586.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/18/82-05/18/82	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/18/82-05/18/82	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	10/06/83-10/06/83	1	8590.	8590.	8590.	8590.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/18/82-05/18/82	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/18/82-05/18/82	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/18/82-05/18/82	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	1	73.	73.	73.	73.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/82-05/18/82	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	10/06/83-10/06/83	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/82-05/18/82	1	0.42	0.42	0.42	0.42	0.	0.	**	**	**	**
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	10/06/83-10/06/83	1	41.9	41.9	41.9	41.9	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/82-05/18/82	1	0.78	0.78	0.78	0.78	0.	0.	**	**	**	**
00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	10/06/83-10/06/83	1	225.	225.	225.	225.	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/82-05/18/82	1	3.65	3.65	3.65	3.65	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/18/82-05/18/82	1	0.516	0.516	0.516	0.516	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/18/82-05/18/82	1	0.035	0.035	0.035	0.035	0.	0.	**	**	**	**
00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	10/06/83-10/06/83	1 ##	4.31	4.31	4.31	4.31	0.	0.	**	**	**	**
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	05/18/82-05/18/82	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00746	SULFIDE, DISSOLVED (MG/L AS S)	05/18/82-05/18/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	1	204.	204.	204.	204.	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	05/18/82-05/18/82	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	05/18/82-05/18/82	1	17.2	17.2	17.2	17.2	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	05/18/82-05/18/82	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00937	POTASSIUM, TOTAL MG/L AS K)	05/18/82-05/18/82	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/18/82-05/18/82	1	47.	47.	47.	47.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/82-05/18/82	1	138.	138.	138.	138.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/82-05/18/82	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/18/82-05/18/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/06/83-10/06/83	1	2.71	2.71	2.71	2.71	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/18/82-05/18/82	1	57.	57.	57.	57.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0040

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	1	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	1	5.83	5.83	5.83	5.83	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/82-05/18/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/18/82-05/18/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/06/83-10/06/83	1	5.58	5.58	5.58	5.58	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/18/82-05/18/82	1	1578.	1578.	1578.	1578.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/18/82-05/18/82	1	84.	84.	84.	84.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/82-05/18/82	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/18/82-05/18/82	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/06/83-10/06/83	1	9.16	9.16	9.16	9.16	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	10/06/83-10/06/83	1	630.	630.	630.	630.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/18/82-05/18/82	1	368.	368.	368.	368.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/82-05/18/82	1	322.	322.	322.	322.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-05/18/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/06/83-10/06/83	1	5.83	5.83	5.83	5.83	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/18/82-05/18/82	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/06/83-10/06/83	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/82-05/18/82	1	817.	817.	817.	817.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/18/82-05/18/82	1	126.	126.	126.	126.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	10/06/83-10/06/83	1	2370.	2370.	2370.	2370.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	10/06/83-10/06/83	1	3750.	3750.	3750.	3750.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	1	3900.	3900.	3900.	3900.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	1	3.591	3.591	3.591	3.591	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			3900.								
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
31673	LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	1	3.23	3.23	3.23	3.23	0.	0.	**	**	**	**
31673	GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	GEOMETRIC MEAN =			1700.								
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/18/82-05/18/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1	14.	14.	14.	14.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1	9.	9.	9.	9.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39117	PHTHLATE ESTERS IN WATER MG/L	05/18/82-05/18/82	1	24.	24.	24.	24.	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	10/06/83-10/06/83	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	10/06/83-10/06/83	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/06/83-10/06/83	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0040

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	10/06/83-10/06/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/18/82-05/18/82	1	370.	370.	370.	370.	0.	0.	**	**	**	**
70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	10/06/83-10/06/83	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	05/18/82-05/18/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/82-05/18/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/18/82-05/18/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/06/83-10/06/83	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	10/06/83-10/06/83	1	3900.	3900.	3900.	3900.	0.	0.	**	**	**	**
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/82-05/18/82	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0040

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00										1	0	0.00
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION)	Fresh Acute	0.022	1	0	0.00										1	0	0.00
		Drinking Water	0.2	1	0	0.00										1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	1	0	0.00										1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00										1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	0	0.00										1	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	1	1.00										1	1	1.00
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00										1	1	1.00
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	1	1.00										1	1	1.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0040

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
82079 TURBIDITY, LAB	Other-Hi Lim.	50.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0041

NPS Station ID: CUGA0041 LAT/LON: 36.623309/ -83.679365 Agency: 11NPSWRD Date Created: 09/20/97
Location: DAVIS BRANCH; 0.5 MILE NORTH OF UNNAMED STREAM FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_DB6
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON DAVIS BRANCH APPROXIMATELY 500 WEST OF STATE ROUTE 988 AND 0.5 MILE NORTH OF THE UNNAMED STREAM LOCATED DIRECTLY NORTH OF THE OLD WILDERNESS ROAD. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0041

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	39	12.9	13.495	20.	5.1	25.322	5.032	6.1	9.8	19.	19.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	39	0.1	0.975	20.	0.	10.39	3.223	0.	0.02	0.9	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	39	48.	65.795	554.	2.	7042.852	83.922	28.	37.	68.	108.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	39	60.	58.41	91.	15.	328.933	18.136	37.	42.	74.	83.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	39	0.	0.051	1.	0.	0.05	0.223	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	39	8.6	9.059	11.9	5.3	2.512	1.585	7.5	7.9	10.5	11.3
00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	17	7.1	7.153	7.6	6.7	0.051	0.227	6.78	7.05	7.3	7.44
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-12/30/91	17	7.1	7.096	7.6	6.7	0.055	0.234	6.78	7.05	7.3	7.44
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-12/30/91	17	0.079	0.08	0.2	0.025	0.002	0.045	0.037	0.05	0.09	0.167
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	39	6.8	6.787	7.2	6.3	0.056	0.236	6.4	6.7	7.	7.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-12/30/91	39	6.8	6.721	7.2	6.3	0.06	0.246	6.4	6.7	7.	7.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-12/30/91	39	0.158	0.19	0.501	0.063	0.014	0.117	0.079	0.1	0.2	0.398
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	39	24.	19.949	35.	4.	94.471	9.72	7.	9.	27.	33.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	39 ##	0.05	0.119	2.	0.05	0.11	0.332	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	39	13.	11.718	22.	0.	39.103	6.253	4.	5.	16.	20.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	39	5.	20.338	441.	0.	4905.535	70.04	0.4	2.	14.	34.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	39 ##	0.01	0.221	5.	0.	0.847	0.92	0.01	0.01	0.01	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	39 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	39	0.05	0.084	0.43	0.	0.01	0.099	0.	0.	0.16	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0041

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	39	0.05	0.065	0.26	0.	0.004	0.063	0.	0.015	0.09	0.16
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	3 ##	0.5	0.333	0.5	0.	0.083	0.289	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	39	26.	23.385	39.	11.	69.19	8.318	13.	14.	29.	34.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	39	5.8	4.992	8.3	2.1	4.072	2.018	2.3	2.7	6.5	7.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	39	2.6	2.477	4.	1.1	0.62	0.787	1.4	1.6	3.	3.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	39	1.26	1.224	1.64	0.59	0.077	0.277	0.86	0.98	1.47	1.55
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	39	1.56	1.537	3.32	0.77	0.377	0.614	0.85	0.97	1.91	2.64
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	39	1.	1.044	3.	0.	0.188	0.434	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	39	5.6	5.703	11.	2.9	2.66	1.631	3.6	4.5	6.7	7.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	39 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/16/91	6 ##	0.	5.833	35.	0.	204.167	14.289	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/16/91	8	35.	31.25	40.	20.	98.214	9.91	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	39 ##	0.	3.846	20.	0.	28.239	5.314	0.	0.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/16/91	8 ##	0.	1.25	10.	0.	12.5	3.536	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	39 ##	0.	2.308	25.	0.	26.113	5.11	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	39 ##	0.	3.333	15.	0.	22.807	4.776	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	39 ##	0.	3.077	25.	0.	38.968	6.242	0.	0.	0.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	39	240.	253.077	710.	80.	19058.704	138.053	90.	130.	330.	410.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	39	10.	16.282	70.	0.	321.997	17.944	0.	0.	20.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	39	40.	44.359	160.	10.	1451.552	38.099	10.	20.	50.	80.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	39	20.	25.385	80.	10.	209.717	14.482	10.	20.	30.	40.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/16/91	26 ##	0.	0.385	10.	0.	3.846	1.961	0.	0.	0.	0.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	39 ##	0.	1.667	10.	0.	12.281	3.504	0.	0.	0.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/16/91	26 ##	0.	11.538	50.	0.	357.538	18.909	0.	0.	22.5	50.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/16/91	26 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	39 ##	0.	5.256	20.	0.	40.722	6.381	0.	0.	10.	10.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	39	90.	179.231	2290.	20.	131033.603	361.986	40.	60.	160.	300.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	39	40.	50.	290.	0.	2273.684	47.683	20.	30.	60.	100.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/16/91	26 ##	0.	0.769	10.	0.	7.385	2.717	0.	0.	0.	3.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/16/91	26 ##	0.	3.077	20.	0.	38.154	6.177	0.	0.	2.5	13.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	39	3200.	3106.667	4360.	1850.	266470.175	516.207	2340.	2900.	3400.	3690.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	39 ##	0.	8.974	200.	0.	1041.026	32.265	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	39	32.	30.513	42.	18.	60.625	7.786	20.	22.	37.	41.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	39 ##	0.15	0.156	0.25	0.15	0.001	0.023	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/16/91	24 ##	0.	1.042	25.	0.	26.042	5.103	0.	0.	0.	0.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	39	0.42	0.539	2.27	0.18	0.156	0.396	0.2	0.3	0.68	0.9
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	39	6.	10.974	96.	0.	249.447	15.794	3.	5.	11.	25.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	39 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0041

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
00403	PH, LAB	Fresh Chronic	9.	17	0	0.00	8	0	0.00	4	0	0.00				5	0	0.00
		Other-Lo Lim.	6.5	17	0	0.00	8	0	0.00	4	0	0.00				5	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Other-Lo Lim.	6.5	39	6	0.15	17	1	0.06	11	1	0.09	4	2	0.50	7	2	0.29
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Drinking Water	250.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	6	0	0.00	3	0	0.00	1	0	0.00				2	0	0.00
		Drinking Water	50.	6	0	0.00	3	0	0.00	1	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	8	0	0.00	5	0	0.00	1	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	8	1	0.13	5	0	0.00	1	0	0.00				2	1	0.50
		Drinking Water	5.	8	1	0.13	5	0	0.00	1	0	0.00				2	1	0.50

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0041

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	37 &	0	0.00	15	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Drinking Water	1300.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Drinking Water	15.	37 &	13	0.35	17	7	0.41	11	4	0.36	3	0	0.00	6	2	0.33
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Drinking Water	100.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
		Drinking Water	5000.	39	0	0.00	17	0	0.00	11	0	0.00	4	0	0.00	7	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	23 &	0	0.00	9	0	0.00	7	0	0.00	4	0	0.00	3	0	0.00
		Drinking Water	2.	23 &	0	0.00	9	0	0.00	7	0	0.00	4	0	0.00	3	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	39	1	0.03	17	0	0.00	11	1	0.09	4	0	0.00	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0042

NPS Station ID: CUGA0042 | LAT/LON: 36.623309/ -83.679310 | Agency: 11NPSWRD | Date Created: 07/12/97
Location: DAVIS BRANCH | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CMRC_DB5
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1150 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON DAVIS BRANCH APPROXIMATELY 500 FEET WEST OF STATE ROUTE 988 AND 0.5 MILES NORTH OF THE UNNAMED STREAM LOCATED DIRECTLY NORTH OF THE WILDERNESS ROAD. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0042

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	2083.333	40000.	0.	69384057.971	8329.709	0.	0.	0.	5000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.358	4.602	0.	1.482	1.218	0.	0.	0.	2.
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			2.283								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	5208.333	125000.	0.	651041666.667	25515.518	0.	0.	0.	0.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.212	5.097	0.	1.082	1.04	0.	0.	0.	0.
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			1.631								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	25.	600.	0.	15000.	122.474	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	2135.417	50000.	0.	104005321.558	10198.3	0.	0.	0.	625.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	2708.333	50000.	0.	110824275.362	10527.311	0.	0.	0.	7500.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	2083.333	50000.	0.	104166666.667	10206.207	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.196	4.699	0.	0.92	0.959	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.57								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	214583.333	5000000.	0.	**********	1019748.388	0.	0.	0.	75000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.495	6.699	0.	2.861	1.691	0.	0.	0.	2.588
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			3.125								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0042

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	2	0.08	8	0	0.00	6	0	0.00	3	0	0.00	7	2	0.29

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0043

NPS Station ID: CUGA0043
LAT/LON: 36.611671/ -83.679809
Agency: 11NPSWRD
Date Created: 09/20/97
Location: DRAINAGE DITCH: HWY 988 AND US 25E
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /CANAL/TYPA/AMBNT
STORET Station ID(s): CUGA_CPSU_988
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED IN A STEEP ROCKY ROADSIDE DRAINAGE DITCH NEAR THE JUNCTION OF HIGHWAY 988 AND U.S. 25E. IT IS USED TO MONITOR RUNOFF FROM A STOCKPILE OF EXCAVATED TUNNEL MATERIAL. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996); "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/01/91-03/03/97	40	12.2	13.415	21.3	6.8	18.014	4.244	8.31	10.425	17.3	20.02
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/91-08/12/96	28	0.08	0.875	10.	0.	4.129	2.032	0.	0.003	0.675	3.
00080	COLOR (PLATINUM-COBALT UNITS)	12/01/91-03/03/97	40	20.	32.05	512.	5.	6135.279	78.328	10.	11.	26.5	30.9
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/01/91-03/03/97	40	614.	577.575	984.	100.	54889.687	234.285	236.1	379.	731.75	905.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/01/91-03/03/97	40	1.	0.525	1.	0.	0.256	0.506	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/01/91-03/03/97	40	8.2	7.915	11.	2.6	2.553	1.598	5.81	6.8	8.925	9.6
00403	PH, LAB, STANDARD UNITS SU	12/01/91-03/03/97	40	7.8	7.863	8.8	7.5	0.068	0.26	7.6	7.6	8.1	8.19
00403	CONVERTED PH, LAB, STANDARD UNITS	12/01/91-03/03/97	40	7.8	7.8	8.8	7.5	0.071	0.267	7.6	7.6	8.1	8.19
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/01/91-03/03/97	40	0.016	0.016	0.032	0.002	0.	0.008	0.006	0.008	0.025	0.025
00406	PH, FIELD, STANDARD UNITS SU	12/01/91-03/03/97	40	7.5	7.6	9.	6.8	0.213	0.461	7.1	7.3	7.775	8.29
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/01/91-03/03/97	40	7.5	7.426	9.	6.8	0.244	0.494	7.1	7.3	7.775	8.29
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/01/91-03/03/97	40	0.032	0.037	0.158	0.001	0.001	0.031	0.005	0.017	0.05	0.079
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/01/91-03/03/97	40	140.	128.35	220.	1.	2225.054	47.17	54.3	93.75	163.75	177.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/01/91-03/03/97	40 ##	0.05	0.061	0.5	0.05	0.005	0.071	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	12/01/91-11/28/94	31	85.	81.032	110.	31.	560.032	23.665	40.6	59.	101.	106.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/01/91-03/03/97	40	7.5	19.128	215.	0.	1383.296	37.193	1.	4.	14.75	53.1
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/01/91-08/10/92	12 ##	0.005	0.111	0.5	0.	0.04	0.201	0.	0.	0.228	0.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/01/91-03/03/97	40 ##	0.01	0.217	4.47	0.01	0.596	0.772	0.01	0.01	0.01	0.556
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/01/91-03/03/97	40	6.	9.766	55.	0.01	104.727	10.234	2.62	4.323	10.193	24.82

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/01/91-03/03/97	40 ##	0.05	0.118	1.05	0.	0.066	0.258	0.025	0.025	0.05	0.181
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/29/92-08/12/96	19	3.9	8.111	44.	0.	140.607	11.858	1.7	3.	4.6	35.
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/01/91-03/03/97	40	207.5	210.	425.	66.	5821.128	76.296	101.	169.5	251.75	299.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/01/91-03/03/97	40	72.55	74.08	155.	22.1	760.987	27.586	35.65	58.125	89.525	103.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/01/91-03/03/97	40	6.	5.993	10.	1.8	3.468	1.862	3.23	5.	7.15	8.73
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/01/91-03/03/97	39	55.59	50.889	110.	3.	624.937	24.999	11.65	30.	62.42	81.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/01/91-03/03/97	39	3.42	4.574	15.4	2.19	9.357	3.059	2.4	2.7	4.69	9.8
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/01/91-03/03/97	40	53.	53.853	170.	0.1	1322.573	36.367	7.7	34.	64.	115.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/01/91-03/03/97	40	86.5	91.98	210.	19.3	1837.384	42.865	48.22	60.2	110.	159.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/01/91-08/12/96	39 ##	0.05	0.138	1.3	0.05	0.046	0.215	0.05	0.05	0.1	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/29/92-08/12/96	18 ##	50.	61.111	250.	50.	2222.222	47.14	50.	50.	50.	70.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/29/92-08/12/96	21	40.	48.048	150.	5.	988.248	31.436	20.	30.	59.5	94.2
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/01/91-08/12/96	39	20.	28.821	140.	5.	1016.572	31.884	5.	10.	30.	50.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/29/92-08/12/96	20 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/01/91-03/03/97	40 ##	5.	8.05	40.	0.	66.356	8.146	5.	5.	5.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	12/01/91-03/23/93	24 ##	5.	16.208	90.	0.	708.781	26.623	4.	5.	10.	82.
01040	COPPER, DISSOLVED (UG/L AS CU)	12/01/91-03/03/97	40 ##	5.	4.5	20.	0.	11.282	3.359	0.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	12/01/91-03/03/97	40	40.	55.825	190.	5.	2311.43	48.077	5.5	20.	88.75	129.
01049	LEAD, DISSOLVED (UG/L AS PB)	12/01/91-03/03/97	40 ##	50.	47.05	90.	20.	262.305	16.196	25.	39.25	50.	68.8
01055	MANGANESE, TOTAL (UG/L AS MN)	12/01/91-03/03/97	40	30.	35.55	110.	10.	405.382	20.134	13.7	20.	47.75	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/01/91-03/03/97	40	20.	23.	60.	0.	178.154	13.347	8.2	15.25	30.	40.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/29/92-08/12/96	20 ##	50.	42.75	50.	5.	269.671	16.422	5.	50.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/01/91-03/03/97	40 ##	5.	6.525	30.	0.	34.204	5.848	3.2	5.	5.	19.
01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/29/92-03/23/93	6	210.	275.	570.	140.	26110.	161.586	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/92-08/12/96	20 ##	5.	11.	50.	5.	148.947	12.204	5.	5.	10.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/01/91-03/03/97	40 ##	5.	11.4	60.	0.	176.297	13.278	0.1	5.	10.75	29.9
01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	1 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/01/91-03/03/97	40	148.	230.75	1810.	5.	95946.09	309.752	5.5	67.	325.	449.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/01/91-03/03/97	40	68.5	94.125	520.	5.	11796.317	108.611	5.	5.	143.	248.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/29/92-12/17/92	5 ##	50.	31.	50.	0.	680.	26.077	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/29/92-12/17/92	5 ##	50.	83.	260.	5.	10170.	100.846	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	12/01/91-03/23/93	24	2105.	2722.917	10000.	1430.	3236012.862	1798.892	1500.	1855.	2575.	4600.
01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/01/91-08/12/96	39 ##	5.	7.256	31.	0.	44.985	6.707	5.	5.	5.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/01/91-03/03/97	36	353.	360.778	628.	62.	19334.578	139.049	184.5	266.	455.	594.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/01/91-08/12/96	39 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/92-08/12/96	21 ##	50.	51.667	100.	35.	133.333	11.547	50.	50.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	12/01/91-03/03/97	40	0.14	0.218	1.1	0.05	0.058	0.242	0.06	0.083	0.218	0.684
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/01/91-03/03/97	36	10.5	21.194	200.	2.	1353.818	36.794	3.	5.	18.25	55.1
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/01/91-08/12/96	39 ##	50.	113.846	900.	50.	22950.607	151.495	50.	50.	100.	300.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0043

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	40	1	0.03	10	0	0.00	8	0	0.00	13	1	0.08	9	0	0.00
00403	PH, LAB	Fresh Chronic	9.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
		Other-Lo Lim.	6.5	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	40	1	0.03	10	0	0.00	8	1	0.13	13	0	0.00	9	0	0.00
		Other-Lo Lim.	6.5	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	40	3	0.08	10	3	0.30	8	0	0.00	13	0	0.00	9	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	40	10	0.25	10	4	0.40	8	3	0.38	13	3	0.23	9	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
		Drinking Water	250.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0043

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	39	0	0.00	10	0	0.00	8	0	0.00	12	0	0.00	9	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	18	0	0.00	5	0	0.00	4	0	0.00	5	0	0.00	4	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	21	0	0.00	5	0	0.00	4	0	0.00	8	0	0.00	4	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	40	1	0.03	10	0	0.00	8	0	0.00	13	1	0.08	9	0	0.00
		Drinking Water	1300.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	40	2	0.05	10	0	0.00	8	1	0.13	13	1	0.08	9	0	0.00
		Drinking Water	15.	12 &	12	1.00				3	3	1.00	3	3	1.00	6	6	1.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
		Drinking Water	100.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
		Drinking Water	5000.	40	0	0.00	10	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	36	4	0.11	10	1	0.10	5	1	0.20	12	2	0.17	9	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0044

NPS Station ID: CUGA0044
LAT/LON: 36.607781/ -83.679726
Agency: 112WRD
Date Created: 02/28/78
Location: MIDDLESBORO TANNERY CO.
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363628083404701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 1.80
On/Off RF1:
RF3 Index: 05130101050300.00
RF3 Mile Point: 0.31
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0044

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/53-09/08/58	2	14.45	14.45	15.	13.9	0.605	0.778	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	08/06/53-08/06/53	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/06/53-09/08/58	2	100.5	100.5	104.	97.	24.5	4.95	**	**	**	**
00400	PH (STANDARD UNITS)	08/06/53-09/08/58	2	6.9	6.9	7.	6.8	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/06/53-09/08/58	2	6.889	6.889	7.	6.8	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/06/53-09/08/58	2	0.129	0.129	0.158	0.1	0.002	0.041	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	08/06/53-09/08/58	2	43.	43.	44.	42.	2.	1.414	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	08/06/53-09/08/58	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/06/53-09/08/58	2	44.	44.	45.	43.	2.	1.414	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/06/53-09/08/58	2	8.	8.	9.	7.	2.	1.414	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/06/53-08/06/53	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/06/53-08/06/53	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/06/53-08/06/53	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/06/53-08/06/53	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/06/53-09/08/58	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/06/53-09/08/58	2	11.	11.	11.	11.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/06/53-09/08/58	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/06/53-08/06/53	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/06/53-08/06/53	1	57.	57.	57.	57.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/06/53-08/06/53	1	60.	60.	60.	60.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/06/53-09/08/58	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	08/06/53-08/06/53	1	50.	50.	50.	50.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	08/06/53-09/08/58	2	945.	945.	1100.	790.	48050.	219.203	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0044

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0044

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0045

NPS Station ID: CUGA0045
LAT/LON: 36.627087/ -83.680143
Agency: 11NPSWRD
Date Created: 09/20/97
Location: DAVIS BRANCH: UPPER REACHES
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_DB5
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1240
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO NORTH; KENTUCKY 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT THE UPPER REACHES OF DAVIS BRANCH ABOVE THE INFLUENCE OF STATE ROUTE 988. IT IS NEAR THE RANGE ROAD GATE. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	92	11.4	12.62	22.9	1.	33.182	5.76	5.83	7.675	19.1	20.44
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	85	0.5	1.738	40.	0.	24.62	4.962	0.	0.05	1.	5.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	92	52.5	86.065	925.	10.	13438.985	115.927	15.	35.25	100.25	154.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	92	55.	65.717	509.	6.	2729.26	52.242	35.3	41.	81.75	93.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	92	0.	0.12	1.	0.	0.106	0.326	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	92	8.7	8.013	13.2	1.	7.511	2.741	4.19	6.425	10.275	11.24
00403	PH, LAB, STANDARD UNITS SU	04/11/91-03/03/97	64	7.	7.005	8.1	6.2	0.101	0.318	6.65	6.8	7.1	7.45
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-03/03/97	64	7.	6.891	8.1	6.2	0.115	0.339	6.65	6.8	7.1	7.45
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-03/03/97	64	0.1	0.129	0.631	0.008	0.013	0.112	0.036	0.079	0.158	0.225
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	92	6.7	6.793	8.1	5.1	0.253	0.503	6.23	6.5	7.1	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	92	6.7	6.469	8.1	5.1	0.359	0.599	6.23	6.5	7.1	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	92	0.2	0.34	7.943	0.008	0.724	0.851	0.032	0.079	0.316	0.592
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	92	16.	20.935	161.	2.	375.556	19.379	5.3	8.	31.	38.7
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	92 ##	0.05	0.232	15.	0.05	2.436	1.561	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	90	10.	11.878	33.	0.	58.783	7.667	4.	5.	18.25	23.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	92	4.	13.686	221.	0.	978.203	31.276	0.034	2.	9.	36.5
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/05/93	66 ##	0.01	0.123	3.	0.	0.293	0.541	0.	0.	0.01	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	92 ##	0.01	0.099	2.1	0.	0.124	0.352	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	92	0.05	0.237	3.7	0.	0.298	0.546	0.	0.	0.2	0.547
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	92 ##	0.05	0.069	0.42	0.	0.006	0.077	0.	0.025	0.08	0.15
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-12/05/93	12	2.6	4.667	19.6	0.	32.582	5.708	0.	0.7	6.65	17.02
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	92	20.	23.783	49.	9.	119.491	10.931	12.3	14.	33.	41.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	92	3.9	4.782	9.8	1.6	6.09	2.468	2.2	2.5	6.925	8.67
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	92	2.35	2.661	5.5	1.1	1.158	1.076	1.53	1.7	3.7	4.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	92	1.3	1.355	2.12	0.49	0.135	0.368	0.879	1.1	1.65	1.807
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	92	1.275	1.507	4.8	0.7	0.601	0.775	0.852	0.95	1.738	2.528
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	92	1.	1.02	3.	0.1	0.146	0.383	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	92	6.9	6.877	11.5	4.2	1.667	1.291	5.3	5.925	7.4	8.75
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	91 ##	0.1	0.084	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/05/93	17 ##	0.	45.294	250.	0.	6410.846	80.068	0.	0.	50.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/05/93	21	28.	29.667	70.	0.	331.333	18.203	6.	20.	40.	58.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	91 ##	5.	14.412	810.	0.	7142.942	84.516	0.	0.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/05/93	20 ##	0.	2.	10.	0.	8.947	2.991	0.	0.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	92 ##	5.	4.815	20.	0.	30.46	5.519	0.	0.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	89 ##	5.	3.994	20.	0.	16.344	4.043	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	92 ##	5.	6.848	60.	0.	95.999	9.798	0.	0.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	92	261.5	431.533	2800.	20.	198236.296	445.237	150.	180.	547.5	887.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	92 ##	25.	25.609	80.	0.	443.889	21.069	0.	10.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	92	70.	110.522	930.	0.	17380.626	131.836	30.	40.	137.5	197.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	92	65.	106.587	880.	10.	19525.454	139.734	30.	40.	120.	177.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/05/93	40 ##	0.	4.375	50.	0.	177.163	13.31	0.	0.	0.	9.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	92 ##	1.	3.337	20.	0.	15.968	3.996	0.	0.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	39 ##	0.	14.821	60.	0.	400.73	20.018	0.	0.	30.	50.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/05/93	40 ##	0.	1.25	20.	0.	13.782	3.712	0.	0.	0.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	92 ##	5.	8.609	60.	0.	123.252	11.102	0.	0.	10.	20.
01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	1 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	92	120.	232.152	2840.	5.	131386.46	362.473	40.	72.5	270.	497.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	92	50.	67.565	320.	0.	3789.303	61.557	10.	30.	80.	149.4
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	38 ##	0.	5.	50.	0.	187.838	13.705	0.	0.	0.	14.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	38 ##	0.	9.211	50.	0.	239.9	15.489	0.	0.	10.	41.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	89	3430.	3606.888	20000.	1900.	3420279.851	1849.4	2520.	3185.	3800.	4100.
01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	91 ##	5.	5.89	60.	0.	64.832	8.052	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	86	27.	31.674	63.	17.	149.54	12.229	19.	22.	41.	52.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	91 ##	0.15	0.152	0.25	0.15	0.	0.015	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/05/93	39 ##	0.	11.667	100.	0.	535.965	23.151	0.	0.	10.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	92	0.72	0.902	3.57	0.17	0.487	0.698	0.283	0.375	1.188	1.824
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	91	10.	17.681	200.	0.	726.797	26.959	5.	6.	17.	38.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	91 ##	100.	102.308	2000.	10.	41084.615	202.693	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0045

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	92	7	0.08	31	6	0.19	23	1	0.04	18	0	0.00	20	0	0.00
00403	PH, LAB	Fresh Chronic	9.	64	0	0.00	20	0	0.00	15	0	0.00	10	0	0.00	19	0	0.00
		Other-Lo Lim.	6.5	64	5	0.08	20	0	0.00	15	3	0.20	10	2	0.20	19	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
		Other-Lo Lim.	6.5	92	30	0.33	31	9	0.29	23	10	0.43	18	7	0.39	20	4	0.20
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	92	3	0.03	31	1	0.03	23	0	0.00	18	0	0.00	20	2	0.10
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
		Drinking Water	250.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	91	0	0.00	31	0	0.00	23	0	0.00	17	0	0.00	20	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0045

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	17	0	0.00	7	0	0.00	5	0	0.00	1	0	0.00	4	0	0.00
		Drinking Water	50.	11 &	0	0.00	5	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	21	0	0.00	9	0	0.00	5	0	0.00	3	0	0.00	4	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	14 &	1	0.07	7	1	0.14	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	5.	14 &	1	0.07	7	1	0.14	3	0	0.00	1	0	0.00	3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	91 &	9	0.10	30	5	0.17	23	1	0.04	18	0	0.00	20	3	0.15
		Drinking Water	1300.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
		Drinking Water	15.	60 &	21	0.35	20	8	0.40	14	6	0.43	12	4	0.33	14	3	0.21
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
		Drinking Water	100.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
		Drinking Water	5000.	92	0	0.00	31	0	0.00	23	0	0.00	18	0	0.00	20	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	30 &	1	0.03	11	0	0.00	9	1	0.11	8	0	0.00	2	0	0.00
		Drinking Water	2.	30 &	1	0.03	11	0	0.00	9	1	0.11	8	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	91	6	0.07	31	1	0.03	22	1	0.05	18	3	0.17	20	1	0.05

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	17	15.5	15.006	21.8	5.5	29.964	5.474	5.5	10.55	19.8	20.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	17	0.1	0.892	5.	0.	2.899	1.703	0.	0.015	0.6	5.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	17	102.	113.647	229.	51.	2463.868	49.637	54.2	74.5	151.	197.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	17	80.	75.824	101.	40.	359.529	18.961	44.	60.5	92.5	101.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	17	7.5	7.665	11.6	2.4	5.389	2.321	4.56	6.2	9.55	10.72
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	17	6.7	6.641	6.9	6.	0.049	0.221	6.32	6.55	6.8	6.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	17	6.7	6.575	6.9	6.	0.054	0.231	6.32	6.55	6.8	6.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	17	0.2	0.266	1.	0.126	0.041	0.203	0.126	0.158	0.284	0.518
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	17	28.	27.235	41.	6.	121.566	11.026	7.6	19.5	38.	41.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	17	17.	15.235	25.	0.	56.191	7.496	3.2	10.5	21.5	25.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	17	7.	10.941	65.	0.	273.809	16.547	0.8	1.5	12.	43.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	17	0.1	0.082	0.2	0.	0.008	0.088	0.	0.	0.2	0.2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	17	0.07	0.086	0.31	0.	0.007	0.082	0.	0.015	0.15	0.182
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	17	33.	31.529	47.	14.	102.89	10.143	14.8	24.5	41.	45.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	17	6.7	6.4	9.6	2.4	5.081	2.254	2.56	4.9	8.55	9.52
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	17	3.5	3.347	4.7	1.6	0.958	0.979	1.68	2.55	4.3	4.54
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	17	1.56	1.505	2.12	0.87	0.123	0.351	0.966	1.195	1.8	1.96
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	17	1.7	1.692	2.36	0.92	0.174	0.417	1.104	1.35	1.975	2.248
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	17	1.	0.971	1.	0.8	0.005	0.069	0.8	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	17	6.1	6.576	10.	5.1	2.002	1.415	5.18	5.55	7.3	9.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	17 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	17 ##	0.	2.941	10.	0.	22.059	4.697	0.	0.	10.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	17 ##	0.	1.765	10.	0.	15.441	3.93	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	17 ##	0.	2.941	10.	0.	22.059	4.697	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	17 ##	10.	8.824	30.	0.	95.404	9.768	0.	0.	15.	26.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	17	460.	597.059	1950.	200.	181884.559	426.479	208.	335.	755.	1214.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	17	10.	19.412	80.	0.	530.882	23.041	0.	0.	35.	56.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	17	160.	174.118	550.	40.	13475.735	116.085	40.	105.	205.	342.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	17	140.	156.471	510.	30.	11724.265	108.279	38.	95.	175.	310.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	17 ##	0.	3.529	10.	0.	24.265	4.926	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	17	10.	6.471	20.	0.	49.265	7.019	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	17	120.	184.706	530.	70.	20438.971	142.965	78.	100.	175.	498.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	17	50.	67.647	200.	10.	2744.118	52.384	26.	35.	95.	160.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	17	3550.	3477.059	4600.	1970.	446747.059	668.391	2322.	3165.	3955.	4360.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	17 ##	0.	5.882	30.	0.	75.735	8.703	0.	0.	10.	22.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	17	41.	38.588	55.	21.	102.132	10.106	22.6	31.	47.	52.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	17 ##	0.15	0.162	0.25	0.15	0.001	0.033	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	17	1.09	1.196	2.17	0.36	0.308	0.555	0.472	0.745	1.825	1.97
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	17	15.	16.824	68.	0.	257.529	16.048	0.8	7.	20.5	41.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	29	10.2	11.617	21.1	2.7	32.044	5.661	4.5	7.1	17.3	19.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	29	0.09	2.202	40.	0.	57.775	7.601	0.	0.	1.	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	29	86.	116.724	477.	26.	11276.85	106.193	36.	48.	137.	227.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	29	49.	60.138	114.	32.	615.552	24.81	35.	40.5	86.	93.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	29	0.	0.138	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	29	8.9	8.134	13.2	1.	11.774	3.431	3.7	5.	10.9	11.5
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	29	6.5	6.507	7.8	5.7	0.135	0.367	6.	6.35	6.7	6.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	29	6.5	6.378	7.8	5.7	0.152	0.39	6.	6.35	6.7	6.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	29	0.316	0.419	1.995	0.016	0.143	0.378	0.126	0.2	0.45	1.
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	29	11.	25.103	161.	3.	918.167	30.301	4.	8.	36.5	48.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	29 ##	0.05	0.61	15.	0.05	7.694	2.774	0.05	0.05	0.05	0.4
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	29	7.	12.241	33.	2.	89.047	9.436	2.	5.	21.	26.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	29	4.	14.552	128.	0.	989.736	31.46	0.	0.9	8.5	57.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	29 ##	0.01	0.01	0.01	0.	0.	0.002	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	29 ##	0.	0.035	0.19	0.	0.003	0.058	0.	0.	0.055	0.13
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	29	0.08	0.103	0.42	0.	0.012	0.109	0.	0.013	0.15	0.26
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	29	16.	24.241	49.	11.	163.19	12.775	12.	14.	36.5	45.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	29	2.9	4.738	9.8	1.6	7.837	2.799	2.	2.45	7.65	8.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	29	2.	2.628	5.5	1.1	1.542	1.242	1.3	1.65	3.85	4.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	29	1.17	1.31	2.06	0.57	0.19	0.436	0.78	0.955	1.7	2.02
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	29	1.14	1.674	4.8	0.79	1.204	1.097	0.84	0.95	1.99	3.97
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	29	1.	1.169	3.	0.1	0.34	0.583	0.6	1.	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	29	7.	6.91	11.5	4.2	1.655	1.286	5.3	6.35	7.25	8.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	29 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	29	10.	35.	810.	0.	22278.571	149.26	0.	0.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	29 ##	5.	7.069	20.	0.	61.638	7.851	0.	0.	10.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	29 ##	0.	3.621	20.	0.	26.601	5.158	0.	0.	7.5	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	29 ##	0.	8.276	60.	0.	184.421	13.58	0.	0.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	29	210.	506.552	2800.	100.	397316.256	630.33	150.	170.	595.	1140.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	29	10.	18.966	70.	0.	343.534	18.535	0.	5.	30.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	29	60.	133.793	930.	20.	38731.527	196.803	30.	40.	125.	420.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	29	40.	115.862	880.	20.	33889.409	184.091	20.	35.	115.	370.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	29 ##	0.	1.379	10.	0.	12.315	3.509	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	29 ##	5.	7.586	60.	0.	152.894	12.365	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	29	130.	303.448	2840.	30.	288423.399	537.051	50.	85.	320.	590.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	29	50.	75.172	320.	0.	4397.291	66.312	30.	40.	85.	180.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	29	3200.	3096.897	3800.	2060.	249586.453	499.586	2300.	2685.	3400.	3700.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	29 ##	0.	3.448	10.	0.	21.613	4.649	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	29	24.	32.414	63.	18.	190.537	13.804	19.	21.	43.	54.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	29 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	29	0.68	0.952	3.36	0.18	0.715	0.845	0.24	0.35	1.27	2.46
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	29	10.	19.414	120.	2.	717.251	26.782	5.	6.	18.	54.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	29 ##	100.	165.517	2000.	100.	124482.759	352.821	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	26	11.25	12.123	21.1	1.	32.963	5.741	5.74	7.325	17.375	20.53
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	25	0.6	1.585	15.	0.03	11.729	3.425	0.048	0.2	0.9	5.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	26	45.	78.885	925.	10.	30150.746	173.64	17.	33.75	60.75	78.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	26	53.	74.885	509.	37.	8092.986	89.961	38.7	44.	79.25	83.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	26	0.	0.077	1.	0.	0.074	0.272	0.	0.	0.	0.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	26	8.6	8.508	12.3	4.4	3.859	1.964	5.95	6.6	10.05	11.12
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	26	7.1	7.104	7.7	6.5	0.12	0.346	6.6	6.8	7.4	7.53
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	26	7.1	6.977	7.7	6.5	0.136	0.369	6.6	6.8	7.4	7.53
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	26	0.079	0.105	0.316	0.02	0.007	0.082	0.03	0.04	0.158	0.251
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	26	15.	17.5	33.	5.	76.5	8.746	7.7	11.	25.25	31.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	25	9.	10.76	20.	3.	30.607	5.532	4.6	6.	16.5	19.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	26	3.5	6.927	45.	0.	129.539	11.382	0.	2.	6.25	22.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	26 ##	0.01	0.021	0.3	0.01	0.003	0.057	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	26	0.055	0.128	0.59	0.	0.026	0.162	0.	0.	0.2	0.429
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	26 ##	0.025	0.033	0.13	0.	0.001	0.03	0.	0.019	0.05	0.079

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Annual Analysis for 1992 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	26	19.5	21.731	36.	12.	53.725	7.33	13.	16.	27.5	34.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	26	3.9	4.335	7.5	2.2	2.847	1.687	2.34	2.95	5.6	7.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	26	2.3	2.527	4.1	1.5	0.724	0.851	1.57	1.775	3.225	3.93
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	26	1.295	1.368	1.87	0.7	0.104	0.323	0.864	1.185	1.625	1.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	26	1.29	1.448	3.62	0.88	0.381	0.617	0.924	1.025	1.525	2.34
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	26	0.9	0.9	2.	0.7	0.06	0.245	0.7	0.8	0.925	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	26	6.55	6.446	8.4	4.6	0.844	0.919	5.24	5.6	7.1	7.46
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	26 ##	0.075	0.075	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	26 ##	5.	5.25	13.	0.	14.985	3.871	0.	1.125	9.25	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	26 ##	5.	3.962	20.	0.	17.878	4.228	0.	0.	5.	6.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	26 ##	5.	3.865	10.	0.	7.791	2.791	0.	1.	5.	6.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	26 ##	5.	4.423	40.	0.	60.654	7.788	0.	0.	5.	6.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	26	235.	350.769	1190.	20.	74951.305	273.772	160.	197.5	449.	846.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	26 ##	25.	18.308	60.	0.	282.542	16.809	0.	0.	25.	38.7
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	26	60.	71.269	190.	0.	1897.405	43.559	30.	46.75	90.	146.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	26	61.5	93.885	770.	20.	20028.426	141.522	30.	47.5	82.	133.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	26 ##	5.	3.731	20.	0.	18.625	4.316	0.	0.	5.	6.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	26 ##	5.	7.769	40.	0.	92.585	9.622	0.	0.	10.	24.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	26	185.	241.308	1710.	5.	109598.942	331.057	15.5	67.5	320.	451.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	26	60.	70.115	301.	5.	3690.506	60.75	5.	37.	92.5	126.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	26	3840.	4380.5	20000.	3000.	10369462.5	3220.165	3100.	3315.	4065.	4697.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	26 ##	5.	6.385	20.	0.	27.286	5.224	0.	5.	7.	15.8
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	20	26.	29.05	55.	19.	121.103	11.005	21.	22.25	28.5	53.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	26 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	26	0.51	0.839	3.57	0.31	0.503	0.709	0.317	0.383	1.033	1.685
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	26	9.	13.5	67.	2.	205.94	14.351	4.7	6.	12.5	31.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	26 ##	50.	71.538	100.	10.	781.538	27.956	50.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	18	12.	13.311	22.9	6.1	34.216	5.849	6.82	7.975	18.475	22.09
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	13	1.	2.157	10.	0.07	8.39	2.897	0.07	0.3	3.5	8.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	18	27.5	27.222	60.	10.	180.065	13.419	14.5	15.	40.	42.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	18	43.5	55.222	114.	6.	849.712	29.15	26.7	34.75	85.25	95.1
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	18	0.	0.111	1.	0.	0.105	0.323	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	18	8.25	7.094	10.6	1.3	7.564	2.75	1.66	5.225	9.15	9.52
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	18	7.1	7.083	8.1	6.1	0.312	0.559	6.28	6.575	7.525	7.83
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	18	7.1	6.763	8.1	6.1	0.421	0.649	6.28	6.575	7.525	7.83
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	18	0.079	0.173	0.794	0.008	0.048	0.22	0.015	0.03	0.267	0.531
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	18	9.5	14.833	33.	2.	117.441	10.837	3.8	5.75	25.25	32.1
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	18 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	18	6.5	9.944	20.	1.	46.291	6.804	2.8	4.75	18.	20.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	18	7.	20.111	221.	0.005	2562.799	50.624	2.701	4.	11.	51.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	18 ##	0.01	0.449	2.1	0.01	0.497	0.705	0.01	0.01	0.738	2.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	18	0.37	0.659	2.7	0.025	0.534	0.731	0.025	0.164	1.2	1.98
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	18 ##	0.05	0.053	0.1	0.05	0.	0.012	0.05	0.05	0.05	0.055
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	18	15.	20.056	39.	9.	95.467	9.771	11.7	13.	28.25	38.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	18	2.85	4.25	8.9	1.7	6.733	2.595	1.97	2.35	6.575	8.81
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	18	2.	2.406	4.1	1.1	0.911	0.955	1.55	1.675	3.375	4.01
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	18	1.25	1.266	1.7	0.49	0.101	0.318	0.769	1.1	1.525	1.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	18	0.95	1.194	2.6	0.7	0.283	0.532	0.79	0.8	1.475	2.24
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	18	1.	1.	2.	0.8	0.068	0.261	0.8	0.9	1.	1.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	18	7.55	7.711	10.	5.3	1.889	1.375	5.75	6.75	8.925	10.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	18 ##	0.05	0.056	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.1

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Annual Analysis for 1993 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	18 ##	5.	5.833	20.	5.	12.5	3.536	5.	5.	5.	6.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	18 ##	5.	5.278	10.	5.	1.389	1.179	5.	5.	5.	5.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-09/07/93	17 ##	5.	5.882	10.	5.	3.86	1.965	5.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	18 ##	5.	6.389	20.	5.	14.134	3.76	5.	5.	5.	11.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	18	190.	298.333	730.	40.	52450.	229.02	76.	145.	457.5	730.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	18 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	18	50.	75.278	250.	5.	4642.565	68.136	9.5	30.	107.5	196.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	18	50.	69.444	240.	10.	3370.261	58.054	19.	30.	92.5	168.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	18 ##	5.	5.556	10.	5.	2.614	1.617	5.	5.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	18 ##	5.	11.111	40.	5.	110.458	10.51	5.	5.	20.	31.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	18	70.	143.333	540.	20.	27976.471	167.262	29.	47.5	167.5	522.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	18	30.	47.5	260.	5.	4112.5	64.129	9.5	20.	42.5	179.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-09/07/93	17	3500.	3423.529	4100.	1900.	228161.765	477.663	2700.	3300.	3700.	3940.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	18 ##	5.	9.167	60.	5.	174.265	13.201	5.	5.	5.	24.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	18	23.	28.111	47.	17.	117.163	10.824	17.	18.75	38.	46.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	18 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	18	0.51	0.694	1.7	0.17	0.223	0.472	0.206	0.29	1.1	1.52
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	17	9.	20.882	200.	4.	2147.36	46.34	5.6	7.	14.5	54.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	18 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-01/10/94	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-01/10/94	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	1	0.54	0.54	0.54	0.54	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-01/10/94	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-01/10/94	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	1	180.	180.	180.	180.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	1	320.	320.	320.	320.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-01/10/94	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	1	22.	22.	22.	22.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-01/10/94	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	1	7.	7.	7.	7.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-01/10/94	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	1	11.3	11.3	11.3	11.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	1	7.943	7.943	7.943	7.943	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	1	103.	103.	103.	103.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	1	191.	191.	191.	191.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	1	244.	244.	244.	244.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	1	148.	148.	148.	148.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	1	19.	19.	19.	19.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	1	47.	47.	47.	47.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	31	19.6	18.006	22.9	7.6	16.724	4.089	10.92	15.4	20.5	21.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	31	96.	95.677	229.	30.	3388.359	58.21	35.	40.	148.	183.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	31	85.	98.419	509.	59.	5984.385	77.359	66.2	74.	93.	109.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	31	0.	0.065	1.	0.	0.062	0.25	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	31	5.6	5.445	8.9	1.	4.055	2.014	1.84	4.4	6.6	7.96
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	31	6.7	6.797	8.1	6.3	0.169	0.411	6.4	6.5	6.9	7.48
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	31	6.7	6.667	8.1	6.3	0.186	0.432	6.4	6.5	6.9	7.48
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	31	0.2	0.215	0.501	0.008	0.018	0.135	0.033	0.126	0.316	0.398
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	31	32.	32.29	48.	19.	48.746	6.982	20.2	29.	38.	41.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	31 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	31	4.	8.113	65.	0.	162.359	12.742	0.02	2.	8.	14.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	31 ##	0.01	0.064	1.4	0.01	0.064	0.253	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	31	0.14	0.214	1.3	0.	0.093	0.305	0.	0.01	0.2	0.52
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	31	0.05	0.077	0.42	0.	0.008	0.087	0.001	0.025	0.12	0.15
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	31	35.	35.194	47.	24.	46.361	6.809	25.	30.	41.	45.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	31	7.3	7.458	9.8	4.9	2.295	1.515	5.1	6.2	8.7	9.58
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	31	3.8	3.758	4.7	2.4	0.33	0.574	2.82	3.3	4.1	4.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	31	1.7	1.675	2.12	1.11	0.041	0.203	1.414	1.57	1.8	1.906
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	31	1.94	2.096	4.09	1.31	0.523	0.723	1.416	1.64	2.22	3.506
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	31	1.	0.987	2.	0.7	0.044	0.211	0.72	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	31	5.6	6.203	11.5	4.2	2.48	1.575	5.1	5.3	6.6	8.74
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	31 ##	5.	5.484	20.	0.	27.258	5.221	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	31 ##	5.	8.871	40.	0.	94.516	9.722	0.	0.	10.	24.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	31	590.	760.645	2800.	190.	251839.57	501.836	414.	490.	920.	1180.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	31 ##	25.	27.871	80.	0.	504.183	22.454	0.	10.	50.	57.2
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	31	150.	188.839	930.	0.	29931.14	173.006	72.	100.	200.	394.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	31	130.	174.871	880.	50.	25758.183	160.494	80.	90.	170.	348.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	31 ##	5.	3.871	10.	0.	14.516	3.81	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	31 ##	5.	8.065	40.	0.	76.129	8.725	0.	0.	10.	18.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	31	100.	121.613	500.	5.	12112.312	110.056	26.	70.	120.	226.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	31	40.	42.742	150.	5.	1071.398	32.732	6.	30.	50.	78.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	28	45.5	44.464	57.	23.	75.295	8.677	30.9	39.5	52.	55.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	31	1.28	1.406	3.3	0.76	0.259	0.509	0.962	1.06	1.7	1.918
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	31	10.	13.581	68.	0.	158.518	12.59	4.4	6.	15.	28.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	23	7.9	8.013	13.2	2.9	5.988	2.447	5.14	6.1	10.1	11.38
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	23	50.	69.565	477.	10.	9865.348	99.324	10.	25.	66.	171.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	23	45.	54.13	114.	32.	434.391	20.842	37.8	40.	61.	86.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	23	0.	0.174	1.	0.	0.15	0.388	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	23	9.8	9.313	12.3	1.7	5.844	2.417	5.06	8.8	11.	11.56
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	23	6.6	6.687	7.7	5.7	0.291	0.54	6.04	6.3	7.	7.56
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	23	6.6	6.42	7.7	5.7	0.366	0.605	6.04	6.3	7.	7.56
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	23	0.251	0.38	1.995	0.02	0.197	0.444	0.028	0.1	0.501	0.918
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	23	9.	15.217	54.	5.	158.087	12.573	5.4	8.	19.	36.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	23 ##	0.05	0.091	1.	0.05	0.039	0.198	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	23	3.	11.557	113.	0.8	595.087	24.394	1.	2.	7.	39.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	23 ##	0.01	0.01	0.01	0.	0.	0.002	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	23 ##	0.025	0.152	0.59	0.	0.046	0.214	0.	0.	0.36	0.546
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	23	0.05	0.079	0.38	0.	0.009	0.093	0.004	0.025	0.09	0.246
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	23	15.	19.957	49.	12.	103.134	10.156	12.4	13.	24.	37.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	23	2.6	3.778	8.6	2.	4.147	2.036	2.2	2.4	4.9	7.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	23	1.8	2.313	5.5	1.1	1.206	1.098	1.5	1.6	2.9	4.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	23	1.1	1.19	2.06	0.57	0.165	0.406	0.732	0.92	1.5	1.96
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	23	1.15	1.44	4.8	0.7	0.866	0.93	0.794	0.9	1.56	2.812
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	23	1.	1.104	2.	0.6	0.186	0.431	0.8	0.9	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	23	7.1	7.03	8.4	5.7	0.544	0.738	5.78	6.5	7.6	8.1
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	23 ##	5.	5.	20.	0.	43.182	6.571	0.	0.	5.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	23 ##	5.	5.435	40.	0.	70.257	8.382	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	23	210.	340.826	2380.	20.	212845.877	461.352	150.	180.	310.	562.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	23 ##	25.	27.174	60.	0.	351.877	18.758	0.	10.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	23	50.	87.348	610.	20.	14450.874	120.212	30.	40.	90.	152.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	23	40.	108.13	770.	20.	32272.937	179.647	30.	40.	70.	388.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	23 ##	5.	3.913	20.	0.	24.901	4.99	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	23 ##	5.	9.348	60.	0.	171.146	13.082	0.	0.	10.	26.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	23	180.	327.565	2840.	22.	329086.893	573.661	30.	70.	380.	566.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	23	50.	84.913	320.	5.	5526.083	74.338	14.	30.	120.	188.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	20	22.	26.8	63.	18.	138.274	11.759	19.	21.	26.75	49.1
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	23	0.49	0.717	3.36	0.26	0.533	0.73	0.278	0.36	0.76	1.856
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	22	8.	15.591	94.	5.	399.491	19.987	5.	6.	18.25	40.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	18	7.3	7.317	13.2	1.	10.503	3.241	2.53	5.475	9.55	11.67
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	18	44.	73.889	413.	15.	9134.928	95.577	15.	24.5	77.75	215.9
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	18	39.5	39.278	49.	29.	43.154	6.569	29.9	33.75	46.25	49.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	18	0.	0.278	1.	0.	0.212	0.461	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	18	10.5	10.6	13.2	8.7	1.662	1.289	8.97	9.625	11.325	13.02
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	18	6.75	6.778	7.8	5.1	0.457	0.676	5.91	6.375	7.4	7.53
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	18	6.747	6.162	7.8	5.1	0.859	0.927	5.91	6.375	7.4	7.53
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	18	0.179	0.689	7.943	0.016	3.369	1.836	0.03	0.04	0.424	1.694
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	18	8.	6.944	12.	2.	10.879	3.298	2.	4.	9.	12.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	18 ##	0.05	0.925	15.	0.05	12.356	3.515	0.05	0.05	0.05	1.95
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	18	5.5	32.723	221.	0.	3584.546	59.871	0.	1.501	33.75	137.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	18 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	18 ##	0.	0.336	3.7	0.	0.905	0.951	0.	0.	0.026	2.08
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	18 ##	0.045	0.037	0.13	0.	0.001	0.034	0.	0.004	0.05	0.076
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	18	13.5	13.389	18.	9.	5.428	2.33	9.9	12.	15.	17.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	18	2.4	2.417	3.6	1.6	0.26	0.51	1.69	2.	2.7	3.24
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	18	1.6	1.617	2.3	1.1	0.104	0.322	1.1	1.3	1.825	2.12
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	18	1.07	1.054	1.6	0.49	0.075	0.274	0.607	0.903	1.213	1.474
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	18	0.935	0.951	1.5	0.7	0.025	0.158	0.79	0.9	0.992	1.068
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	18	1.	1.061	3.	0.1	0.348	0.59	0.73	0.8	1.	2.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	18	7.05	7.272	10.	5.8	0.856	0.925	6.25	6.875	7.35	9.01
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	18 ##	0.	2.778	10.	0.	12.418	3.524	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	18 ##	2.5	4.167	15.	0.	27.206	5.216	0.	0.	6.25	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	18	165.	162.833	220.	90.	1236.265	35.161	99.	145.	193.25	202.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	18 ##	20.	23.889	50.	0.	483.987	22.	0.	0.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	18	40.	50.	190.	10.	1741.176	41.727	19.	30.	52.5	109.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	18	30.	34.167	75.	10.	306.618	17.511	19.	20.	42.5	61.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	18 ##	0.	2.778	10.	0.	15.359	3.919	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	18 ##	5.	7.778	50.	0.	153.595	12.393	0.	0.	10.	23.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	18	237.	301.889	1120.	30.	72774.81	269.768	39.	95.	450.	598.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	18	75.	97.667	260.	30.	4170.941	64.583	39.	47.5	142.	206.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	18	21.	20.667	26.	17.	6.	2.449	17.	18.75	22.	24.2
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	18	0.34	0.434	1.22	0.18	0.082	0.286	0.207	0.255	0.495	1.112
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	18	11.5	32.389	200.	2.	2576.84	50.763	3.8	5.	41.	128.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-03/03/97	20	14.8	14.34	19.8	6.9	13.398	3.66	9.41	11.35	17.275	19.49
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-03/03/97	20	56.	101.1	925.	10.	38560.516	196.368	15.	40.	85.75	122.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-03/03/97	20	50.5	52.15	86.	6.	317.713	17.825	36.2	42.	60.25	80.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-03/03/97	20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-03/03/97	20	8.05	8.17	10.8	5.	2.144	1.464	6.52	6.975	9.275	10.36
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-03/03/97	20	6.95	6.925	7.8	6.2	0.165	0.406	6.41	6.6	7.1	7.58
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-03/03/97	20	6.947	6.764	7.8	6.2	0.193	0.439	6.41	6.6	7.1	7.58
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-03/03/97	20	0.113	0.172	0.631	0.016	0.023	0.153	0.027	0.079	0.251	0.39
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-03/03/97	20	15.	22.5	161.	6.	1091.	33.03	8.1	11.	20.75	24.9
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-03/03/97	20	6.	7.64	45.	0.	94.487	9.72	0.08	2.25	9.	15.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-03/03/97	20 ##	0.01	0.336	2.1	0.01	0.414	0.643	0.01	0.01	0.503	1.891
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-03/03/97	20	0.06	0.283	2.7	0.	0.398	0.63	0.	0.026	0.275	1.118
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-03/03/97	20	0.05	0.076	0.2	0.	0.004	0.066	0.	0.023	0.138	0.189
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-03/03/97	20	19.5	19.85	31.	13.	26.029	5.102	14.	16.	24.	28.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-03/03/97	20	3.75	3.915	6.3	2.4	1.514	1.23	2.4	2.825	5.1	6.03
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-03/03/97	20	2.2	2.3	3.3	1.6	0.254	0.504	1.71	1.925	2.725	3.26
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-03/03/97	20	1.28	1.318	1.68	0.9	0.038	0.196	1.105	1.193	1.478	1.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-03/03/97	20	1.215	1.175	1.58	0.8	0.049	0.221	0.81	0.97	1.278	1.535
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-03/03/97	20	0.9	0.935	2.	0.4	0.085	0.291	0.71	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-03/03/97	20	6.95	7.39	10.	5.8	1.477	1.215	6.13	6.525	7.95	9.81
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-03/03/97	20 ##	5.	5.4	20.	0.	36.674	6.056	0.	0.	8.75	19.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-03/03/97	20 ##	5.	7.75	60.	0.	188.092	13.715	0.	0.	8.75	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-03/03/97	20	220.5	267.55	620.	40.	20857.524	144.421	87.	172.5	356.	527.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-03/03/97	20 ##	10.5	21.85	50.	0.	460.45	21.458	0.	2.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-03/03/97	20	60.	70.25	190.	5.	1859.145	43.118	30.	50.	95.	129.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-03/03/97	20	61.	64.15	120.	30.	728.029	26.982	30.	40.75	86.	109.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-03/03/97	20 ##	0.25	2.35	10.	0.	8.792	2.965	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-03/03/97	20 ##	5.	9.35	40.	0.	132.134	11.495	0.	0.	17.5	29.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-03/03/97	20	150.	231.	1710.	20.	128420.	358.357	50.	92.5	220.	344.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-03/03/97	20	50.	59.	301.	0.	4021.263	63.413	5.5	22.5	67.5	104.3
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-03/03/97	20	27.	28.55	40.	21.	27.208	5.216	23.	24.	33.25	36.8
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-03/03/97	20	0.49	0.755	3.57	0.17	0.547	0.74	0.281	0.353	0.995	1.317
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-03/03/97	20	9.5	13.1	67.	2.	185.779	13.63	5.1	7.	14.25	21.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0046

NPS Station ID: CUGA0046 | LAT/LON: 36.615504/ -83.680642 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: DAVIS BRANCH: NORTH OF UNNAMED STREAM | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_DB7
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1300 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON DAVIS BRANCH 500 FEET WEST OF STATE ROUTE 988 AND 800 FEET NORTH OF THE UNNAMED STREAM LOCATED DIRECTLY NORTH OF THE OLD WILDERNESS ROAD. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0046

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	40	12.6	13.138	19.9	2.8	26.735	5.171	6.1	8.75	18.875	19.29
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	40	0.085	1.072	23.	0.	13.354	3.654	0.	0.005	0.95	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	40	49.5	62.35	442.	19.	4403.515	66.359	25.3	37.75	63.75	103.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	40	60.	58.325	88.	30.	282.533	16.809	37.	42.	74.	81.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	40	0.	0.05	1.	0.	0.049	0.221	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	40	8.35	8.68	13.1	3.9	4.604	2.146	5.62	7.4	10.725	11.47
00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	17	7.1	7.135	7.4	6.7	0.03	0.173	6.86	7.05	7.3	7.32
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-12/30/91	17	7.1	7.099	7.4	6.7	0.031	0.177	6.86	7.05	7.3	7.32
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-12/30/91	17	0.079	0.08	0.2	0.04	0.001	0.038	0.048	0.05	0.09	0.141
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	40	6.8	6.77	7.2	6.3	0.047	0.216	6.41	6.6	6.9	7.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-12/30/91	40	6.8	6.715	7.2	6.3	0.05	0.223	6.41	6.6	6.9	7.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-12/30/91	40	0.158	0.193	0.501	0.063	0.011	0.107	0.1	0.126	0.251	0.39
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	40	21.	18.95	35.	0.	99.638	9.982	7.	8.	27.	31.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	40 ##	0.05	0.074	1.	0.05	0.023	0.15	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	40	13.	11.35	21.	0.	37.977	6.163	4.	5.	16.	19.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	40	4.	19.523	513.	0.	6490.505	80.564	0.	1.	8.75	28.7
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	40 ##	0.01	0.323	4.7	0.	1.118	1.058	0.01	0.01	0.01	0.991
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	40 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	40	0.04	0.089	0.8	0.	0.019	0.139	0.	0.	0.153	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0046

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	40	0.05	0.077	0.43	0.	0.008	0.09	0.	0.013	0.11	0.234
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	3 ##	0.5	0.5	1.	0.	0.25	0.5	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	40	26.5	23.15	37.	11.	63.259	7.954	13.	14.	29.	33.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	40	5.8	4.95	8.	2.1	3.719	1.929	2.5	2.8	6.5	7.27
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	40	2.7	2.428	3.8	1.	0.592	0.769	1.41	1.6	2.9	3.58
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	40	1.255	1.241	1.79	0.65	0.082	0.286	0.881	0.995	1.485	1.609
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	40	1.575	1.593	3.39	0.78	0.443	0.666	0.89	0.982	1.965	2.804
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	40	1.	1.08	2.	0.8	0.099	0.314	0.9	1.	1.	1.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	40	5.8	5.978	11.	2.6	2.844	1.687	4.1	4.75	7.075	7.99
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	40 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/17/91	6 ##	0.	5.833	35.	0.	204.167	14.289	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/17/91	8	35.	32.5	50.	20.	135.714	11.65	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	40 ##	0.	69.125	2600.	0.	168494.728	410.481	0.	0.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/17/91	8 ##	0.	3.75	20.	0.	55.357	7.44	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	40 ##	0.	1.375	10.	0.	10.24	3.2	0.	0.	0.	9.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	40 ##	0.	2.625	20.	0.	24.343	4.934	0.	0.	3.75	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	40 ##	0.	5.	65.	0.	138.462	11.767	0.	0.	7.5	19.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	40	265.	255.5	510.	0.	17517.692	132.354	100.	130.	372.5	440.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	40	10.	16.125	80.	0.	414.728	20.365	0.	0.	27.5	40.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	40	40.	56.5	340.	10.	3428.462	58.553	10.	22.5	77.5	117.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	40	30.	34.25	110.	10.	486.603	22.059	10.	20.	50.	60.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/17/91	27 ##	0.	0.37	10.	0.	3.704	1.925	0.	0.	0.	0.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	40 ##	0.	0.5	10.	0.	3.59	1.895	0.	0.	0.	0.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/17/91	27 ##	0.	10.37	50.	0.	319.088	17.863	0.	0.	20.	42.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/17/91	27 ##	0.	1.481	20.	0.	20.798	4.56	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	40 ##	0.	11.75	330.	0.	2695.577	51.919	0.	0.	10.	10.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	40	80.	168.25	2310.	0.	129112.244	359.322	40.	60.	130.	294.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	40	40.	48.625	320.	0.	2724.343	52.195	10.	20.	57.5	89.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/91	27 ##	0.	2.593	30.	0.	50.712	7.121	0.	0.	0.	12.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/91	27 ##	0.	2.963	30.	0.	52.422	7.24	0.	0.	0.	12.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	40	3200.	3068.75	4320.	0.	461077.885	679.027	2286.	3000.	3400.	3671.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	40 ##	0.	4.375	50.	0.	114.343	10.693	0.	0.	0.	14.5
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	40	32.5	30.7	43.	19.	62.677	7.917	20.	22.	37.	41.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	40 ##	0.15	0.156	0.25	0.15	0.001	0.023	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/17/91	25 ##	0.	1.	25.	0.	25.	5.	0.	0.	0.	0.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	40	0.52	0.524	1.78	0.15	0.093	0.305	0.182	0.293	0.658	0.901
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	40	6.	9.55	95.	0.	223.485	14.949	3.	5.	9.	16.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	40 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0046

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	40	1	0.03	17	1	0.06	11	0	0.00	5	0	0.00	7	0	0.00
00403	PH, LAB	Fresh Chronic	9.	17	0	0.00	8	0	0.00	4	0	0.00				5	0	0.00
		Other-Lo Lim.	6.5	17	0	0.00	8	0	0.00	4	0	0.00				5	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
		Other-Lo Lim.	6.5	40	5	0.13	17	1	0.06	11	1	0.09	5	2	0.40	7	1	0.14
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	250.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	6	0	0.00	3	0	0.00	1	0	0.00				2	0	0.00
		Drinking Water	50.	6	0	0.00	3	0	0.00	1	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	8	0	0.00	5	0	0.00	1	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	8	2	0.25	5	1	0.20	1	0	0.00				2	1	0.50
		Drinking Water	5.	8	2	0.25	5	1	0.20	1	0	0.00				2	1	0.50

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0046

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	37 &	1	0.03	14	0	0.00	11	0	0.00	5	0	0.00	7	1	0.14
		Drinking Water	1300.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	15.	38 &	12	0.32	17	6	0.35	11	3	0.27	4	0	0.00	6	3	0.50
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	100.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	40	1	0.03	17	1	0.06	11	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	5000.	40	0	0.00	17	0	0.00	11	0	0.00	5	0	0.00	7	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	24 &	0	0.00	9	0	0.00	7	0	0.00	5	0	0.00	3	0	0.00
		Drinking Water	2.	24 &	0	0.00	9	0	0.00	7	0	0.00	5	0	0.00	3	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	40	1	0.03	17	0	0.00	11	1	0.09	5	0	0.00	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0047

NPS Station ID: CUGA0047
LAT/LON: 36.608837/ -83.680948
Agency: 11NPSWRD
Date Created: 09/20/97
Location: DRAINAGE DITCH: RAILROAD TUNNEL
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /CANAL/TYPA/AMBNT
STORET Station ID(s): CUGA_CPSU_RR1
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1300
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS AT THE KENTUCKY END OF THE EXISTING RAILROAD TUNNEL. THE FLOW FROM THE TUNNEL ENTERS THE DAVIS BRANCH 150 YARDS UPSTREAM FROM ITS CONFLUENCE WITH LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	171	12.4	12.568	20.9	4.4	17.57	4.192	7.22	8.7	16.6	17.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	155	0.2	0.409	12.	0.	1.097	1.047	0.03	0.1	0.4	0.64
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	172	10.	33.936	541.	0.5	4746.885	68.898	5.	6.	29.	78.3
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	172	197.	200.041	356.	11.	3214.168	56.694	142.3	165.5	235.5	268.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	172	0.	0.134	1.	0.	0.117	0.341	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	172	9.	8.538	11.7	1.5	3.735	1.933	6.	7.7	9.8	10.5
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	147	7.5	7.515	8.8	6.2	0.064	0.254	7.2	7.4	7.6	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	147	7.5	7.418	8.8	6.2	0.074	0.272	7.2	7.4	7.6	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	147	0.032	0.038	0.631	0.002	0.003	0.053	0.016	0.025	0.04	0.063
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	172	7.3	7.348	8.6	6.2	0.121	0.347	6.9	7.1	7.6	7.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	172	7.3	7.202	8.6	6.2	0.142	0.377	6.9	7.1	7.6	7.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	172	0.05	0.063	0.631	0.003	0.005	0.068	0.016	0.025	0.079	0.126
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	172	40.	40.645	130.	14.	159.423	12.626	30.	34.	44.	49.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	172 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	125	24.	24.776	79.	0.	79.24	8.902	18.	21.	27.	30.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	172	9.5	22.32	715.	0.1	3951.924	62.864	3.	6.	18.	40.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-11/01/94	74 ##	0.01	0.805	35.	0.	16.918	4.113	0.	0.	0.015	1.25
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	172 ##	0.01	0.018	1.	0.01	0.006	0.079	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	172	0.57	0.667	7.53	0.01	0.566	0.752	0.1	0.14	0.888	1.27

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	172 ##	0.05	0.083	0.58	0.	0.011	0.107	0.017	0.05	0.05	0.228
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-08/12/96	27	2.	3.678	17.	0.	22.082	4.699	0.	1.1	4.2	13.6
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	172	68.	69.471	130.	34.	197.268	14.045	56.	61.	77.	86.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	172	19.	19.653	37.1	2.	18.795	4.335	15.53	17.	21.075	25.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	172	4.7	4.804	15.	1.4	2.744	1.656	2.7	3.9	5.7	6.77
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	172	8.825	9.815	34.	0.01	26.213	5.12	5.403	6.838	11.	16.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	172	1.645	1.677	5.28	0.	0.473	0.688	1.	1.3	1.9	2.157
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	172	16.	18.407	79.	0.05	120.478	10.976	9.	12.	20.75	32.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	172	26.	26.907	100.	2.9	96.501	9.823	17.	20.525	32.	38.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	172 ##	0.1	0.156	1.36	0.05	0.046	0.214	0.05	0.05	0.2	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	29 ##	50.	50.69	250.	0.	3497.722	59.142	0.	17.5	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	36	20.	24.194	70.	0.	149.075	12.21	5.	20.	30.	40.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	171 ##	5.	8.076	60.	0.	79.694	8.927	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	33 ##	5.	4.394	10.	0.	8.996	2.999	0.	2.5	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	172 ##	5.	5.692	80.	0.	44.402	6.663	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	92 ##	5.	9.304	90.	0.	162.873	12.762	0.	4.25	10.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	172 ##	5.	13.186	1370.	0.	10860.983	104.216	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	172	120.	158.477	2180.	5.	40623.982	201.554	30.	67.75	170.	310.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	172 ##	50.	42.448	100.	0.	327.465	18.096	20.	30.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	172	250.	266.221	1400.	27.	28218.36	167.983	102.4	162.5	320.	434.9
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	172	194.	233.157	4780.	4.	135554.25	368.177	50.	130.	280.	390.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	51 ##	0.	18.431	50.	0.	535.49	23.141	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	171 ##	5.	7.918	70.	0.	55.464	7.447	5.	5.	10.	19.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	36 ##	2.5	22.639	60.	0.	619.266	24.885	0.	0.	50.	53.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	51 ##	0.	3.922	30.	0.	36.314	6.026	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	172	10.	23.25	1000.	0.	5878.06	76.669	5.	5.	21.5	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	172	480.	556.378	2360.	15.	151489.78	389.217	230.	340.	630.	950.7
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	172	80.	94.683	930.	5.	12297.854	110.896	5.	40.	118.75	160.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	35 ##	0.	6.571	50.	0.	276.134	16.617	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	35 ##	0.	29.143	110.	0.	1219.832	34.926	0.	0.	50.	88.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	93	3300.	3480.914	30000.	1800.	8013268.993	2830.772	2394.	2800.	3600.	3800.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	172 ##	5.	5.843	50.	0.	42.004	6.481	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	166	102.5	105.289	201.	0.	698.789	26.435	80.1	87.75	120.	141.3
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	172 ##	0.15	0.151	0.25	0.15	0.	0.011	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	50 ##	0.	23.9	100.	0.	704.378	26.54	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	172	0.465	0.727	6.77	0.005	0.833	0.913	0.18	0.3	0.863	1.297
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	156	10.	19.878	248.	0.	996.585	31.569	3.7	5.	20.	50.3
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	171 ##	50.	67.895	400.	10.	1216.718	34.881	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0047

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	172	6	0.03	60	2	0.03	41	1	0.02	30	2	0.07	41	1	0.02
00403	PH, LAB	Fresh Chronic	9.	147	0	0.00	49	0	0.00	33	0	0.00	25	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	147	1	0.01	49	0	0.00	33	1	0.03	25	0	0.00	40	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
		Other-Lo Lim.	6.5	172	3	0.02	60	1	0.02	41	2	0.05	30	0	0.00	41	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	172	1	0.01	60	0	0.00	41	0	0.00	30	0	0.00	41	1	0.02
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
		Drinking Water	250.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	29	0	0.00	9	0	0.00	7	0	0.00	5	0	0.00	8	0	0.00
		Drinking Water	50.	9 &	0	0.00	4	0	0.00	3	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	36	0	0.00	11	0	0.00	8	0	0.00	8	0	0.00	9	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12 &	4	0.33	6	2	0.33	3	1	0.33				3	1	0.33
		Drinking Water	5.	12 &	4	0.33	6	2	0.33	3	1	0.33				3	1	0.33

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0047

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	170 &	4	0.02	58	3	0.05	41	1	0.02	30	0	0.00	41	0	0.00
		Drinking Water	1300.	172	1	0.01	60	1	0.02	41	0	0.00	30	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	172	4	0.02	60	2	0.03	41	1	0.02	30	1	0.03	41	0	0.00
		Drinking Water	15.	58 &	42	0.72	21	18	0.86	14	9	0.64	9	5	0.56	14	10	0.71
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	171	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	40	0	0.00
		Drinking Water	100.	171	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	40	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	172	1	0.01	60	1	0.02	41	0	0.00	30	0	0.00	41	0	0.00
		Drinking Water	5000.	172	0	0.00	60	0	0.00	41	0	0.00	30	0	0.00	41	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	26 &	0	0.00	10	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
		Drinking Water	2.	26 &	0	0.00	10	0	0.00	9	0	0.00	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	156	16	0.10	58	9	0.16	34	2	0.06	27	2	0.07	37	3	0.08

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	16	14.65	13.788	17.9	6.5	15.173	3.895	7.06	10.15	17.175	17.83
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	16	0.35	0.475	2.	0.	0.233	0.482	0.	0.2	0.5	1.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	16	44.5	70.063	252.	23.	4080.863	63.882	23.	31.	83.25	205.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	16	174.5	178.063	264.	148.	660.463	25.699	151.5	170.25	182.75	212.9
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	16	0.	0.125	1.	0.	0.117	0.342	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	16	9.5	9.844	11.6	9.	0.703	0.838	9.07	9.2	10.5	11.32
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	16	7.25	7.294	7.8	7.1	0.045	0.211	7.1	7.1	7.4	7.73
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	16	7.247	7.254	7.8	7.1	0.046	0.215	7.1	7.1	7.4	7.73
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	16	0.057	0.056	0.079	0.016	0.	0.021	0.019	0.04	0.079	0.079
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	16	42.	43.25	53.	35.	17.667	4.203	37.8	41.	46.25	50.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	16 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	16	26.	24.875	32.	0.	50.65	7.117	14.7	25.	28.5	30.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	16	9.	11.188	42.	1.	104.563	10.226	2.4	4.25	14.75	28.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	16 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	16	0.1	0.106	0.2	0.1	0.001	0.025	0.1	0.1	0.1	0.13
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	16	0.035	0.086	0.29	0.	0.012	0.109	0.	0.	0.148	0.283
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	16	61.5	63.375	90.	54.	63.85	7.991	56.8	59.	66.	74.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	16	16.9	17.644	25.6	15.4	5.912	2.431	15.54	16.325	18.55	21.26
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	16	4.5	4.456	6.1	2.7	0.497	0.705	3.26	4.225	4.7	5.26
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	16	6.245	6.341	7.57	4.86	0.653	0.808	5.168	5.675	6.985	7.444
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	16	1.77	1.743	2.06	1.29	0.055	0.234	1.346	1.598	1.97	2.053
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	16	13.5	12.5	16.	7.	6.267	2.503	8.4	10.25	14.	15.3
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	16	19.8	20.431	29.	17.2	8.174	2.859	17.62	18.35	22.075	24.73
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	16 ##	0.195	0.372	1.36	0.1	0.151	0.389	0.1	0.1	0.568	1.192
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	16 ##	5.	5.625	20.	0.	39.583	6.292	0.	0.	10.	13.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	16	10.	5.625	10.	0.	26.25	5.123	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	16 ##	0.	5.625	30.	0.	79.583	8.921	0.	0.	10.	23.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	16 ##	0.	6.563	25.	0.	75.729	8.702	0.	0.	10.	21.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	16	105.	111.25	190.	20.	3051.667	55.242	34.	65.	160.	190.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	16	20.	30.625	100.	0.	712.917	26.7	7.	10.	45.	79.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	16	175.	216.875	450.	120.	9036.25	95.059	127.	150.	260.	415.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	16	135.	154.375	290.	100.	2466.25	49.661	107.	120.	190.	227.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	16	10.	7.5	10.	0.	20.	4.472	0.	2.5	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	16	10.	70.	1000.	0.	61546.667	248.086	0.	0.	10.	314.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	16	430.	431.875	610.	270.	9962.917	99.814	298.	352.5	520.	582.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	16	95.	104.375	220.	60.	1386.25	37.232	60.	90.	115.	164.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	16	3250.	3198.75	3830.	2220.	178918.333	422.987	2521.	2855.	3517.5	3725.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	16 ##	0.	7.5	20.	0.	86.667	9.309	0.	0.	20.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	16	88.	88.188	112.	74.	60.829	7.799	79.6	84.25	89.75	98.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	16 ##	0.15	0.166	0.25	0.15	0.001	0.035	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	16	0.555	0.626	1.53	0.2	0.113	0.336	0.235	0.373	0.808	1.166
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	16	8.5	12.75	52.	0.	152.733	12.359	2.8	6.25	15.	34.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	16 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	27	12.	12.407	20.1	6.5	15.693	3.961	7.2	8.7	16.	17.36
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	27	0.2	0.328	3.	0.	0.322	0.567	0.	0.06	0.4	0.62
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	27	39.	90.37	541.	3.	17525.319	132.383	8.2	13.	128.	254.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	27	156.	151.963	177.	54.	699.806	26.454	120.8	144.	168.	175.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	27	0.	0.074	1.	0.	0.071	0.267	0.	0.	0.	0.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	27	9.7	9.759	11.7	6.4	1.388	1.178	8.34	9.3	10.6	11.34
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	19	7.6	7.595	7.8	7.5	0.011	0.103	7.5	7.5	7.7	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	19	7.6	7.584	7.8	7.5	0.011	0.103	7.5	7.5	7.7	7.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	19	0.025	0.026	0.032	0.016	0.	0.006	0.016	0.02	0.032	0.032
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	27	7.3	7.23	7.9	6.5	0.108	0.328	6.76	7.	7.4	7.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	27	7.3	7.108	7.9	6.5	0.123	0.351	6.76	7.	7.4	7.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	27	0.05	0.078	0.316	0.013	0.005	0.069	0.016	0.04	0.1	0.177
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	27	42.	40.63	48.	29.	20.781	4.559	33.4	37.	44.	45.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	27	26.	24.889	29.	18.	7.41	2.722	20.6	23.	27.	27.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	27	7.	20.63	129.	1.	1016.934	31.889	2.	4.	23.	63.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	27 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	27	0.1	0.121	0.39	0.06	0.004	0.06	0.08	0.09	0.13	0.172
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	27	0.17	0.216	0.58	0.	0.033	0.183	0.012	0.06	0.35	0.53
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	27	61.	61.778	97.	38.	92.179	9.601	54.6	59.	63.	71.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	27	17.1	17.356	31.9	11.7	11.735	3.426	13.26	16.5	17.8	19.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	27	4.3	4.237	7.5	1.4	1.251	1.118	2.98	3.8	4.5	5.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	27	6.71	6.033	8.85	0.01	3.549	1.884	3.254	5.4	7.19	7.622
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	27	1.65	1.613	2.73	0.	0.27	0.52	1.114	1.37	1.84	2.268
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	27	12.	11.63	18.	2.	10.934	3.307	6.8	10.	14.	15.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	27	20.9	19.696	24.7	12.5	13.412	3.662	13.86	16.4	22.9	23.76
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	27 ##	0.1	0.14	0.84	0.1	0.024	0.154	0.1	0.1	0.1	0.168
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	27	20.	17.407	60.	0.	243.02	15.589	0.	0.	20.	40.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	27 ##	5.	7.778	80.	0.	231.41	15.212	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	27	10.	15.926	90.	0.	363.533	19.067	0.	0.	20.	34.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	27 ##	0.	4.074	15.	0.	28.917	5.377	0.	0.	10.	11.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	27	150.	222.963	2180.	40.	155875.499	394.811	70.	120.	170.	240.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	27	20.	32.222	90.	0.	679.487	26.067	0.	10.	50.	80.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	27	170.	188.148	420.	90.	5538.746	74.423	118.	140.	230.	314.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	27	150.	325.926	4780.	20.	795340.456	891.819	98.	130.	180.	282.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	27	10.	8.519	30.	0.	51.567	7.181	0.	0.	10.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	27	10.	12.222	50.	0.	148.718	12.195	0.	0.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	27	370.	554.444	2360.	160.	267179.487	516.894	226.	240.	570.	1572.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	27	120.	155.185	830.	10.	25772.08	160.537	66.	90.	160.	248.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	27	3300.	3160.	4600.	1930.	331507.692	575.767	2196.	2800.	3600.	3620.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	27 ##	0.	4.444	40.	0.	100.641	10.032	0.	0.	5.	22.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	27	86.	81.037	94.	0.	347.729	18.648	61.	81.	89.	93.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	27	0.38	0.859	6.35	0.14	1.518	1.232	0.176	0.27	1.29	1.638
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	27	11.	22.481	110.	0.	847.182	29.106	2.	4.	27.	82.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	27 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	26	12.35	12.442	19.	5.9	18.805	4.336	7.04	8.225	16.9	18.11
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	26	0.2	0.337	3.	0.03	0.332	0.576	0.058	0.098	0.3	0.65
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	27	15.	43.093	294.	0.5	4809.808	69.353	5.	10.	45.	131.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	27	195.	188.667	245.	62.	1198.231	34.615	148.4	173.	206.	221.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	27	0.	0.111	1.	0.	0.103	0.32	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	27	8.6	8.774	11.1	6.6	1.387	1.178	7.16	7.9	9.8	10.56
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	27	7.6	7.5	7.8	7.	0.042	0.204	7.2	7.4	7.6	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	27	7.6	7.45	7.8	7.	0.044	0.21	7.2	7.4	7.6	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	27	0.025	0.035	0.1	0.016	0.	0.019	0.016	0.025	0.04	0.063
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	27	7.6	7.444	8.6	6.2	0.326	0.571	6.68	6.9	7.9	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	27	7.6	7.088	8.6	6.2	0.458	0.677	6.68	6.9	7.9	8.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	27	0.025	0.082	0.631	0.003	0.016	0.128	0.008	0.013	0.126	0.21
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	27	40.	42.667	60.	31.	65.923	8.119	33.6	37.	49.	57.

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Annual Analysis for 1992 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	26	24.	26.115	37.	19.	26.586	5.156	20.7	23.	30.25	35.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	27	8.	14.004	88.	0.1	376.739	19.41	2.	6.	14.	47.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	27 ##	0.01	0.021	0.31	0.01	0.003	0.058	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	27	0.27	0.341	0.97	0.01	0.067	0.259	0.108	0.14	0.48	0.902
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	27 ##	0.025	0.069	0.37	0.	0.012	0.108	0.	0.01	0.05	0.286
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	27	68.	71.593	108.	58.	149.635	12.233	58.8	64.	75.	92.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	27	18.7	19.922	29.6	15.5	14.939	3.865	16.24	17.2	21.	27.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	27	5.	5.107	8.4	2.7	1.54	1.241	3.64	4.4	5.7	6.98
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	27	8.19	7.774	9.5	5.79	1.449	1.204	5.972	6.57	8.85	9.098
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	27	1.74	2.02	5.28	1.3	0.891	0.944	1.384	1.56	2.1	2.92
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	27	13.	12.483	21.	0.05	15.596	3.949	7.	11.	15.	16.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	27	27.4	28.444	43.	19.	36.817	6.068	22.42	23.4	32.	38.48
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	27 ##	0.1	0.245	1.28	0.05	0.119	0.345	0.05	0.05	0.3	0.882
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	27 ##	5.	9.296	40.	0.	117.986	10.862	0.	5.	10.	30.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	27 ##	5.	6.259	30.	0.	38.738	6.224	0.	5.	5.	12.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	27 ##	5.	8.37	40.	0.	90.165	9.496	0.	5.	7.	25.2
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	27 ##	5.	4.556	40.	0.	57.641	7.592	0.	0.	5.	6.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	27	100.	120.963	285.	30.	3778.191	61.467	55.6	88.	170.	196.8
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	27 ##	25.	31.148	90.	0.	511.977	22.627	0.	25.	36.	77.2
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	27	240.	246.778	462.	80.	6423.564	80.147	156.	190.	290.	350.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	27	200.	213.259	442.	60.	5181.199	71.981	140.	180.	260.	292.8
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	27	5.	8.556	25.	0.	39.795	6.308	4.	5.	10.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	27	20.	19.185	47.	0.	179.541	13.399	0.	7.	30.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	27	550.	607.222	1490.	104.	87023.41	294.997	238.	450.	800.	1024.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	27	90.	86.019	261.	5.	5343.855	73.102	5.	20.	140.	170.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	27	3300.	4234.259	30000.	2300.	26733143.661	5170.41	2641.	2960.	3600.	3972.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	27 ##	5.	7.778	20.	0.	40.256	6.345	0.8	5.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	21	98.	100.667	152.	58.	356.033	18.869	83.4	90.	111.	124.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	27	0.42	0.577	2.09	0.07	0.173	0.416	0.252	0.3	0.88	1.022
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	27	8.	14.556	85.	2.	340.718	18.459	3.	4.	16.	40.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	27 ##	50.	70.741	100.	10.	768.661	27.725	50.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	26	12.	11.95	19.7	5.2	19.778	4.447	6.75	7.775	15.55	18.59
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	23	0.2	0.912	12.	0.09	6.034	2.456	0.094	0.2	0.6	1.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	26	10.	11.731	40.	2.5	79.385	8.91	4.25	5.	11.25	28.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	26	204.	197.423	272.	105.	1175.694	34.288	147.6	178.	219.	235.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	26	0.	0.077	1.	0.	0.074	0.272	0.	0.	0.	0.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	26	7.95	7.681	10.4	1.5	4.922	2.219	3.67	6.95	9.45	10.26
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	26	7.5	7.469	8.8	6.2	0.221	0.471	6.94	7.3	7.6	8.03
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	26	7.5	7.191	8.8	6.2	0.302	0.549	6.94	7.3	7.6	8.03
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	26	0.032	0.064	0.631	0.002	0.015	0.12	0.009	0.025	0.05	0.118
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	26	7.3	7.358	8.	6.8	0.101	0.318	6.87	7.2	7.7	7.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	26	7.3	7.251	8.	6.8	0.113	0.336	6.87	7.2	7.7	7.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	26	0.05	0.056	0.158	0.01	0.002	0.041	0.016	0.02	0.063	0.136
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	26	34.5	38.923	130.	27.	363.594	19.068	29.7	33.	38.	43.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	26	21.5	26.577	79.	16.	225.214	15.007	18.	20.75	25.25	50.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	26	12.	40.615	715.	3.	19035.446	137.969	4.7	6.75	16.75	41.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	26 ##	0.01	0.048	1.	0.01	0.038	0.194	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	26	0.94	1.373	7.53	0.48	2.001	1.414	0.528	0.67	1.525	2.7

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Annual Analysis for 1993 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	26	67.	66.231	82.	38.	90.985	9.539	55.4	61.5	72.	80.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	26	19.2	19.023	23.9	13.	4.079	2.02	16.72	18.15	20.15	21.06
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	26	5.	4.673	7.3	1.5	1.957	1.399	2.41	3.5	5.625	6.11
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	26	9.7	9.942	17.	4.1	7.542	2.746	6.37	8.975	11.	14.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	26	1.55	1.509	2.1	0.9	0.126	0.355	0.979	1.2	1.8	1.93
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	26	19.	17.731	24.	7.	18.525	4.304	9.7	16.	20.	22.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	26	29.	28.538	42.	17.	41.218	6.42	17.	25.75	33.25	35.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	26 ##	0.05	0.113	0.3	0.05	0.007	0.081	0.05	0.05	0.2	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	25 ##	5.	6.	20.	5.	10.417	3.227	5.	5.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	26 ##	5.	5.192	10.	5.	0.962	0.981	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	26	90.	120.192	380.	5.	11296.962	106.287	17.	30.	140.	319.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	26	260.	308.462	1400.	30.	67797.538	260.38	50.	217.5	327.5	545.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	26	215.	197.5	450.	5.	10662.5	103.259	37.	145.	265.	306.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	26 ##	5.	9.615	70.	5.	183.846	13.559	5.	5.	6.25	23.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	26	20.	18.654	50.	5.	147.115	12.129	5.	10.	22.5	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	26	555.	603.077	2200.	60.	192158.154	438.358	206.	295.	655.	1190.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	26	65.	90.385	930.	5.	30321.846	174.132	8.5	30.	80.	116.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	23	3400.	3169.565	3900.	1800.	420395.257	648.379	2240.	2500.	3700.	3800.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	26 ##	5.	6.731	50.	5.	77.885	8.825	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	26	103.5	106.654	174.	70.	377.755	19.436	78.6	100.5	114.	126.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	26 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	26	0.525	0.692	3.1	0.07	0.582	0.763	0.087	0.278	0.71	2.32
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	22	10.	23.	200.	4.	1775.048	42.131	4.	5.	17.5	55.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	25 ##	50.	64.	400.	50.	4900.	70.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	30	11.65	12.04	18.5	4.4	16.276	4.034	6.37	8.975	16.1	16.88
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	26	0.2	0.347	2.	0.01	0.269	0.519	0.024	0.058	0.425	1.02
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	30	7.5	8.583	25.	2.5	26.157	5.114	2.75	5.	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	30	213.5	204.233	330.	106.	2573.633	50.731	112.2	185.5	236.25	256.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	30	6.65	7.32	11.2	1.5	5.366	2.316	4.18	6.	9.375	9.89
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	29	7.5	7.455	7.9	7.1	0.034	0.184	7.2	7.3	7.6	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	29	7.5	7.418	7.9	7.1	0.035	0.188	7.2	7.3	7.6	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	29	0.032	0.038	0.079	0.013	0.	0.016	0.02	0.025	0.05	0.063
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	30	7.3	7.29	7.7	6.8	0.053	0.231	6.91	7.1	7.425	7.59
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	30	7.3	7.229	7.7	6.8	0.057	0.239	6.91	7.1	7.425	7.59
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	30	0.05	0.059	0.158	0.02	0.001	0.034	0.026	0.038	0.079	0.123
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	30	33.5	35.733	93.	14.	203.582	14.268	21.3	27.5	42.	48.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	30	20.5	21.9	57.	9.	75.817	8.707	13.2	16.75	26.	29.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	30	12.5	17.2	84.	3.	247.959	15.747	5.1	8.	21.5	37.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	30	0.67	0.838	2.5	0.025	0.301	0.549	0.392	0.508	0.913	1.87
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	30 ##	0.05	0.052	0.1	0.05	0.	0.009	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	30	72.5	72.767	130.	34.	438.944	20.951	39.6	62.75	82.5	94.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	30	20.2	20.123	37.1	11.	25.233	5.023	13.2	17.3	22.2	25.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	30	5.3	5.44	15.	1.4	7.409	2.722	1.9	3.45	7.	8.36
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	30	10.	9.943	18.	4.1	11.723	3.424	4.8	8.425	11.	15.9

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Annual Analysis for 1994 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	30	1.45	1.703	4.8	0.8	0.924	0.961	0.85	1.	1.925	3.06
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	30	17.5	17.533	38.	2.	77.913	8.827	6.2	10.75	20.	34.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	30	31.	32.93	100.	2.9	265.857	16.305	16.2	24.5	38.	46.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	30 ##	0.05	0.105	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.29
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	30 ##	5.	6.	10.	5.	4.138	2.034	5.	5.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	30 ##	5.	5.167	10.	5.	0.833	0.913	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	30	125.	156.5	450.	5.	11736.466	108.335	41.	67.5	242.5	309.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	30	320.	310.667	830.	50.	29420.23	171.523	71.	175.	410.	514.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	30	290.	273.333	540.	30.	20712.644	143.919	51.	165.	382.5	478.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	29 ##	5.	7.586	20.	5.	22.537	4.747	5.	5.	10.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	30	20.	21.667	90.	5.	348.851	18.678	5.	10.	22.5	49.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	30	510.	639.667	2300.	160.	174189.54	417.36	313.	397.5	795.	1090.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	30	45.	78.667	280.	5.	6903.333	83.086	5.	10.	125.	252.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	30	115.	110.567	201.	57.	900.116	30.002	61.3	98.5	125.75	137.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	30	0.48	0.601	2.2	0.13	0.193	0.439	0.181	0.308	0.785	1.19
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	24	12.	20.542	112.	4.	583.737	24.161	4.	6.	23.75	56.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	25	12.1	12.98	20.9	4.4	18.813	4.337	7.76	9.35	17.05	18.46
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	19	0.1	0.185	0.6	0.02	0.029	0.172	0.04	0.06	0.2	0.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	25	10.	12.6	40.	2.5	92.437	9.614	2.5	5.	15.	29.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	25	240.	210.96	313.	11.	5918.123	76.929	76.6	166.	256.5	295.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	25	9.1	8.528	10.5	3.8	3.689	1.921	4.86	8.	10.15	10.4
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	25	7.5	7.52	7.9	7.1	0.031	0.176	7.3	7.4	7.6	7.74
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	25	7.5	7.485	7.9	7.1	0.032	0.179	7.3	7.4	7.6	7.74
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	25	0.032	0.033	0.079	0.013	0.	0.014	0.018	0.025	0.04	0.05
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	25	7.4	7.36	7.9	6.5	0.113	0.335	6.72	7.2	7.6	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	25	7.4	7.203	7.9	6.5	0.138	0.372	6.72	7.2	7.6	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	25	0.04	0.063	0.316	0.013	0.005	0.073	0.02	0.025	0.063	0.196
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	25	36.	38.2	51.	30.	32.583	5.708	31.	34.5	42.5	47.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	25	12.	22.16	156.	2.	1016.807	31.887	3.6	8.	21.5	59.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	25	0.79	0.843	1.7	0.3	0.112	0.335	0.42	0.595	1.05	1.3
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	25	74.	72.44	110.	46.	205.09	14.321	51.	62.5	81.	86.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	25	20.7	20.696	31.8	13.9	19.518	4.418	14.22	18.3	22.95	27.18
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	25	5.1	5.016	7.7	1.7	2.711	1.647	2.44	3.9	6.3	7.04
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	25	11.	11.964	25.	3.3	24.529	4.953	7.44	8.4	13.5	20.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	25	1.5	1.504	2.5	0.89	0.217	0.466	0.906	1.	1.8	2.1
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	25	21.	23.28	46.	6.	98.043	9.902	15.6	18.	23.	42.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	25	29.	29.68	47.	15.	69.727	8.35	16.6	26.	36.	40.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	25 ##	0.05	0.102	0.2	0.05	0.004	0.065	0.05	0.05	0.2	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	25 ##	5.	59.6	1370.	5.	74529.	273.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	25	170.	251.2	596.	30.	37783.333	194.379	32.4	88.	456.5	558.4

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Annual Analysis for 1995 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	25	297.	331.16	831.	30.	38282.64	195.66	53.2	220.	440.	607.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	25	250.	244.72	562.	5.	31173.377	176.56	26.8	47.5	394.5	529.6
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	25 ##	5.	7.92	33.	5.	51.91	7.205	5.	5.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	25 ##	5.	14.04	69.	5.	208.207	14.429	5.	5.	21.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	25	446.	523.16	2010.	30.	154971.39	393.664	130.	275.5	683.5	915.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	25	54.	71.04	409.	5.	6959.123	83.421	5.	20.5	76.5	153.6
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	25	116.	116.2	150.	72.	339.917	18.437	97.6	103.	124.	146.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	25	0.75	0.971	5.79	0.06	1.365	1.168	0.194	0.32	1.035	2.402
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	20	13.	21.05	108.	2.	710.05	26.647	3.1	6.	22.75	74.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	21	14.8	13.033	18.	6.1	20.562	4.535	6.76	8.35	17.45	17.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	18	0.2	0.256	1.	0.01	0.06	0.244	0.01	0.087	0.325	0.64
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	21	10.	11.19	40.	5.	67.262	8.201	5.	5.	15.	20.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	21	272.	277.476	356.	211.	2053.262	45.313	213.8	245.	312.5	349.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	21	0.	0.143	1.	0.	0.129	0.359	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	21	8.3	8.486	11.6	5.	2.8	1.673	5.28	7.8	9.65	10.54
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	21	7.6	7.595	8.1	7.4	0.023	0.153	7.42	7.5	7.65	7.78
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	21	7.6	7.574	8.1	7.4	0.024	0.155	7.42	7.5	7.65	7.78
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	21	0.025	0.027	0.04	0.008	0.	0.008	0.017	0.023	0.032	0.038
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	21	7.5	7.471	7.8	7.	0.04	0.2	7.12	7.35	7.6	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	21	7.5	7.423	7.8	7.	0.043	0.206	7.12	7.35	7.6	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	21	0.032	0.038	0.1	0.016	0.	0.021	0.02	0.025	0.045	0.076
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	21	41.	48.143	110.	33.	330.829	18.189	33.4	36.5	50.	74.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	21	8.	28.524	357.	2.	5813.462	76.246	2.2	4.5	13.	43.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	21 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	21	0.87	0.886	1.7	0.37	0.094	0.307	0.544	0.64	1.2	1.2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	21	80.	77.048	97.	57.	111.148	10.543	58.2	70.5	83.5	89.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	21	23.4	22.657	33.	2.	34.34	5.86	17.76	20.45	25.7	28.12
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	21	4.5	4.41	6.7	2.2	1.511	1.229	2.68	3.4	5.4	6.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	21	15.	17.048	34.	1.6	65.936	8.12	7.84	12.5	20.5	31.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	21	1.5	1.649	4.	0.9	0.492	0.702	0.964	1.2	1.9	2.56
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	21	31.	35.524	79.	12.	260.762	16.148	16.8	27.	39.5	68.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	21	26.	25.21	37.	9.4	55.522	7.451	12.2	21.5	31.5	34.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	21 ##	0.05	0.086	0.3	0.05	0.005	0.073	0.05	0.05	0.075	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	21 ##	5.	5.476	15.	5.	4.762	2.182	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	21 ##	5.	7.143	50.	5.	96.429	9.82	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	21	53.	99.619	897.	5.	35423.648	188.212	5.	5.	106.5	144.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	21	253.	236.095	769.	27.	23399.29	152.968	50.2	136.5	284.	335.6
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	21	180.	172.476	300.	4.	10466.062	102.304	17.	68.5	260.5	295.2
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	21	16.	25.952	95.	5.	651.248	25.52	5.	5.	34.5	72.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	21	435.	451.095	1640.	15.	106409.19	326.204	71.2	279.	542.5	671.8
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	21	80.	77.	120.	15.	839.1	28.967	25.8	61.5	100.5	114.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	21	134.	131.905	188.	65.	738.79	27.181	86.	120.	147.	161.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	21	0.42	0.758	6.77	0.005	2.029	1.424	0.01	0.17	0.805	1.226
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	20	10.	23.85	248.	2.	2882.766	53.691	3.	4.25	22.	37.7
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	60	17.1	16.43	20.9	8.3	5.793	2.407	12.21	15.5	17.9	18.57
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	56	0.1	0.171	0.8	0.	0.027	0.166	0.01	0.06	0.275	0.43
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	60	12.5	34.675	541.	0.5	5861.397	76.56	5.	10.	31.	70.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	60	205.5	212.683	350.	94.	2611.542	51.103	156.	175.25	239.25	274.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	60	0.	0.083	1.	0.	0.078	0.279	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	60	8.	7.82	10.	3.8	2.401	1.549	5.26	6.625	9.175	9.59
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	60	7.3	7.32	8.	6.5	0.091	0.301	6.91	7.1	7.5	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	60	7.3	7.216	8.	6.5	0.102	0.319	6.91	7.1	7.5	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	60	0.05	0.061	0.316	0.01	0.002	0.05	0.02	0.032	0.079	0.123
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	60	41.	43.383	110.	24.	206.681	14.376	33.1	35.	44.75	58.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	60 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	60	10.	25.252	357.	0.1	2660.037	51.576	4.	6.	18.75	44.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	60 ##	0.01	0.015	0.31	0.01	0.002	0.039	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	60	0.615	0.614	2.	0.01	0.251	0.501	0.1	0.123	0.958	1.29
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	60 ##	0.05	0.082	0.53	0.	0.012	0.11	0.021	0.03	0.05	0.289
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	60	70.5	72.217	130.	51.	198.715	14.097	58.1	62.	79.25	90.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	60	18.75	19.952	37.1	13.9	20.098	4.483	15.85	17.2	20.925	26.89
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	60	5.35	5.358	8.4	2.6	1.343	1.159	4.2	4.5	6.075	6.79
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	60	8.605	8.53	16.	1.6	6.129	2.476	5.517	6.86	9.775	11.9
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	60	1.86	1.925	5.28	0.89	0.483	0.695	1.22	1.7	2.038	2.195
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	60	16.	16.368	31.	0.05	36.785	6.065	10.1	12.	19.	25.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	60	28.	28.203	100.	2.9	164.936	12.843	16.48	19.8	34.15	38.09
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	60 ##	0.1	0.185	1.36	0.05	0.05	0.223	0.05	0.05	0.2	0.433
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	9 ##	50.	27.778	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	11	30.	29.	40.	20.	56.4	7.51	20.	20.	35.	40.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	60 ##	5.	6.583	40.	0.	50.417	7.1	0.	5.	5.	19.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	11 ##	5.	4.091	10.	0.	14.091	3.754	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	60 ##	5.	5.417	10.	0.	7.874	2.806	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	60 ##	5.	29.167	1370.	0.	31043.362	176.191	0.	5.	5.	14.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	60	110.	172.767	2180.	5.	82231.911	286.761	30.4	62.5	177.5	307.7
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	60 ##	50.	44.567	100.	10.	315.334	17.758	20.	30.	50.	59.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	60	273.	303.883	831.	48.	26395.562	162.467	150.	185.	372.75	459.1
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	60	230.	234.383	547.	21.	12983.935	113.947	110.	150.	290.	391.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	17 ##	0.	10.294	50.	0.	292.096	17.091	0.	0.	15.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	60 ##	5.	7.967	33.	0.	32.304	5.684	5.	5.	10.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	17 ##	0.	5.	30.	0.	71.875	8.478	0.	0.	7.5	22.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	60	10.	35.55	1000.	0.	16444.387	128.236	0.	5.	27.75	57.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	60	440.	519.15	2300.	15.	169346.706	411.518	240.	278.	540.	849.4
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	60	70.	77.208	830.	5.	11253.57	106.083	5.5	25.	98.75	120.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	60 ##	5.	6.5	40.	0.	46.017	6.784	0.	5.	5.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	57	104.	107.754	201.	58.	585.01	24.187	82.	89.	118.5	142.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	60 ##	0.15	0.154	0.25	0.15	0.	0.019	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	15 ##	0.	16.667	50.	0.	595.238	24.398	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	60	0.66	1.03	6.77	0.07	1.71	1.308	0.341	0.45	0.96	2.127
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	58	11.	24.103	248.	0.	1448.445	38.058	4.	6.	24.5	63.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	60 ##	50.	71.	400.	10.	2460.	49.598	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	41	9.1	8.849	13.3	4.4	4.051	2.013	6.16	7.3	10.	11.52
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	36	0.2	0.417	3.	0.	0.395	0.629	0.069	0.1	0.4	1.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	41	12.5	32.39	469.	2.5	5817.869	76.275	5.	5.	23.	52.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	41	198.	195.	313.	54.	2974.75	54.541	143.2	159.5	235.5	260.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	41	0.	0.146	1.	0.	0.128	0.358	0.	0.	0.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	41	9.9	9.58	11.6	2.9	3.008	1.734	7.44	8.95	10.6	11.28
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	41	7.3	7.283	7.8	6.2	0.143	0.379	6.8	7.05	7.6	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	41	7.3	7.088	7.8	6.2	0.182	0.427	6.8	7.05	7.6	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	41	0.05	0.082	0.631	0.016	0.012	0.109	0.02	0.025	0.09	0.158
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	41	42.	40.732	57.	21.	48.901	6.993	32.2	35.5	45.5	49.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	41	10.	14.732	110.	1.	329.501	18.152	4.	6.	15.	26.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	41 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	41	0.5	0.709	7.53	0.09	1.399	1.183	0.1	0.1	0.79	1.156
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	41 ##	0.05	0.065	0.28	0.	0.004	0.061	0.	0.05	0.05	0.166
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	41	70.	71.732	110.	38.	216.851	14.726	56.2	60.	82.	92.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	41	19.8	20.239	31.8	2.	25.01	5.001	15.6	17.75	23.25	27.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	41	4.7	4.817	8.6	1.4	3.197	1.788	2.7	3.5	6.55	7.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	41	8.7	9.283	32.	1.47	28.745	5.361	4.93	5.895	10.5	16.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	41	1.6	1.805	5.	0.93	0.743	0.862	1.12	1.31	1.86	2.68
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	41	14.	17.463	79.	2.	183.855	13.559	7.	10.	20.	36.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	41	24.	27.722	50.	12.5	86.529	9.302	15.64	22.1	36.	41.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	41 ##	0.1	0.161	1.28	0.05	0.062	0.25	0.05	0.05	0.15	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	7 ##	50.	38.571	50.	0.	339.286	18.42	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	8	20.	19.625	30.	5.	46.839	6.844	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	41 ##	5.	8.024	30.	0.	45.774	6.766	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	7 ##	5.	4.286	10.	0.	11.905	3.45	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	41 ##	5.	5.488	20.	0.	13.506	3.675	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	41 ##	5.	4.878	40.	0.	39.36	6.274	0.	0.	5.	9.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	41	140.	186.927	596.	44.	17614.42	132.719	67.6	95.	262.5	364.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	41 ##	50.	37.195	90.	0.	350.061	18.71	10.	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	41	230.	252.024	572.	30.	20361.624	142.694	92.	134.	350.	468.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	41	190.	210.537	562.	5.	21837.955	147.777	30.6	100.	295.	448.4
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	41 ##	5.	7.439	30.	0.	46.402	6.812	0.	5.	10.	20.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	13 ##	0.	3.462	20.	0.	34.936	5.911	0.	0.	5.	16.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	41	10.	15.171	40.	0.	111.695	10.569	1.	7.5	22.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	41	490.	607.293	2360.	150.	183109.112	427.913	232.	350.	713.5	1100.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	41	76.	92.805	520.	5.	8104.611	90.026	5.	40.	125.	188.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	41 ##	5.	4.512	30.	0.	23.506	4.848	0.	0.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	38	106.	106.211	188.	49.	759.198	27.554	73.9	83.75	125.25	141.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	41	0.42	0.581	3.1	0.09	0.27	0.52	0.204	0.295	0.745	1.096
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	34	8.	15.206	110.	2.	418.896	20.467	3.5	4.	16.	34.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	41 ##	50.	67.073	100.	50.	576.22	24.005	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	30	8.1	8.163	13.3	4.4	3.257	1.805	6.21	6.975	8.875	10.35
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	26	0.4	1.013	12.	0.	5.439	2.332	0.079	0.2	0.7	2.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	30	10.	29.333	239.	2.5	2897.299	53.827	2.5	5.	28.25	47.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	30	178.	194.867	356.	105.	4598.12	67.809	109.3	143.25	244.25	304.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	30	9.7	8.677	11.7	1.5	6.392	2.528	4.18	7.75	10.225	10.96
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	30	7.35	7.383	8.1	6.8	0.115	0.339	7.	7.1	7.625	7.89
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	30	7.347	7.27	8.1	6.8	0.128	0.358	7.	7.1	7.625	7.89
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	30	0.045	0.054	0.158	0.008	0.001	0.037	0.013	0.024	0.079	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	30	36.5	35.933	47.	20.	40.616	6.373	28.1	31.75	41.	44.7

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Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	30	8.	36.833	715.	2.	16714.489	129.285	2.1	4.	15.25	55.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	30	0.61	0.632	1.9	0.06	0.279	0.528	0.1	0.135	0.815	1.65
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	30 ##	0.05	0.077	0.37	0.	0.007	0.085	0.005	0.05	0.05	0.179
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	30	64.	62.7	110.	34.	240.493	15.508	39.6	55.5	71.25	79.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	30	18.8	18.74	26.7	11.	14.876	3.857	13.04	16.35	20.55	24.51
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	30	3.6	3.78	15.	1.4	5.733	2.394	1.81	2.425	4.45	4.88
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	30	8.875	12.882	34.	3.7	70.933	8.422	4.26	6.358	18.25	26.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	30	1.2	1.244	2.4	0.8	0.117	0.342	0.855	0.93	1.47	1.636
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	30	17.	23.533	71.	6.	266.464	16.324	8.1	11.5	35.	45.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	30	23.3	22.797	38.	13.	34.321	5.858	16.	17.75	25.325	31.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	30 ##	0.1	0.1	0.3	0.05	0.004	0.066	0.05	0.05	0.1	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	5 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	8	20.	19.5	30.	5.	46.286	6.803	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	30 ##	5.	9.	40.	0.	78.276	8.847	0.5	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	7 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	30 ##	5.	5.5	30.	0.	28.19	5.309	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	30 ##	5.	4.5	15.	0.	9.224	3.037	0.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	30	111.5	105.633	380.	5.	5921.964	76.954	6.5	37.5	150.	169.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	30 ##	50.	44.	90.	0.	321.379	17.927	10.	47.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	30	175.	189.333	720.	27.	19937.885	141.202	41.	77.5	247.75	339.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	30	145.	139.767	330.	4.	8813.357	93.879	30.	47.5	206.	280.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	12 ##	50.	29.167	50.	0.	662.879	25.746	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	30 ##	5.	9.167	70.	0.	144.971	12.04	5.	5.	10.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	12 ##	5.	3.333	10.	0.	10.606	3.257	0.	0.	5.	8.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	30	18.	16.867	50.	0.	142.12	11.921	5.	5.	20.	39.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	30	455.	531.433	2200.	30.	196615.771	443.414	105.	228.5	600.	1038.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	30	110.	133.433	930.	5.	28378.599	168.459	5.	47.5	152.5	269.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	30 ##	5.	6.333	50.	0.	82.644	9.091	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	30	93.5	101.4	162.	57.	876.593	29.607	64.	78.5	124.25	148.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	12 ##	50.	29.167	50.	0.	662.879	25.746	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	30	0.265	0.438	2.6	0.005	0.35	0.592	0.061	0.158	0.413	1.365
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	27	7.	19.593	200.	3.	1456.481	38.164	3.	6.	15.	41.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	30 ##	50.	65.	100.	50.	543.103	23.305	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/23/96	40	13.9	13.893	18.7	7.4	7.037	2.653	9.83	12.15	15.975	16.89
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/23/96	37	0.2	0.337	2.	0.	0.131	0.362	0.038	0.2	0.45	0.7
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/23/96	41	10.	37.768	294.	2.5	3694.751	60.784	5.	10.	35.	139.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/23/96	41	197.	190.366	294.	11.	3198.338	56.554	121.2	160.5	221.	266.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/23/96	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/23/96	41	8.9	8.446	10.8	1.5	2.872	1.695	6.36	7.8	9.45	10.14
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/23/96	41	7.4	7.427	8.6	6.6	0.142	0.377	6.94	7.2	7.6	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/23/96	41	7.4	7.273	8.6	6.6	0.166	0.408	6.94	7.2	7.6	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/23/96	41	0.04	0.053	0.251	0.003	0.003	0.054	0.013	0.025	0.063	0.117
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/23/96	41	39.	40.	130.	14.	270.	16.432	27.2	32.	42.	48.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/23/96	41	8.	15.	71.	1.	238.6	15.447	2.2	5.	21.	41.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/23/96	41 ##	0.01	0.034	1.	0.01	0.024	0.155	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/23/96	41	0.61	0.727	3.4	0.08	0.437	0.661	0.11	0.19	0.91	1.38
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/23/96	41 ##	0.05	0.105	0.58	0.	0.021	0.145	0.013	0.05	0.05	0.392

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Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/23/96	41	67.	68.146	97.	39.	106.278	10.309	58.	61.5	72.5	82.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/23/96	41	18.5	19.298	31.9	12.7	13.667	3.697	16.	16.65	21.4	23.82
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/23/96	41	4.7	4.729	7.5	1.9	1.141	1.068	3.4	4.15	5.35	6.28
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/23/96	41	10.	9.982	21.	0.01	12.998	3.605	6.9	7.565	11.5	14.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/23/96	41	1.5	1.505	2.54	0.	0.201	0.448	1.02	1.25	1.7	2.148
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/23/96	41	17.	18.585	40.	5.	56.849	7.54	12.	14.	21.	32.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/23/96	41	27.6	27.202	42.	9.4	41.887	6.472	19.02	22.4	31.5	34.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/23/96	41 ##	0.05	0.148	1.05	0.05	0.053	0.231	0.05	0.05	0.1	0.576
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	9	24.	26.556	70.	0.	419.278	20.476	0.	12.5	35.	70.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/23/96	40 ##	5.	9.675	60.	0.	159.251	12.619	0.5	5.	7.25	29.9
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	8 ##	5.	4.375	10.	0.	10.268	3.204	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/23/96	41 ##	5.	6.439	80.	0.	143.502	11.979	0.2	5.	5.	8.2
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/23/96	41 ##	5.	4.463	10.	0.	7.305	2.703	0.	5.	5.	9.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/23/96	41	106.	147.78	897.	5.	27120.076	164.682	30.	46.5	173.5	378.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/23/96	41 ##	50.	43.463	80.	0.	313.855	17.716	11.2	38.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/23/96	41	253.	281.561	1400.	59.	39874.202	199.685	160.	205.	303.5	432.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/23/96	41	210.	322.317	4780.	5.	516899.172	718.957	102.8	155.	276.	318.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	9 ##	10.	23.889	50.	0.	623.611	24.972	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/23/96	40 ##	5.	7.4	30.	0.	35.785	5.982	5.	5.	10.	19.5
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	9 ##	5.	3.333	10.	0.	12.5	3.536	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/23/96	41	12.	18.	90.	0.	305.85	17.489	1.	5.	25.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/23/96	41	550.	578.195	1490.	51.	66486.311	257.849	283.6	412.	720.	938.4
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/23/96	41	85.	93.78	409.	5.	5706.526	75.542	10.	44.5	121.	176.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/23/96	41 ##	5.	5.854	20.	0.	25.628	5.062	0.	5.	5.	17.2
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/23/96	41	103.	103.854	174.	0.	702.778	26.51	81.8	92.	118.	132.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/23/96	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/23/96	41	0.42	0.641	2.31	0.03	0.285	0.534	0.142	0.28	0.98	1.284
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/23/96	37	9.	17.757	108.	2.	507.523	22.528	2.8	4.	25.	40.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/23/96	40 ##	50.	66.25	100.	50.	562.5	23.717	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0048

NPS Station ID: CUGA0048 | LAT/LON: 36.576142/ -83.680921 | Agency: 11NPSWRD | Date Created: 07/12/97
Location: GAP CREEK - 0.25 MILES SOUTH OF TIPRELL | FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CMRC_GC10
RMI-Indexes: | Within Park Boundary: No
RMI-Miles:
HUC: 06010206 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1250 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 06010206 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON GAP CREEK APPROXIMATELY 0.25 MILE SOUTH OF TIPRELL AND 300 FEET SOUTH OF THE FIRST UNNAMED BRANCH OF GAP CREEK DIRECTLY SOUTH OF TIPRELL.
THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0048

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	607637.5	10000000.	0.	**********	2148492.18	0.	0.	0.	2091650.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	1.234	7.	0.	6.156	2.481	0.	0.	0.	6.054
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			17.133								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	155554.167	1800000.	0.	231754718242.754	481409.097	0.	0.	0.	966650.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.749	6.255	0.	4.115	2.029	0.	0.	0.	5.863
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			5.614								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1724.583	41390.	0.	71380504.167	8448.698	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	2289.833	41790.	0.	74059208.58	8605.766	0.	0.	0.	5833.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	4343.042	83333.	0.	296700462.042	17224.995	0.	0.	0.	10450.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	6187.5	100000.	0.	461452445.652	21481.444	0.	0.	0.	21750.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	34720.833	833300.	0.	28932870416.667	170096.65	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.247	5.921	0.	1.461	1.209	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.765								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0048

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	5	0.21	8	0	0.00	6	0	0.00	3	3	1.00	7	2	0.29

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0049

NPS Station ID: CUGA0049 LAT/LON: 36.602087/ -83.681892 Agency: 11NPSWRD Date Created: 09/20/97
Location: TUNNEL CREEK: 0.75 MILES E. OF LITTLE YELLOW CR. FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_TC6
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1350 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK APPROXIMATELY 0.75 MILES FROM ITS CONFLUENCE WITH LITTLE YELLOW CREEK. IT IS ABOVE KENTUCKY TUNNEL CONSTRUCTION ACTIVITIES. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. PARAMETER STORET CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0049

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/90-12/01/91	3	10.1	10.4	12.7	8.4	4.69	2.166	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/10/90-12/01/91	3	5.	12.333	30.	2.	236.333	15.373	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/10/90-12/01/91	3	27.	27.	29.	25.	4.	2.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/10/90-12/01/91	3	0.	0.333	1.	0.	0.333	0.577	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/10/90-12/01/91	3	10.6	9.867	10.9	8.1	2.363	1.537	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/01/91-12/01/91	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/01/91-12/01/91	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/01/91-12/01/91	1	15.849	15.849	15.849	15.849	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	12/10/90-12/01/91	3	5.1	6.1	8.4	4.8	3.99	1.997	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/10/90-12/01/91	3	5.1	5.101	8.4	4.8	5.488	2.343	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/10/90-12/01/91	3	7.943	7.932	15.849	0.004	62.766	7.922	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/10/90-12/01/91	3	1.	0.667	1.	0.	0.333	0.577	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/10/90-12/01/91	3	4.	4.333	5.	4.	0.333	0.577	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/10/90-12/01/91	3	0.6	0.4	0.6	0.	0.12	0.346	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/10/90-12/01/91	3 ##	0.	6.	18.	0.	108.	10.392	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/10/90-12/01/91	3 ##	0.01	0.24	0.7	0.01	0.159	0.398	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/10/90-12/01/91	3 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0049

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/10/90-12/01/91	3 ##	0.005	0.015	0.04	0.	0.	0.022	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/90-12/01/91	3	5.	5.667	7.	5.	1.333	1.155	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/90-12/01/91	3	0.8	0.8	0.9	0.7	0.01	0.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/90-12/01/91	3	0.7	0.767	0.9	0.7	0.013	0.115	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/90-12/01/91	3	0.36	0.357	0.37	0.34	0.	0.015	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/90-12/01/91	3	0.88	0.837	0.95	0.68	0.02	0.14	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/10/90-12/01/91	3	0.6	0.6	0.7	0.5	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/10/90-12/01/91	3	5.5	5.967	6.9	5.5	0.653	0.808	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/90-12/01/91	3 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/10/90-12/01/91	3 ##	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/10/90-12/01/91	3	20.	30.	60.	10.	700.	26.458	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	12/10/90-12/01/91	3 ##	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	12/10/90-12/01/91	3	10.	23.333	50.	10.	533.333	23.094	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/10/90-12/01/91	3	20.	23.333	40.	10.	233.333	15.275	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/10/90-12/01/91	3	10.	6.667	10.	0.	33.333	5.774	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/10/90-12/01/91	3	70.	130.	280.	40.	17100.	130.767	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/10/90-12/01/91	3	60.	86.667	160.	40.	4133.333	64.291	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	12/10/90-12/01/91	3	2230.	2066.667	2270.	1700.	101233.333	318.172	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/10/90-12/01/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/10/90-12/01/91	3	12.	12.	13.	11.	1.	1.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/10/90-12/01/91	3 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/10/90-12/20/90	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/10/90-12/01/91	3	0.02	0.037	0.08	0.01	0.001	0.038	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/10/90-12/01/91	3	2.	3.333	6.	2.	5.333	2.309	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/10/90-12/01/91	3 ##	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0049

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				3	0	0.00						
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00						
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00				3	0	0.00						
		Other-Lo Lim.	6.5	3	2	0.67				3	2	0.67						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3	0	0.00				3	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00				3	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00				3	0	0.00						
		Drinking Water	250.	3	0	0.00				3	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00				3	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00				3	0	0.00						
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00				3	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00				3	0	0.00						
		Drinking Water	1300.	3	0	0.00				3	0	0.00						
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00				3	0	0.00						
		Drinking Water	15.	3	0	0.00				3	0	0.00						
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00				3	0	0.00						
		Drinking Water	100.	3	0	0.00				3	0	0.00						
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00				3	0	0.00						
		Drinking Water	5000.	3	0	0.00				3	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0049

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00				2	0	0.00						
		Drinking Water	2.	2	0	0.00				2	0	0.00						
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	3	0	0.00				3	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0050

NPS Station ID: CUGA0050 LAT/LON: 36.613753/ -83.682087 Agency: 11NPSWRD Date Created: 07/12/97
Location: DAVIS BRANCH AT CONFLUENCE WITH UNNAMED STREAM FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CMRC_DB8
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON DAVIS BRANCH APPROXIMATELY 600 FEET WEST OF STATE ROUTE 988 AND AT THE CONFLUENCE OF THE UNNAMED STREAM THAT IS LOCATED DIRECTLY NORTH OF THE WILDERNESS RD. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0050

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	25	0.	2000.	50000.	0.	100000000.	10000.	0.	0.	0.	0.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	25	0.	0.188	4.699	0.	0.883	0.94	0.	0.	0.	0.
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			1.542								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	25	0.	200000.	4000000.	0.	653333333333.333	808290.377	0.	0.	0.	440000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	25	0.	0.712	6.602	0.	3.911	1.978	0.	0.	0.	5.542
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			5.155								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	25	0.	2044.	30000.	0.	49840066.667	7059.75	0.	0.	0.	8360.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	25	0.	1240.	30000.	0.	35940000.	5994.998	0.	0.	0.	400.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	25	0.	44000.	1100000.	0.	48400000000.	220000.	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	25	0.	0.242	6.041	0.	1.46	1.208	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.744								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	25	0.	242000.	6000000.	0.	**********	1199624.941	0.	0.	0.	20000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	25	0.	0.459	6.778	0.	2.615	1.617	0.	0.	0.	1.88
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			2.878								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0050

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	25	1	0.04	8	0	0.00	7	0	0.00	3	0	0.00	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0051

NPS Station ID: CUGA0051 LAT/LON: 36.613642/ -83.682170 Agency: 11NPSWRD Date Created: 09/20/97
Location: DAVIS BRANCH:AT CONFLUENCE OF UNNAMED STREAM FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_DB8
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS DAVIS BRANCH APPROXIMATELY 600 FEET WEST OF STATE ROUTE 988 AND AT THE CONFLUENCE OF THE UNNAMED STREAM THAT IS LOCATED DIRECTLY NORTH OF THE OLD WILDERNESS ROAD. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0051

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-12/30/91	42	12.6	13.279	19.9	2.9	25.89	5.088	6.13	9.475	18.825	19.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-12/30/91	42	0.15	1.074	17.	0.	7.72	2.778	0.	0.	1.	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-12/30/91	42	37.	63.929	507.	5.	7587.58	87.107	19.2	28.75	55.5	119.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-12/30/91	42	67.5	65.524	99.	34.	357.182	18.899	39.9	48.	82.25	90.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-12/30/91	42	0.	0.095	1.	0.	0.088	0.297	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-12/30/91	42	8.9	9.131	13.	3.7	3.266	1.807	7.36	7.9	10.55	11.54
00403	PH, LAB, STANDARD UNITS SU	04/11/91-12/30/91	19	7.2	7.126	7.6	6.6	0.078	0.279	6.6	6.9	7.4	7.4
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-12/30/91	19	7.2	7.036	7.6	6.6	0.086	0.293	6.6	6.9	7.4	7.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-12/30/91	19	0.063	0.092	0.251	0.025	0.004	0.067	0.04	0.04	0.126	0.251
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-12/30/91	42	6.9	6.879	7.6	6.	0.104	0.323	6.6	6.7	7.	7.34
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-12/30/91	42	6.9	6.75	7.6	6.	0.121	0.348	6.6	6.7	7.	7.34
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-12/30/91	42	0.126	0.178	1.	0.025	0.034	0.184	0.047	0.1	0.2	0.251
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-12/30/91	42	23.5	20.095	35.	4.	98.235	9.911	7.	9.	28.25	32.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	42 ##	0.05	0.143	2.	0.05	0.177	0.42	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/30/91	42	13.5	12.31	46.	0.	68.56	8.28	4.	5.	17.	20.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-12/30/91	42	4.	20.619	448.	0.	5359.071	73.206	0.	1.	8.5	26.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/30/91	42 ##	0.01	0.313	6.	0.	1.276	1.13	0.01	0.01	0.01	0.74
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-12/30/91	42 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-12/30/91	42 ##	0.015	0.123	2.47	0.	0.144	0.379	0.	0.	0.153	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0051

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-12/30/91	42	0.045	0.082	0.5	0.	0.012	0.107	0.	0.008	0.113	0.222
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-08/28/91	3 ##	0.5	0.333	0.5	0.	0.083	0.289	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-12/30/91	42	27.	25.238	39.	12.	81.747	9.041	13.3	16.	34.	36.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-12/30/91	42	6.2	5.805	9.4	2.1	5.757	2.399	2.79	3.35	8.2	8.87
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-12/30/91	42	2.7	2.443	3.9	1.1	0.6	0.775	1.4	1.7	3.	3.54
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-12/30/91	42	1.35	1.354	2.04	0.58	0.139	0.372	0.903	1.04	1.635	1.813
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-12/30/91	42	1.555	1.568	2.84	0.79	0.322	0.568	0.932	1.02	1.995	2.476
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-12/30/91	42	2.	1.719	3.	0.7	0.377	0.614	0.93	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-12/30/91	42	6.55	6.845	11.5	4.8	2.001	1.414	5.	5.925	8.	8.67
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-12/30/91	42 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-12/17/91	7 ##	0.	5.	35.	0.	175.	13.229	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-12/17/91	9	40.	32.222	50.	10.	169.444	13.017	10.	20.	40.	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-12/30/91	42 ##	0.	4.762	20.	0.	35.308	5.942	0.	0.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-12/17/91	9 ##	0.	3.333	10.	0.	25.	5.	0.	0.	10.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-12/30/91	42 ##	0.	3.452	30.	0.	45.717	6.761	0.	0.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-12/30/91	42 ##	0.	7.381	180.	0.	769.803	27.745	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-12/30/91	42 ##	0.	6.071	110.	0.	310.409	17.618	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-12/30/91	42	230.	235.	740.	70.	15162.195	123.135	100.	130.	312.5	350.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-12/30/91	42	10.	18.214	90.	0.	374.172	19.344	0.	5.	20.	40.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-12/30/91	42	30.	44.048	200.	10.	1780.778	42.199	10.	20.	52.5	101.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-12/30/91	42	20.	31.667	180.	10.	1194.715	34.565	10.	10.	40.	50.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-12/17/91	27 ##	0.	0.37	10.	0.	3.704	1.925	0.	0.	0.	0.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-12/30/91	42 ##	0.	1.786	10.	0.	14.416	3.797	0.	0.	0.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-12/17/91	27 ##	0.	11.852	50.	0.	323.362	17.982	0.	0.	30.	40.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-12/17/91	27 ##	0.	1.111	20.	0.	17.949	4.237	0.	0.	0.	2.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-12/30/91	42 ##	0.	5.952	30.	0.	57.607	7.59	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-12/30/91	42	90.	190.357	2420.	5.	150737.064	388.249	40.	50.	162.5	387.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-12/30/91	42	35.	54.286	280.	0.	3015.331	54.912	20.	20.	62.5	121.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/91	27 ##	0.	1.111	10.	0.	10.256	3.203	0.	0.	0.	10.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/91	27 ##	0.	4.444	30.	0.	71.795	8.473	0.	0.	10.	20.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-12/30/91	42	3100.	2982.381	4110.	1920.	244569.803	494.54	2223.	2750.	3300.	3552.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-12/30/91	42 ##	0.	3.81	20.	0.	33.914	5.824	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-12/30/91	42	34.5	33.143	46.	19.	75.394	8.683	22.	24.	41.	43.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-12/30/91	42 ##	0.15	0.156	0.25	0.15	0.001	0.023	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-12/17/91	25 ##	0.	1.	25.	0.	25.	5.	0.	0.	0.	0.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-12/30/91	42	0.37	0.46	2.14	0.14	0.126	0.355	0.18	0.25	0.523	0.866
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-12/30/91	42	6.	10.571	97.	0.	264.641	16.268	2.3	4.75	9.25	27.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-12/30/91	42 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0051

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	42	1	0.02	18	1	0.06	12	0	0.00	5	0	0.00	7	0	0.00
00403	PH, LAB	Fresh Chronic	9.	19	0	0.00	8	0	0.00	5	0	0.00				6	0	0.00
		Other-Lo Lim.	6.5	19	0	0.00	8	0	0.00	5	0	0.00				6	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
		Other-Lo Lim.	6.5	42	3	0.07	18	1	0.06	12	2	0.17	5	0	0.00	7	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	250.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	7	0	0.00	4	0	0.00	1	0	0.00				2	0	0.00
		Drinking Water	50.	7	0	0.00	4	0	0.00	1	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	9	0	0.00	6	0	0.00	1	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	9	3	0.33	6	2	0.33	1	0	0.00				2	1	0.50
		Drinking Water	5.	9	3	0.33	6	2	0.33	1	0	0.00				2	1	0.50

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0051

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	41 &	2	0.05	17	0	0.00	12	0	0.00	5	0	0.00	7	2	0.29
		Drinking Water	1300.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	42	1	0.02	18	0	0.00	12	0	0.00	5	0	0.00	7	1	0.14
		Drinking Water	15.	41 &	19	0.46	18	9	0.50	12	4	0.33	5	2	0.40	6	4	0.67
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	100.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
		Drinking Water	5000.	42	0	0.00	18	0	0.00	12	0	0.00	5	0	0.00	7	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	24 &	0	0.00	10	0	0.00	7	0	0.00	5	0	0.00	2	0	0.00
		Drinking Water	2.	24 &	0	0.00	10	0	0.00	7	0	0.00	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	42	1	0.02	18	0	0.00	12	1	0.08	5	0	0.00	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0052

NPS Station ID: CUGA0052
LAT/LON: 36.570892/ -83.682698
Agency: 11NPSWRD
Date Created: 08/09/97
Location: TNCL501R
FIPS State/County: 47025 TENNESSEE/CLAIBORNE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): CUGA_NURE_04 /NURE_4083683
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 06010206
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 06010206
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING INSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0052

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/78-05/07/78	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/07/78-05/07/78	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/07/78-05/07/78	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/07/78-05/07/78	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/07/78-05/07/78	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/78-05/07/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/07/78-05/07/78	1	4.56	4.56	4.56	4.56	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/07/78-05/07/78	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	05/07/78-05/07/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/07/78-05/07/78	1	34.	34.	34.	34.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	05/07/78-05/07/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/07/78-05/07/78	1	14.	14.	14.	14.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	05/07/78-05/07/78	1	1900.	1900.	1900.	1900.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	05/07/78-05/07/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0052

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0053

NPS Station ID: CUGA0053 LAT/LON: 36.602504/ -83.683365 Agency: 11NPSWRD Date Created: 09/20/97
Location: TUNNEL CREEK - NORTH TUNNEL DRAINAGE FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_TC7N
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1350 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK IN THE TUNNEL DRAINAGE AT THE FIRST SEDIMENT BASIN IN THE LEFT DITCH OF THE NORTHERN TUNNEL'S KENTUCKY PORTAL. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURINGA RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0053

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/06/91-07/27/92	28	14.4	15.3	20.9	11.3	8.319	2.884	11.88	13.125	16.95	20.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/06/91-07/27/92	28	0.55	0.556	2.	0.01	0.274	0.523	0.02	0.048	0.8	1.1
00080	COLOR (PLATINUM-COBALT UNITS)	05/06/91-07/27/92	28	805.	1970.071	16550.	5.	12187072.587	3490.999	16.3	63.25	2170.	5392.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/06/91-07/27/92	28	151.5	199.107	637.	8.	27211.877	164.96	90.8	104.25	210.75	611.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	05/06/91-07/27/92	28	0.	0.071	1.	0.	0.069	0.262	0.	0.	0.	0.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/06/91-07/27/92	28	8.1	6.921	10.3	1.2	8.011	2.83	1.48	4.7	8.975	9.66
00403	PH, LAB, STANDARD UNITS SU	05/06/91-07/27/92	27	9.5	9.193	11.7	6.9	2.308	1.519	6.98	7.8	10.3	11.1
00403	CONVERTED PH, LAB, STANDARD UNITS	05/06/91-07/27/92	27	9.5	7.659	11.7	6.9	4.749	2.179	6.98	7.8	10.3	11.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/06/91-07/27/92	27	0.	0.022	0.126	0.	0.002	0.041	0.	0.	0.016	0.105
00406	PH, FIELD, STANDARD UNITS SU	05/06/91-07/27/92	28	10.	9.461	11.7	6.1	2.744	1.656	6.49	8.3	10.675	11.14
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/06/91-07/27/92	28	10.	7.191	11.7	6.1	8.086	2.844	6.49	8.3	10.675	11.14
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/06/91-07/27/92	28	0.	0.064	0.794	0.	0.03	0.174	0.	0.	0.005	0.324
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/06/91-07/27/92	28	65.	85.643	371.	11.	5545.646	74.469	31.3	42.25	100.25	196.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/06/91-07/27/92	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	05/06/91-07/27/92	28	38.5	51.857	226.	7.	2067.46	45.469	19.5	26.	61.	120.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/06/91-07/27/92	28	245.5	936.107	6972.	1.	2828830.396	1681.913	5.6	34.5	882.5	3986.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	05/06/91-07/27/92	28 ##	0.01	6.393	55.	0.	194.556	13.948	0.	0.003	4.95	21.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/06/91-07/27/92	28	0.155	0.265	2.21	0.01	0.178	0.422	0.01	0.045	0.343	0.551
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/06/91-07/27/92	28	0.545	0.705	3.71	0.04	0.543	0.737	0.118	0.218	0.908	1.567
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/06/91-07/27/92	28	0.085	0.235	1.7	0.	0.128	0.358	0.	0.015	0.375	0.598
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/28/91-06/15/92	3	1.	1.	2.	0.	1.	1.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/06/91-07/27/92	28	49.5	63.429	180.	20.	1410.402	37.555	26.5	37.75	76.75	107.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0053

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/06/91-07/27/92	28	17.	23.339	69.9	5.5	273.491	16.538	8.07	12.55	28.425	59.76
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/06/91-07/27/92	28	1.	1.899	21.7	0.07	15.948	3.994	0.2	0.525	1.375	3.25
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/06/91-07/27/92	28	5.695	9.758	30.45	0.03	88.383	9.401	0.562	3.158	16.665	27.472
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/06/91-07/27/92	28	5.15	5.859	16.16	1.26	12.473	3.532	2.205	3.155	8.038	10.393
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/06/91-07/27/92	28	1.	1.379	5.	0.5	1.029	1.014	0.6	0.825	2.	2.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/06/91-07/27/92	28	10.	17.475	56.	5.2	220.055	14.834	6.38	7.15	26.8	48.07
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/06/91-07/27/92	28	0.345	0.466	1.26	0.05	0.176	0.419	0.1	0.1	0.835	1.172
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	2 ##	77.5	77.5	120.	35.	3612.5	60.104	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/28/91-01/13/92	4	10.	30.	100.	0.	2200.	46.904	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/06/91-07/27/92	28	20.	24.679	160.	0.	1086.004	32.955	0.	0.5	30.	70.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/28/91-01/13/92	4 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/06/91-07/27/92	28	10.	11.393	40.	0.	97.581	9.878	0.	5.	17.5	30.
01035	COBALT, DISSOLVED (UG/L AS CO)	05/06/91-07/27/92	28 ##	7.5	30.393	480.	0.	8167.358	90.373	0.	0.	20.	54.
01040	COPPER, DISSOLVED (UG/L AS CU)	05/06/91-07/27/92	28 ##	0.	4.643	20.	0.	36.905	6.075	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	05/06/91-07/27/92	28	70.	186.464	3160.	0.	342312.999	585.075	27.	40.	90.	192.9
01049	LEAD, DISSOLVED (UG/L AS PB)	05/06/91-07/27/92	28	20.	26.964	160.	0.	1032.036	32.125	0.	10.	30.	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	05/06/91-07/27/92	28	135.	897.5	12870.	20.	6142626.852	2478.432	20.	85.	550.	1931.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/06/91-07/27/92	28	10.	60.214	870.	0.	31299.952	176.918	0.	0.5	30.	96.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/28/91-01/13/92	4	10.	12.5	30.	0.	158.333	12.583	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/06/91-07/27/92	28 ##	2.5	6.679	30.	0.	81.856	9.047	0.	0.	10.	22.8
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/28/91-01/13/92	4	35.	30.	50.	0.	600.	24.495	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/28/91-01/13/92	4 ##	5.	27.5	100.	0.	2358.333	48.563	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/06/91-07/27/92	28	10.	53.214	720.	0.	20176.323	142.043	0.	0.	35.	168.
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/06/91-07/27/92	28	4460.	9699.643	71950.	60.	250525462.831	15827.996	162.	1037.5	12602.5	24696.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/06/91-07/27/92	28	420.	565.679	2090.	0.	254995.782	504.971	60.	120.	755.	1319.7
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/28/91-01/13/92	4 ##	0.	2.5	10.	0.	25.	5.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/28/91-01/13/92	4 ##	30.	35.	80.	0.	1700.	41.231	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	05/06/91-07/27/92	28	4600.	6610.714	50000.	2600.	74468569.841	8629.517	3530.	4025.	6225.	8039.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	05/06/91-07/27/92	28 ##	0.5	223.071	6000.	0.	1282250.81	1132.365	0.	0.	10.	33.5
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	05/06/91-06/15/92	27	107.	110.519	255.	26.	3421.49	58.494	52.	58.	140.	207.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/06/91-07/27/92	28 ##	0.15	0.16	0.42	0.15	0.003	0.051	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-05/18/92	3 ##	0.	33.333	100.	0.	3333.333	57.735	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/06/91-07/27/92	28	3.385	10.028	75.09	0.07	254.421	15.951	0.126	0.87	14.475	32.066
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/06/91-07/27/92	28	192.	141.143	200.	3.	6202.868	78.758	8.5	61.25	200.	200.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	05/06/91-07/27/92	28 ##	100.	98.214	100.	50.	89.286	9.449	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0053

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	28	5	0.18	10	3	0.30	7	1	0.14	2	0	0.00	9	1	0.11
00403	PH, LAB	Fresh Chronic	9.	27	16	0.59	10	7	0.70	6	3	0.50	2	1	0.50	9	5	0.56
		Other-Lo Lim.	6.5	27	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00	9	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	28	20	0.71	10	9	0.90	7	4	0.57	2	2	1.00	9	5	0.56
		Other-Lo Lim.	6.5	28	3	0.11	10	0	0.00	7	0	0.00	2	0	0.00	9	3	0.33
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	28	1	0.04	10	1	0.10	7	0	0.00	2	0	0.00	9	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
		Drinking Water	250.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	1	0.50				2	1	0.50						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	4	0	0.00	2	0	0.00	2	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	4	0	0.00	2	0	0.00	2	0	0.00						
		Drinking Water	5.	4	0	0.00	2	0	0.00	2	0	0.00						
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	28	1	0.04	10	1	0.10	7	0	0.00	2	0	0.00	9	0	0.00
		Drinking Water	1300.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0053

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	28	1	0.04	10	0	0.00	7	0	0.00	2	0	0.00	9	1	0.11
		Drinking Water	15.	26 &	13	0.50	9	6	0.67	7	4	0.57	2	1	0.50	8	2	0.25
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
		Drinking Water	100.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	28	4	0.14	10	2	0.20	7	0	0.00	2	0	0.00	9	2	0.22
		Drinking Water	5000.	28	0	0.00	10	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2 &	0	0.00				2	0	0.00						
		Drinking Water	2.	2 &	0	0.00				2	0	0.00						
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	28	22	0.79	10	10	1.00	7	5	0.71	2	2	1.00	9	5	0.56

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0054

NPS Station ID: CUGA0054
LAT/LON: 36.601670/ -83.683642
Agency: 11NPSWRD
Date Created: 09/20/97
Location: TUNNEL CREEK - BELOW DAM 2
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_TC7NP
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1350
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK IN THE TUNNEL DRAINAGE ON THE NORTHBOUND SIDE BELOW DAM 2 LOCATION. THIS STATION CONTAINS CLEAN WATER PIPED FROM THE NORTHBOUND TUNNEL AND WATER FROM STATION TC6. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0054

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/08/91-06/15/92	13	12.7	13.077	17.4	9.4	4.215	2.053	10.04	11.8	14.4	16.48
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/08/91-06/15/92	13	0.4	1.629	9.	0.	7.604	2.758	0.032	0.15	2.	7.8
00080	COLOR (PLATINUM-COBALT UNITS)	10/08/91-06/15/92	13	23.	170.615	1000.	5.	135589.09	368.224	5.	11.5	34.5	1000.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/08/91-06/15/92	13	36.	99.	647.	18.	28809.667	169.734	20.8	27.5	92.5	452.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	10/08/91-06/15/92	13	0.	0.154	1.	0.	0.141	0.376	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/08/91-06/15/92	13	8.4	8.469	11.	5.	3.577	1.891	5.32	7.15	10.4	10.84
00403	PH, LAB, STANDARD UNITS SU	10/08/91-06/15/92	13	6.8	7.185	10.9	5.4	2.223	1.491	5.44	6.6	7.35	10.34
00403	CONVERTED PH, LAB, STANDARD UNITS	10/08/91-06/15/92	13	6.8	6.184	10.9	5.4	3.307	1.819	5.44	6.6	7.35	10.34
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/08/91-06/15/92	13	0.158	0.654	3.981	0.	1.712	1.308	0.	0.047	0.251	3.654
00406	PH, FIELD, STANDARD UNITS SU	10/08/91-06/15/92	13	9.2	8.869	11.6	5.7	2.177	1.476	6.34	7.9	9.7	11.08
00406	CONVERTED PH, FIELD, STANDARD UNITS	10/08/91-06/15/92	13	9.2	6.796	11.6	5.7	6.832	2.614	6.34	7.9	9.7	11.08
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/08/91-06/15/92	13	0.001	0.16	1.995	0.	0.304	0.552	0.	0.	0.013	1.217
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/08/91-06/15/92	13	8.	21.308	125.	2.	1109.064	33.303	2.	4.5	26.5	91.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	10/08/91-06/15/92	13 ##	0.05	0.962	5.	0.05	3.167	1.78	0.05	0.05	1.525	4.6
00440	BICARBONATE ION (MG/L AS HCO3)	10/08/91-06/15/92	13	5.	13.	76.	1.	407.833	20.195	1.	3.	16.	55.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/08/91-06/15/92	13	4.	482.031	4535.	0.	1700166.712	1303.904	0.	1.7	9.	3397.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/08/91-06/15/92	13 ##	0.01	0.479	2.4	0.	0.54	0.735	0.	0.	0.9	1.92
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/08/91-06/15/92	13 ##	0.01	0.088	0.69	0.01	0.037	0.194	0.01	0.01	0.045	0.518
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/08/91-06/15/92	13	0.08	0.487	4.09	0.	1.261	1.123	0.	0.025	0.255	2.906

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0054

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/08/91-06/15/92	13 ##	0.01	0.023	0.08	0.	0.001	0.027	0.	0.	0.045	0.072
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-06/15/92	2 ##	0.25	0.25	0.5	0.	0.125	0.354	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/08/91-06/15/92	13	12.	22.692	114.	7.	843.064	29.036	7.4	8.	29.5	82.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/08/91-06/15/92	13	3.2	7.285	42.7	1.3	124.331	11.15	1.34	1.75	8.95	30.18
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/08/91-06/15/92	13	0.6	0.728	1.7	0.06	0.185	0.43	0.196	0.55	0.75	1.62
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/08/91-06/15/92	13	0.55	1.776	11.22	0.39	9.22	3.036	0.398	0.44	1.355	8.484
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/08/91-06/15/92	13	0.78	1.604	6.58	0.62	3.412	1.847	0.644	0.72	1.33	5.828
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/08/91-06/15/92	13	0.5	0.831	4.	0.4	0.932	0.966	0.44	0.5	0.7	2.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/08/91-06/15/92	13	6.5	7.254	29.	0.	51.438	7.172	0.52	3.7	7.45	22.08
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/08/91-06/15/92	13 ##	0.1	0.172	0.83	0.1	0.042	0.206	0.1	0.1	0.1	0.622
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	2 ##	127.5	127.5	220.	35.	17112.5	130.815	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/16/91-01/13/92	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/08/91-06/15/92	13 ##	0.	3.538	20.	0.	38.103	6.173	0.	0.	7.	16.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/16/91-01/13/92	2 ##	10.	10.	20.	0.	200.	14.142	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	10/08/91-06/15/92	13 ##	0.	1.231	10.	0.	8.859	2.976	0.	0.	0.5	8.
01035	COBALT, DISSOLVED (UG/L AS CO)	10/08/91-06/15/92	13 ##	0.	1.231	10.	0.	9.692	3.113	0.	0.	0.	8.4
01040	COPPER, DISSOLVED (UG/L AS CU)	10/08/91-06/15/92	13 ##	0.	1.154	15.	0.	17.308	4.16	0.	0.	0.	9.
01046	IRON, DISSOLVED (UG/L AS FE)	10/08/91-06/15/92	13	30.	60.769	320.	0.	8041.026	89.672	0.	15.	60.	260.
01049	LEAD, DISSOLVED (UG/L AS PB)	10/08/91-06/15/92	13 ##	0.	4.846	20.	0.	40.308	6.349	0.	0.	10.	16.
01055	MANGANESE, TOTAL (UG/L AS MN)	10/08/91-06/15/92	13	20.	1243.846	14430.	0.	15857042.308	3982.09	4.	10.	65.	9246.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/08/91-06/15/92	13	10.	10.154	30.	0.	128.808	11.349	0.	0.	18.5	30.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/16/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/08/91-06/15/92	13 ##	0.	0.269	2.	0.	0.442	0.665	0.	0.	0.	1.8
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/16/91-01/13/92	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/16/91-01/13/92	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/08/91-06/15/92	13	80.	113.923	310.	0.	10943.41	104.611	0.	30.	225.5	282.
01105	ALUMINUM, TOTAL (UG/L AS AL)	10/08/91-06/15/92	13	180.	2672.308	18730.	50.	36430902.564	6035.802	54.	105.	740.	16566.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/08/91-06/15/92	13	67.	205.077	1329.	40.	124707.91	353.14	44.	55.	150.	969.4
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/16/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/16/91-01/13/92	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	10/08/91-06/15/92	13	3200.	4523.846	20000.	1600.	22984058.974	4794.169	1640.	2650.	4300.	14324.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	10/08/91-06/15/92	13 ##	0.	2.692	10.	0.	15.064	3.881	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	10/08/91-06/15/92	13	20.	34.385	166.	13.	1754.09	41.882	13.	14.	36.	124.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/08/91-06/15/92	13 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	10/08/91-06/15/92	13	0.12	7.245	54.52	0.04	308.416	17.562	0.044	0.075	0.615	47.732
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	10/08/91-06/15/92	13	8.	37.077	200.	2.	5248.91	72.449	2.	3.5	15.	200.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	10/08/91-06/15/92	13 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0054

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
00403	PH, LAB	Fresh Chronic	9.	13	2	0.15	2	0	0.00	6	0	0.00	2	0	0.00	3	2	0.67
		Other-Lo Lim.	6.5	13	2	0.15	2	0	0.00	6	2	0.33	2	0	0.00	3	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	13	7	0.54	2	0	0.00	6	3	0.50	2	1	0.50	3	3	1.00
		Other-Lo Lim.	6.5	13	1	0.08	2	0	0.00	6	1	0.17	2	0	0.00	3	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
		Drinking Water	250.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	1	0.50				2	1	0.50						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00				2	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	1	0.50				2	1	0.50						
		Drinking Water	5.	2	1	0.50				2	1	0.50						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0054

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
		Drinking Water	1300.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
		Drinking Water	15.	13	1	0.08	2	0	0.00	6	0	0.00	2	1	0.50	3	0	0.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
		Drinking Water	100.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	13	5	0.38	2	0	0.00	6	2	0.33	2	2	1.00	3	1	0.33
		Drinking Water	5000.	13	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00				2	0	0.00						
		Drinking Water	2.	2	0	0.00				2	0	0.00						
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	13	2	0.15	2	0	0.00	6	0	0.00	2	0	0.00	3	2	0.67

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0055

NPS Station ID: CUGA0055
LAT/LON: 36.602727/ -83.684003
Agency: 11NPSWRD
Date Created: 09/20/97
Location: TUNNEL - KENTUCKY SIDE
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /CANAL/TYPA/AMBNT
STORET Station ID(s): CUGA_CPSU_TUNEL
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1400
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS IN THE TUNNEL WITHIN THE KENTUCKY BORDER AT THE NORTHERN END. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0055

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/06/94-05/21/97	28	13.75	15.368	33.6	10.9	19.803	4.45	11.68	12.9	16.55	20.11
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/06/94-05/21/97	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/06/94-05/21/97	32	5.	4.609	10.	2.5	4.48	2.117	2.5	2.5	5.	8.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/06/94-05/21/97	28	231.	215.429	330.	4.	5392.032	73.43	69.3	201.75	253.5	292.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/06/94-05/21/97	32	0.	0.125	1.	0.	0.113	0.336	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/06/94-05/21/97	28	8.4	8.15	9.8	6.	1.269	1.126	6.47	7.125	9.	9.62
00403	PH, LAB, STANDARD UNITS SU	12/06/94-05/21/97	32	7.9	7.825	8.3	7.1	0.067	0.259	7.36	7.7	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	12/06/94-05/21/97	32	7.9	7.735	8.3	7.1	0.075	0.275	7.36	7.7	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/94-05/21/97	32	0.013	0.018	0.079	0.005	0.	0.015	0.008	0.01	0.02	0.045
00406	PH, FIELD, STANDARD UNITS SU	12/06/94-05/21/97	28	7.8	7.854	8.3	7.	0.067	0.259	7.6	7.7	8.	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/06/94-05/21/97	28	7.8	7.759	8.3	7.	0.076	0.276	7.6	7.7	8.	8.2
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/94-05/21/97	28	0.016	0.017	0.1	0.005	0.	0.017	0.006	0.01	0.02	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/06/94-05/21/97	32	105.	107.875	150.	34.	602.823	24.552	83.3	90.5	127.5	147.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/06/94-05/21/97	32 ##	0.05	0.049	0.05	0.005	0.	0.008	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	12/06/94-12/06/94	1	85.	85.	85.	85.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/06/94-05/21/97	32	2.5	3.7	26.	0.1	23.221	4.819	0.48	1.	4.75	7.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/06/94-05/21/97	32 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/06/94-05/21/97	32	0.885	1.167	4.6	0.025	1.116	1.056	0.191	0.393	1.55	3.08
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/06/94-05/21/97	32 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/15/95-03/06/96	5	1.4	3.74	13.	0.6	27.268	5.222	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/94-05/21/97	32	130.	123.125	170.	77.	857.661	29.286	82.3	95.25	147.5	160.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/94-05/21/97	32	46.3	43.278	56.9	25.3	99.406	9.97	29.38	34.675	53.175	55.49

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0055

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/94-05/21/97	32	3.35	3.566	7.5	0.005	2.579	1.606	2.4	2.8	3.875	6.78
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/94-05/21/97	32	1.4	3.219	35.	0.36	39.618	6.294	0.507	0.9	2.325	8.48
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/94-05/21/97	32	1.1	1.482	3.7	0.56	0.805	0.897	0.602	0.815	1.975	3.16
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/94-05/21/97	32	1.	7.195	74.	0.05	233.577	15.283	0.76	1.	2.	24.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/94-05/21/97	32	9.2	12.6	36.	0.7	87.546	9.357	6.36	7.325	12.	33.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/94-05/21/97	32 ##	0.05	0.067	0.2	0.05	0.002	0.045	0.05	0.05	0.05	0.17
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/10/95-03/06/96	3 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	02/15/95-03/06/96	4	14.5	23.25	54.	10.	428.917	20.71	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/94-05/21/97	32 ##	5.	5.375	12.	5.	2.242	1.497	5.	5.	5.	5.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	02/15/95-03/06/96	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/94-05/21/97	32 ##	5.	5.156	10.	5.	0.781	0.884	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/94-05/21/97	32 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	12/06/94-05/21/97	32 ##	10.	18.688	130.	5.	793.319	28.166	5.	5.	19.5	47.6
01049	LEAD, DISSOLVED (UG/L AS PB)	12/06/94-05/21/97	32 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	12/06/94-05/21/97	32 ##	5.	12.125	175.	5.	899.661	29.994	5.	5.	5.	17.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/94-05/21/97	32 ##	5.	11.156	175.	5.	900.523	30.009	5.	5.	5.	13.5
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	02/15/95-03/06/96	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/06/94-05/21/97	32 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	02/15/95-03/06/96	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/94-05/21/97	32 ##	5.	13.156	70.	5.	212.201	14.567	5.	5.	17.75	32.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/06/94-05/21/97	32	53.	69.281	340.	5.	5787.886	76.078	5.	11.25	90.75	168.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/06/94-05/21/97	32	16.	26.375	122.	5.	799.016	28.267	5.	5.	41.25	71.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/06/94-05/21/97	32 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/06/94-05/21/97	32	131.	132.438	248.	21.	1676.77	40.948	96.2	105.	153.25	189.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/06/94-05/21/97	32 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	02/15/95-03/06/96	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/06/94-05/21/97	32	0.035	0.065	0.26	0.005	0.004	0.066	0.005	0.02	0.098	0.167
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/06/94-05/21/97	24	2.	2.292	5.	1.	1.52	1.233	1.	1.25	2.75	4.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/06/94-05/21/97	32 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0055

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	28	0	0.00	8	0	0.00	7	0	0.00	8	0	0.00	5	0	0.00
00403	PH, LAB	Fresh Chronic	9.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Other-Lo Lim.	6.5	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	28	0	0.00	8	0	0.00	7	0	0.00	8	0	0.00	5	0	0.00
		Other-Lo Lim.	6.5	28	0	0.00	8	0	0.00	7	0	0.00	8	0	0.00	5	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Drinking Water	250.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
		Drinking Water	50.	0 &	0	0.00												
01005	BARIUM, DISSOLVED	Drinking Water	2000.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Drinking Water	1300.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Drinking Water	15.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Drinking Water	100.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00
		Drinking Water	5000.	32	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0055

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	0 &	0	0.00												
		Drinking Water	2.	0 &	0	0.00												
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	24	0	0.00	7	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0056

NPS Station ID: CUGA0056
LAT/LON: 36.602920/ -83.684504
Agency: 11NPSWRD
Date Created: 09/20/97
Location: TUNNEL CREEK - MIDSTREAM
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CPSU_TC7
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1350
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK IN THE TUNNEL DRAINAGE AT THE FIRST SEDIMENT BASIN IN THE RIGHT DITCH OF THE SOUTHERN TUNNEL'S KENTUCKY PORTAL. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-07/27/92	51	13.4	13.418	19.2	8.5	4.013	2.003	11.14	12.3	14.5	16.38
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-07/27/92	51	0.6	0.725	5.	0.	0.684	0.827	0.002	0.3	1.	1.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-07/27/92	51	34.	3603.569	110000.	1.	259410725.69	16106.233	8.	10.	985.	4188.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-07/27/92	51	62.	162.765	931.	1.	49020.504	221.406	53.2	57.	157.	368.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-07/27/92	51	0.	0.118	1.	0.	0.106	0.325	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-07/27/92	51	9.3	9.298	10.9	6.4	1.027	1.014	8.42	8.7	10.1	10.5
00403	PH, LAB, STANDARD UNITS SU	04/11/91-07/27/92	27	9.4	9.707	11.9	7.2	3.299	1.816	7.4	8.	11.4	11.72
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-07/27/92	27	9.4	7.961	11.9	7.2	6.465	2.543	7.4	8.	11.4	11.72
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-07/27/92	27	0.	0.011	0.063	0.	0.	0.018	0.	0.	0.01	0.04
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-07/27/92	51	7.1	8.278	12.5	6.1	4.744	2.178	6.12	6.5	10.4	11.8
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-07/27/92	51	7.1	6.737	12.5	6.1	7.168	2.677	6.12	6.5	10.4	11.8
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-07/27/92	51	0.079	0.183	0.794	0.	0.07	0.264	0.	0.	0.316	0.762
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-07/27/92	51	24.	110.725	707.	20.	23417.603	153.028	21.	23.	131.	365.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-07/27/92	51 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-07/27/92	51	15.	62.431	431.	0.	8073.77	89.854	13.	13.	77.	205.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-07/27/92	51	11.	594.439	7733.	0.	2015707.818	1419.756	0.	0.8	418.	2033.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-07/27/92	51 ##	0.01	4.457	95.	0.	260.332	16.135	0.	0.01	0.2	15.06
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-07/27/92	51 ##	0.01	0.244	4.2	0.01	0.48	0.693	0.01	0.01	0.07	0.66
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-07/27/92	51	0.06	0.456	5.18	0.	1.012	1.006	0.	0.	0.37	1.498
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-07/27/92	51	0.07	0.213	2.35	0.	0.157	0.397	0.	0.01	0.19	0.658
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/24/90-06/15/92	5 ##	0.5	1.68	4.	0.	4.337	2.083	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-07/27/92	51	29.	87.961	564.	22.	12099.118	109.996	23.2	25.	128.	273.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-07/27/92	51	8.2	30.957	220.	5.9	1832.909	42.812	6.4	7.	42.4	93.66
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-07/27/92	51	1.7	1.46	4.3	0.03	0.747	0.864	0.1	0.7	1.8	1.98
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-07/27/92	51	0.85	8.092	62.68	0.	214.612	14.65	0.534	0.63	6.25	27.858
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-07/27/92	51	1.18	6.258	60.09	0.73	121.904	11.041	0.852	0.99	5.58	19.854
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-07/27/92	51	0.9	1.151	4.	0.4	0.628	0.793	0.6	0.6	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-07/27/92	51	4.8	13.21	102.7	3.1	309.584	17.595	3.42	3.9	14.1	37.72
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-07/27/92	51 ##	0.1	0.269	1.35	0.01	0.09	0.299	0.1	0.1	0.39	0.79
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-01/13/92	9 ##	0.	15.	100.	0.	1150.	33.912	0.	0.	17.5	100.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-01/13/92	11	10.	39.091	290.	0.	6989.091	83.601	2.	10.	20.	238.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-07/27/92	51 ##	0.	17.98	220.	0.	1817.18	42.628	0.	0.	20.	48.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-01/13/92	11 ##	0.	0.909	10.	0.	9.091	3.015	0.	0.	0.	8.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-07/27/92	51 ##	5.	18.765	120.	0.	929.464	30.487	0.	0.	20.	76.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-07/27/92	51 ##	5.	13.882	130.	0.	702.466	26.504	0.	0.	10.	56.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-07/27/92	51 ##	0.	11.471	200.	0.	1009.294	31.769	0.	0.	10.	28.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-07/27/92	51	90.	120.706	980.	0.	20502.252	143.186	50.	70.	110.	220.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-07/27/92	51	30.	37.431	140.	0.	1282.49	35.812	0.	10.	60.	90.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-07/27/92	51	60.	1719.02	30170.	30.	31454453.02	5608.427	40.	40.	340.	2806.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-07/27/92	51	30.	63.529	1660.	0.	52392.374	228.894	2.6	10.	50.	58.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-01/13/92	30 ##	0.	2.333	40.	0.	66.782	8.172	0.	0.	0.	9.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-07/27/92	51 ##	0.	5.029	50.	0.	89.324	9.451	0.	0.	10.	19.2
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-01/13/92	30 ##	0.	14.333	160.	0.	1052.989	32.45	0.	0.	20.	30.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-01/13/92	30 ##	0.	5.	120.	0.	481.034	21.932	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-07/27/92	51	10.	12.078	70.	0.	270.594	16.45	0.	0.	20.	37.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-07/27/92	51	70.	19002.157	474870.	10.	5356932061.255	73191.065	20.	20.	4990.	29118.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-07/27/92	51	40.	575.078	8571.	0.	1880660.354	1371.372	10.	10.	350.	2166.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-01/13/92	30 ##	0.	0.667	10.	0.	6.437	2.537	0.	0.	0.	0.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-01/13/92	30 ##	0.	9.333	80.	0.	365.057	19.106	0.	0.	12.5	30.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-07/27/92	51	3400.	5507.451	80000.	1000.	118788707.373	10899.023	2314.	3160.	4110.	7220.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-07/27/92	51 ##	0.	8.51	90.	0.	284.015	16.853	0.	0.	10.	23.2
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-06/15/92	50	33.5	119.78	672.	26.	22219.318	149.061	27.	30.	167.	361.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-07/27/92	51 ##	0.15	0.155	0.25	0.15	0.	0.021	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-05/18/92	29 ##	0.	6.034	100.	0.	402.463	20.061	0.	0.	0.	25.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-07/27/92	51	0.75	9.54	98.75	0.12	489.196	22.118	0.152	0.21	5.34	25.442
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-07/27/92	51	8.	80.196	200.	0.	8682.761	93.181	1.	2.	200.	200.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-07/27/92	51 ##	100.	99.02	100.	50.	49.02	7.001	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0056

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
00403	PH, LAB	Fresh Chronic	9.	27	16	0.59	9	5	0.56	6	5	0.83	2	2	1.00	10	4	0.40
		Other-Lo Lim.	6.5	27	0	0.00	9	0	0.00	6	0	0.00	2	0	0.00	10	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	51	16	0.31	19	5	0.26	14	5	0.36	7	2	0.29	11	4	0.36
		Other-Lo Lim.	6.5	51	13	0.25	19	10	0.53	14	2	0.14	7	0	0.00	11	1	0.09
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	51	4	0.08	19	0	0.00	14	0	0.00	7	1	0.14	11	3	0.27
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
		Drinking Water	250.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	9	0	0.00	4	0	0.00	3	0	0.00				2	0	0.00
		Drinking Water	50.	9	1	0.11	4	0	0.00	3	1	0.33				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	11	0	0.00	6	0	0.00	3	0	0.00				2	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	11	1	0.09	6	0	0.00	3	1	0.33				2	0	0.00
		Drinking Water	5.	11	1	0.09	6	0	0.00	3	1	0.33				2	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	51	3	0.06	19	1	0.05	14	1	0.07	7	0	0.00	11	1	0.09
01040	COPPER, DISSOLVED	Fresh Acute	18.	50 &	6	0.12	18	1	0.06	14	2	0.14	7	2	0.29	11	1	0.09
		Drinking Water	1300.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0056

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	51	7	0.14	19	2	0.11	14	0	0.00	7	3	0.43	11	2	0.18
		Drinking Water	15.	47 &	30	0.64	18	11	0.61	14	7	0.50	6	5	0.83	9	7	0.78
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
		Drinking Water	100.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
		Drinking Water	5000.	51	0	0.00	19	0	0.00	14	0	0.00	7	0	0.00	11	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	27 &	2	0.07	10	0	0.00	10	2	0.20	5	0	0.00	2	0	0.00
		Drinking Water	2.	27 &	2	0.07	10	0	0.00	10	2	0.20	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	51	21	0.41	19	8	0.42	14	5	0.36	7	3	0.43	11	5	0.45

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0057

NPS Station ID: CUGA0057
LAT/LON: 36.665837/ -83.685838
Agency: 112WRD
Date Created: 02/28/78
Location: AMERICAN ASSOC.
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363957083410901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 4.30
On/Off RF1:
RF3 Index: 05130101004705.72
RF3 Mile Point: 6.14
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0057

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/64-03/18/64	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/64-03/18/64	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/64-03/18/64	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/64-03/18/64	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/64-03/18/64	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/18/64-03/18/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/18/64-03/18/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/18/64-03/18/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/18/64-03/18/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/18/64-03/18/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/18/64-03/18/64	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/18/64-03/18/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/64-03/18/64	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	03/18/64-03/18/64	1	580.	580.	580.	580.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0057

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0058

NPS Station ID: CUGA0058 LAT/LON: 36.606920/ -83.687865 Agency: 11NPSWRD Date Created: 09/20/97
Location: DAVIS BRANCH: UPSTREAM OF LITTLE YELLOW CREEK FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_DB10
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS APPROXIMATELY 600 FEET ABOVE DAVIS BRANCH'S CONFLUENCE WITH LITTLE YELLOW CREEK. IT MONITORS THE EFFECTS OF ALL UPSTREAM IMPACTS TO DAVIS BRANCH. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848.
TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525.
TEL (970)225-3516.

Parameter Inventory for Station: CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	182	13.15	13.577	25.5	0.9	31.455	5.608	6.43	9.	18.5	20.94
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	158	0.6	2.062	26.	0.	16.007	4.001	0.028	0.2	3.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	182	20.	33.574	524.	2.5	3730.852	61.081	5.	10.	35.	49.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	182	127.5	150.165	402.	7.	5979.078	77.324	68.6	89.	197.75	262.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	182	0.	0.159	1.	0.	0.135	0.367	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	182	8.1	7.959	13.4	1.9	5.222	2.285	4.9	6.1	9.725	10.87
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	154	7.4	7.384	8.	6.	0.082	0.287	7.	7.2	7.6	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	154	7.4	7.253	8.	6.	0.099	0.315	7.	7.2	7.6	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	154	0.04	0.056	1.	0.01	0.007	0.086	0.02	0.025	0.063	0.1
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	182	7.2	7.192	8.	6.3	0.089	0.298	6.8	7.	7.4	7.6
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	182	7.2	7.084	8.	6.3	0.1	0.317	6.8	7.	7.4	7.6
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	182	0.063	0.082	0.501	0.01	0.005	0.071	0.025	0.04	0.1	0.158
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	182	32.	43.154	120.	1.	855.236	29.244	13.	18.	64.5	91.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	182 ##	0.05	0.085	5.	0.05	0.138	0.371	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	131	21.	26.997	70.	0.	334.546	18.291	8.	12.	41.	56.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	182	3.	14.188	670.	0.	2847.209	53.359	0.5	2.	7.	31.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	77 ##	0.01	0.389	5.2	0.	1.038	1.019	0.	0.01	0.01	1.26
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	182 ##	0.01	0.042	1.1	0.01	0.021	0.144	0.01	0.01	0.01	0.1
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	182	0.25	0.483	15.	0.	1.597	1.264	0.	0.05	0.55	0.871

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	182 ##	0.05	0.094	2.9	0.	0.059	0.243	0.017	0.05	0.05	0.157
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	28	2.5	4.429	25.4	0.	29.809	5.46	0.	1.35	4.7	12.1
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	182	43.	56.5	180.	18.	1113.986	33.376	24.	30.	80.25	110.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	182	12.75	17.436	56.7	4.5	128.675	11.343	6.49	8.6	24.15	35.54
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	182	2.7	3.038	8.4	1.2	1.555	1.247	1.73	2.1	4.	5.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	182	5.2	5.908	21.	1.13	10.863	3.296	2.339	3.545	7.788	9.569
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	182	1.4	1.569	3.98	0.5	0.482	0.695	0.869	1.	2.005	2.57
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	182	7.	8.808	30.	1.	33.858	5.819	3.	4.	13.	16.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	182	12.	13.282	37.	1.4	22.258	4.718	9.63	10.7	14.35	18.14
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	179 ##	0.05	0.085	0.64	0.05	0.005	0.074	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	47.419	250.	0.	3424.785	58.522	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	21.	29.316	90.	0.	318.006	17.833	17.6	20.	31.25	60.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	2 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	179 ##	5.	9.539	100.	0.	150.338	12.261	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	35 ##	5.	3.286	10.	0.	7.269	2.696	0.	0.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	182 ##	5.	5.181	40.	0.	31.873	5.646	0.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	99 ##	5.	6.318	60.	0.	76.951	8.772	0.	0.	10.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	182 ##	5.	5.44	50.	0.	53.121	7.288	0.	3.75	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	182	200.	247.802	1660.	5.	32331.994	179.811	93.	128.75	320.	464.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	182 ##	50.	39.717	150.	0.	426.44	20.65	7.2	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	181	40.	60.265	550.	5.	5254.607	72.489	20.	30.	60.	110.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	182	30.	40.522	437.	0.	1696.052	41.183	15.3	20.	50.	70.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	0.	16.852	50.	0.	525.751	22.929	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	181 ##	5.	4.508	30.	0.	13.04	3.611	0.	5.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39	10.	24.641	90.	0.	848.447	29.128	0.	0.	50.	70.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	53 ##	0.	3.113	20.	0.	24.256	4.925	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	182 ##	5.	12.761	139.	0.	317.983	17.832	0.	5.	10.25	35.7
01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	2 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	182	82.	164.44	2500.	5.	93000.347	304.96	6.5	30.	160.	327.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	182	30.	48.901	350.	5.	3059.482	55.313	5.	5.	67.	114.2
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	6.316	50.	0.	240.114	15.496	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	5.	21.579	90.	0.	781.223	27.95	0.	0.	50.	62.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	99	3000.	3200.444	20000.	1850.	3918996.29	1979.645	2260.	2700.	3200.	3450.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	179 ##	5.	5.285	100.	0.	70.216	8.38	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	176	62.	78.074	289.	0.	1896.275	43.546	36.7	46.	105.75	144.3
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	179 ##	0.15	0.151	0.25	0.05	0.	0.013	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	22.547	100.	0.	694.829	26.36	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	181	0.39	0.502	3.5	0.005	0.162	0.402	0.192	0.28	0.59	0.844
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	167	5.	12.455	200.	0.	657.731	25.646	2.	3.	8.	30.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	179 ##	50.	66.313	100.	10.	593.07	24.353	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0058

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	182	8	0.04	62	4	0.06	44	0	0.00	34	4	0.12	42	0	0.00
00403	PH, LAB	Fresh Chronic	9.	154	0	0.00	50	0	0.00	36	0	0.00	27	0	0.00	41	0	0.00
		Other-Lo Lim.	6.5	154	2	0.01	50	0	0.00	36	2	0.06	27	0	0.00	41	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
		Other-Lo Lim.	6.5	182	5	0.03	62	0	0.00	44	2	0.05	34	3	0.09	42	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	182	2	0.01	62	0	0.00	44	0	0.00	34	0	0.00	42	2	0.05
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	182	1	0.01	62	1	0.02	44	0	0.00	34	0	0.00	42	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	0	0.00							2	0	0.00			
		Drinking Water	0.2	2	0	0.00							2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
		Drinking Water	250.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0058

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	179	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	42	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	0	0.00	5	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00							2	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	14 &	1	0.07	7	1	0.14	3	0	0.00	1	0	0.00	3	0	0.00
		Drinking Water	5.	14 &	1	0.07	7	1	0.14	3	0	0.00	1	0	0.00	3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	180 &	5	0.03	61	3	0.05	43	2	0.05	34	0	0.00	42	0	0.00
		Drinking Water	1300.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	181 &	1	0.01	62	1	0.02	44	0	0.00	33	0	0.00	42	0	0.00
		Drinking Water	15.	60 &	31	0.52	20	13	0.65	16	7	0.44	11	5	0.45	13	6	0.46
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	181	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	41	0	0.00
		Drinking Water	100.	181	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	41	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	2	0	0.00							2	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	182	1	0.01	62	1	0.02	44	0	0.00	34	0	0.00	42	0	0.00
		Drinking Water	5000.	182	0	0.00	62	0	0.00	44	0	0.00	34	0	0.00	42	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00							2	0	0.00			
		Drinking Water	50.	2	0	0.00							2	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	0	0.00	11	0	0.00	9	0	0.00	7	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	0	0.00	11	0	0.00	9	0	0.00	7	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	167	10	0.06	61	1	0.02	37	2	0.05	31	6	0.19	38	1	0.03

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	17	17.1	15.7	23.2	6.2	31.879	5.646	6.36	10.55	20.25	21.76
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	17	0.2	1.734	12.	0.	13.18	3.63	0.	0.085	0.85	10.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	17	46.	53.235	166.	25.	1039.066	32.235	27.4	35.5	56.	95.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	17	169.	157.588	237.	80.	2255.507	47.492	80.8	117.5	193.	223.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	17	7.8	8.276	11.4	5.6	3.218	1.794	6.32	6.75	10.	11.08
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	17	7.2	7.206	7.6	6.9	0.031	0.175	6.98	7.05	7.3	7.44
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	17	7.2	7.174	7.6	6.9	0.032	0.178	6.98	7.05	7.3	7.44
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	17	0.063	0.067	0.126	0.025	0.001	0.027	0.037	0.05	0.09	0.105
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	17	51.	50.824	84.	16.	388.529	19.711	17.6	33.	64.5	77.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	31.	28.765	51.	0.	191.691	13.845	8.	19.	39.	47.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	17	3.	7.	45.	0.	114.5	10.7	0.	2.	8.5	22.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	17 ##	0.01	0.055	0.8	0.	0.037	0.192	0.	0.01	0.01	0.168
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	17 ##	0.1	0.089	0.1	0.01	0.001	0.03	0.01	0.1	0.1	0.1
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	17	0.1	0.076	0.2	0.	0.007	0.083	0.	0.	0.15	0.2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	17	0.04	0.06	0.17	0.	0.004	0.062	0.	0.	0.115	0.162
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17	62.	60.588	102.	26.	462.132	21.497	28.4	39.5	75.	92.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	17	17.6	17.929	32.	6.9	51.121	7.15	7.62	11.	23.25	28.72
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	17	3.9	3.612	5.1	1.9	0.847	0.921	1.98	2.75	4.3	4.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	17	6.14	6.127	9.18	2.65	4.273	2.067	2.778	4.46	7.785	9.044
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	17	1.92	1.855	2.65	1.1	0.175	0.418	1.196	1.535	2.07	2.458
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	17	11.	9.706	15.	3.	15.846	3.981	3.	6.	13.	14.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	17	10.7	11.024	14.5	8.3	2.769	1.664	8.54	10.05	12.2	13.78
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	17 ##	0.1	0.115	0.35	0.1	0.004	0.061	0.1	0.1	0.1	0.15
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	17	10.	9.412	20.	0.	55.882	7.475	0.	0.	15.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	17 ##	0.	1.765	10.	0.	15.441	3.93	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	17 ##	0.	3.529	20.	0.	36.765	6.063	0.	0.	10.	12.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	17 ##	0.	5.294	40.	0.	101.471	10.073	0.	0.	10.	16.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	17	330.	337.647	560.	110.	18781.618	137.046	142.	230.	450.	544.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	17	10.	17.647	70.	0.	319.118	17.864	0.	5.	25.	46.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	17	60.	65.882	130.	30.	863.235	29.381	38.	50.	65.	130.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	17	50.	49.412	80.	0.	418.382	20.454	16.	35.	60.	80.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	17 ##	0.	2.941	10.	0.	22.059	4.697	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	17 ##	0.	4.118	20.	0.	38.235	6.183	0.	0.	10.	12.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	17	90.	120.	380.	10.	8925.	94.472	50.	70.	115.	316.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	17	50.	57.059	150.	10.	1334.559	36.532	26.	35.	60.	134.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	17	3130.	3046.471	3990.	2080.	202186.765	449.652	2224.	2810.	3325.	3558.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	17 ##	0.	4.118	20.	0.	38.235	6.183	0.	0.	10.	12.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	17	81.	74.353	121.	0.	956.993	30.935	31.2	52.	93.5	113.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	17	0.54	0.538	0.85	0.19	0.032	0.18	0.278	0.37	0.645	0.794
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	17	4.	6.353	31.	0.	58.993	7.681	0.	2.5	8.	18.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1991 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	31	12.4	12.884	21.2	3.6	29.475	5.429	6.44	8.2	19.4	20.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	31	0.2	1.76	23.	0.	17.423	4.174	0.	0.1	2.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	31	31.	78.323	524.	12.	14717.492	121.316	20.	25.	49.	212.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	31	101.	142.581	286.	55.	6422.452	80.14	59.2	84.	236.	263.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	31	0.	0.194	1.	0.	0.161	0.402	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	31	8.9	8.639	12.2	3.6	5.058	2.249	5.72	7.2	10.8	11.6
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	21	7.6	7.567	7.9	7.2	0.046	0.215	7.22	7.35	7.7	7.8

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Annual Analysis for 1991 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	21	7.6	7.514	7.9	7.2	0.049	0.222	7.22	7.35	7.7	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	21	0.025	0.031	0.063	0.013	0.	0.016	0.016	0.02	0.045	0.061
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	31	7.	7.	7.8	6.3	0.1	0.316	6.52	6.9	7.2	7.36
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	31	7.	6.886	7.8	6.3	0.113	0.337	6.52	6.9	7.2	7.36
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	31	0.1	0.13	0.501	0.016	0.012	0.109	0.044	0.063	0.126	0.303
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	31	32.	46.806	114.	1.	1236.695	35.167	11.2	18.	90.	101.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	31 ##	0.05	0.21	5.	0.05	0.79	0.889	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	31	20.	28.6	70.	0.6	463.987	21.54	7.	11.	55.	61.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	31	3.	16.581	136.	0.	1120.852	33.479	0.	1.	11.	58.4
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	31 ##	0.01	0.395	4.	0.	1.228	1.108	0.01	0.01	0.01	2.56
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	31 ##	0.01	0.014	0.14	0.01	0.001	0.023	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	31	0.03	0.071	0.66	0.	0.015	0.123	0.	0.	0.11	0.16
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	31	0.11	0.216	1.04	0.	0.064	0.254	0.	0.02	0.35	0.548
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	31	41.	57.29	132.	19.	1387.08	37.244	21.	27.	97.	118.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	31	12.1	17.584	43.1	4.5	161.806	12.72	5.42	7.4	30.8	38.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	31	2.5	2.994	5.6	1.3	1.775	1.332	1.42	2.	4.5	5.08
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	31	3.91	5.03	9.67	1.13	7.706	2.776	1.676	3.	7.75	9.39
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	31	1.39	1.703	3.45	0.9	0.58	0.761	0.928	1.04	2.29	2.978
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	31	5.	6.613	14.	1.	14.845	3.853	2.	4.	10.	12.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	31	11.8	11.829	22.5	3.	9.031	3.005	9.26	10.9	12.5	14.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	31 ##	0.1	0.133	0.64	0.1	0.016	0.126	0.1	0.1	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	31	10.	20.484	100.	0.	590.591	24.302	0.	0.	40.	50.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	31 ##	0.	8.871	40.	0.	154.516	12.43	0.	0.	20.	30.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	31 ##	0.	9.516	60.	0.	190.591	13.805	0.	0.	20.	30.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	31 ##	0.	4.839	50.	0.	104.14	10.205	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	31	180.	224.839	500.	90.	12612.473	112.305	110.	140.	310.	376.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	31	30.	32.258	100.	0.	763.065	27.624	0.	10.	50.	78.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	31	40.	56.129	150.	20.	1351.183	36.758	20.	30.	70.	126.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	31	30.	43.226	140.	20.	735.914	27.128	20.	30.	60.	78.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	31 ##	0.	4.194	30.	0.	45.161	6.72	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	31	10.	8.871	40.	0.	96.183	9.807	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	31	130.	293.871	2500.	40.	231237.849	480.872	70.	80.	250.	900.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	31	80.	100.323	350.	30.	5056.559	71.109	42.	60.	110.	214.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	31	2800.	2685.161	3200.	1850.	163545.806	404.408	2104.	2340.	3000.	3200.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	31 ##	0.	4.839	40.	0.	85.806	9.263	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	31	52.	72.194	146.	25.	1605.095	40.064	29.4	40.	118.	132.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	31	0.38	0.472	2.13	0.16	0.145	0.381	0.182	0.22	0.55	0.932
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	31	7.	18.065	145.	1.	1158.662	34.039	3.	3.	9.	43.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	31 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	28	12.7	13.443	22.1	1.3	37.303	6.108	5.99	8.55	19.15	21.46
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	25	1.	1.995	12.	0.07	7.093	2.663	0.26	0.45	2.5	6.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	28	29.	40.536	348.	10.	3766.851	61.375	14.9	20.	41.5	49.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	28	105.5	122.857	216.	7.	2942.72	54.247	66.8	82.	178.75	198.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	28	8.05	8.	13.4	4.8	4.804	2.192	4.89	6.1	9.7	10.71
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	28	7.4	7.407	8.	6.7	0.084	0.291	7.07	7.3	7.575	7.9
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	28	7.4	7.308	8.	6.7	0.095	0.308	7.07	7.3	7.575	7.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	28	0.04	0.049	0.2	0.01	0.002	0.041	0.013	0.027	0.05	0.087
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	28	7.3	7.275	7.9	6.6	0.122	0.349	6.7	7.	7.5	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	28	7.3	7.138	7.9	6.6	0.141	0.376	6.7	7.	7.5	7.7

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Annual Analysis for 1992 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	28	0.05	0.073	0.251	0.013	0.004	0.062	0.02	0.032	0.1	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	28	31.5	39.714	81.	13.	453.915	21.305	16.	22.5	59.75	75.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	19.	24.259	49.	8.	174.199	13.198	10.	13.	37.	46.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	28	2.	10.218	82.	0.	503.548	22.44	0.	0.2	3.75	59.7
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	20 ##	0.01	0.657	5.2	0.	1.591	1.262	0.	0.	1.075	2.22
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	28 ##	0.01	0.018	0.24	0.01	0.002	0.043	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	28	0.265	0.32	1.08	0.01	0.073	0.27	0.059	0.06	0.533	0.702
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	28 ##	0.025	0.046	0.188	0.	0.003	0.052	0.	0.017	0.058	0.162
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28	38.5	48.464	92.	24.	496.776	22.288	24.9	29.75	68.	82.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	28	11.	14.671	29.8	6.3	57.478	7.581	6.67	8.2	21.375	25.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	28	2.45	2.75	4.4	1.7	0.811	0.901	1.7	1.95	3.575	4.22
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	28	3.655	4.491	8.35	1.95	4.685	2.164	2.35	2.67	6.922	7.767
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	28	1.5	1.69	3.98	0.89	0.606	0.778	0.992	1.113	1.898	3.364
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	28	4.	4.5	10.	1.	4.333	2.082	2.	3.	5.75	7.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	28	11.4	12.668	24.	8.3	13.189	3.632	9.78	10.125	14.075	18.46
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	28 ##	0.05	0.073	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	28	7.	8.625	30.	0.	49.604	7.043	0.	5.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	28 ##	5.	3.857	10.	0.	7.905	2.812	0.	0.25	5.	5.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	28 ##	5.	4.839	20.	0.	18.057	4.249	0.	0.875	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	28 ##	5.	3.036	10.	0.	8.036	2.835	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	28	185.	226.357	500.	90.	12176.979	110.349	122.7	145.75	280.	411.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	28 ##	25.	18.875	37.	0.	139.067	11.793	0.	7.	25.	30.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	28	40.	62.464	430.	20.	6209.739	78.802	20.	30.	60.	123.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	28	40.	37.607	60.	20.	156.099	12.494	20.	30.	47.75	60.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	28 ##	5.	2.893	5.	0.	6.173	2.485	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	28 ##	5.	6.482	30.	0.	58.916	7.676	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	28	135.	225.75	2020.	5.	154105.75	392.563	5.	31.5	257.5	427.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	28	31.5	42.857	173.	5.	1969.09	44.374	5.	5.	64.25	104.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	28	3117.	3675.5	20000.	2500.	10400812.926	3225.029	2595.	2700.	3435.	3740.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	28 ##	5.	4.143	10.	0.	9.905	3.147	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	22	49.5	64.091	147.	34.	1258.372	35.474	36.3	39.75	73.	134.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	28 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	28	0.43	0.604	2.14	0.22	0.231	0.48	0.25	0.29	0.605	1.432
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	28	5.	15.714	130.	1.	810.36	28.467	1.9	3.25	8.75	61.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	26	13.7	13.608	25.5	4.	39.324	6.271	6.79	8.475	18.325	23.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	21	0.4	1.641	10.	0.01	6.701	2.589	0.068	0.15	2.5	6.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	26	15.	16.346	40.	5.	55.115	7.424	5.	10.	20.	25.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	26	141.	169.462	315.	53.	9083.458	95.307	64.7	78.75	257.5	304.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	26	0.	0.077	1.	0.	0.074	0.272	0.	0.	0.	0.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	26	7.6	7.485	11.3	4.3	4.133	2.033	4.75	5.7	9.225	10.33
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	26	7.3	7.285	7.8	6.6	0.085	0.291	6.9	7.075	7.5	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	26	7.3	7.186	7.8	6.6	0.095	0.308	6.9	7.075	7.5	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	26	0.05	0.065	0.251	0.016	0.003	0.051	0.02	0.032	0.085	0.126
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	26	7.3	7.346	8.	6.8	0.095	0.309	6.94	7.175	7.6	7.83
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	26	7.3	7.249	8.	6.8	0.105	0.324	6.94	7.175	7.6	7.83
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	26	0.05	0.056	0.158	0.01	0.002	0.039	0.015	0.025	0.067	0.118
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	26	40.	50.462	110.	10.	1325.378	36.406	12.7	17.	90.25	103.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	26	24.5	30.654	67.	2.	502.555	22.418	7.7	10.	55.25	62.8

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Annual Analysis for 1993 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	26	3.	29.896	670.	0.5	17062.504	130.624	0.94	2.	5.5	13.3
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-12/13/93	9 ##	0.	0.406	3.	0.	0.985	0.993	0.	0.	0.325	3.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	26 ##	0.01	0.17	1.1	0.01	0.123	0.35	0.01	0.01	0.01	0.902
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	26	0.615	0.913	3.52	0.025	0.794	0.891	0.025	0.378	1.025	2.683
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	26 ##	0.05	0.162	2.9	0.05	0.312	0.559	0.05	0.05	0.05	0.065
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	26	56.5	66.962	140.	18.	1745.158	41.775	22.7	28.75	110.	130.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	26	17.25	21.438	46.3	4.9	210.79	14.519	6.11	8.25	35.675	42.84
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	26	3.05	3.242	5.2	1.3	1.715	1.309	1.87	2.	4.475	5.13
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	26	5.85	7.312	21.	1.4	24.711	4.971	2.37	3.525	11.25	13.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	26	1.4	1.58	3.2	0.5	0.505	0.711	0.8	0.992	2.15	2.69
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	26	9.	9.615	18.	2.	27.206	5.216	2.7	5.5	14.25	17.3
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	26	14.	14.946	26.	1.4	22.729	4.767	9.64	12.	18.	20.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	26 ##	0.05	0.071	0.2	0.05	0.002	0.049	0.05	0.05	0.05	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	26 ##	5.	7.692	20.	5.	30.462	5.519	5.	5.	6.25	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	23 ##	5.	5.87	20.	5.	10.573	3.252	5.	5.	5.	8.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	26 ##	5.	6.538	20.	5.	17.538	4.188	5.	5.	5.	13.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	26	195.	201.154	400.	60.	9490.615	97.42	74.	107.5	292.5	323.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	26 ##	50.	53.846	150.	50.	384.615	19.612	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	25	40.	63.8	550.	5.	11023.5	104.993	16.	20.	70.	104.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	26	35.	41.731	100.	5.	765.885	27.675	10.	20.	70.	83.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	26 ##	5.	5.385	10.	5.	1.846	1.359	5.	5.	5.	6.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	26	10.	11.923	40.	5.	108.154	10.4	5.	5.	12.5	33.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	26	25.	138.462	1600.	5.	119247.538	345.322	5.	8.75	110.	435.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	26 ##	5.	23.077	250.	5.	2846.154	53.349	5.	5.	12.5	63.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	23	3000.	3430.435	12000.	2100.	3587667.984	1894.114	2800.	2900.	3300.	3640.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	26 ##	5.	8.654	100.	5.	347.115	18.631	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	26	80.5	90.308	170.	30.	2478.942	49.789	35.7	44.75	140.	161.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	26 ##	0.15	0.146	0.15	0.05	0.	0.02	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	25	0.34	0.507	3.5	0.11	0.418	0.646	0.194	0.255	0.555	0.738
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	22	5.	13.636	200.	1.	1738.623	41.697	1.3	3.	6.25	10.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	30	13.15	12.953	20.1	0.9	28.415	5.331	4.07	9.275	17.7	18.77
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	23	0.6	1.973	22.	0.01	20.716	4.551	0.01	0.1	2.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	30	10.	13.5	35.	5.	48.534	6.967	5.	10.	15.	24.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	30	120.	133.467	283.	14.	4619.085	67.964	60.1	83.25	177.75	260.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	30	6.3	6.737	11.6	1.9	6.738	2.596	2.91	5.3	8.9	10.39
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	29	7.5	7.355	7.7	6.5	0.075	0.273	7.	7.2	7.6	7.6
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	29	7.5	7.248	7.7	6.5	0.087	0.294	7.	7.2	7.6	7.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	29	0.032	0.056	0.316	0.02	0.003	0.057	0.025	0.025	0.063	0.1
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	30	7.2	7.177	7.6	6.5	0.065	0.256	6.81	7.	7.4	7.4
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	30	7.2	7.091	7.6	6.5	0.073	0.27	6.81	7.	7.4	7.4
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	30	0.063	0.081	0.316	0.025	0.004	0.064	0.04	0.04	0.1	0.155
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	30	29.5	38.667	96.	8.	765.402	27.666	10.1	15.25	57.5	89.9
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	18.	23.633	59.	5.	289.275	17.008	6.1	9.5	35.	55.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	30	3.	12.733	85.	1.	521.375	22.834	1.1	2.	9.75	67.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	30	0.3	0.353	1.1	0.025	0.077	0.277	0.025	0.15	0.448	0.773
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05

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Annual Analysis for 1994 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30	44.5	52.7	120.	18.	905.803	30.097	20.1	28.75	66.	109.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	30	13.4	16.29	38.9	4.8	100.937	10.047	5.64	8.075	20.25	34.83
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	30	2.65	2.933	5.7	1.4	1.531	1.237	1.5	1.975	3.625	5.09
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	30	4.55	5.057	14.	1.8	7.192	2.682	1.92	3.325	6.1	9.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	30	1.2	1.45	3.2	0.7	0.479	0.692	0.8	0.9	1.75	2.58
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	30	5.	7.033	28.	2.	27.551	5.249	3.	4.	9.25	13.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	30	13.	13.763	27.	9.9	13.729	3.705	10.	11.	15.	18.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	30 ##	0.05	0.08	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	30 ##	5.	7.	30.	5.	28.621	5.35	5.	5.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	30 ##	5.	5.167	10.	5.	0.833	0.913	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	30	225.	266.667	660.	70.	26278.161	162.105	90.	150.	350.	527.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	30	30.	39.667	130.	20.	465.402	21.573	20.	30.	50.	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	30	30.	28.333	50.	10.	131.609	11.472	10.	20.	40.	40.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	29 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	30	10.	15.667	60.	5.	302.989	17.407	5.	5.	20.	50.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	30	75.	138.5	720.	5.	30998.534	176.064	5.	10.	185.	420.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	30	15.	39.667	190.	5.	2936.092	54.186	5.	5.	52.5	146.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	30	64.5	79.333	289.	30.	2764.161	52.575	31.1	44.75	101.25	142.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	30	0.415	0.462	0.85	0.17	0.042	0.206	0.2	0.29	0.625	0.788
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	25	5.	11.56	59.	1.	217.423	14.745	2.	3.	15.5	36.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	24	13.25	13.613	23.1	6.4	25.269	5.027	7.3	9.425	17.375	22.65
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	17	0.6	0.901	4.	0.06	1.448	1.203	0.06	0.25	0.95	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	24	10.	13.333	45.	2.5	119.928	10.951	2.5	5.	18.75	32.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	24	142.	181.917	402.	28.	10179.645	100.894	78.5	120.	239.	350.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	24	0.	0.125	1.	0.	0.114	0.338	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	24	9.1	8.342	11.6	3.9	5.583	2.363	4.35	7.15	9.9	11.
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	24	7.45	7.442	8.	6.9	0.055	0.234	7.1	7.3	7.6	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	24	7.447	7.379	8.	6.9	0.059	0.242	7.1	7.3	7.6	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	24	0.036	0.042	0.126	0.01	0.001	0.026	0.02	0.025	0.05	0.082
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	24	7.2	7.225	7.6	6.9	0.038	0.194	7.	7.025	7.375	7.55
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	24	7.2	7.186	7.6	6.9	0.039	0.198	7.	7.025	7.375	7.55
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	24	0.063	0.065	0.126	0.025	0.001	0.027	0.028	0.042	0.095	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	24	28.5	45.5	120.	12.	1077.652	32.828	16.5	20.5	75.75	104.5
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	24 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	24	4.5	9.496	77.	0.6	267.176	16.346	0.7	1.	11.25	26.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	24 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	24	0.368	1.237	15.	0.025	10.19	3.192	0.025	0.16	0.655	3.8
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	24 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	24	46.5	65.208	180.	22.	1826.172	42.734	30.	32.75	93.75	140.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	24	14.15	20.6	56.7	6.7	207.079	14.39	8.6	9.8	31.825	46.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	24	2.7	3.283	8.4	1.2	2.491	1.578	2.	2.225	4.175	5.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	24	6.	7.046	16.	1.6	12.67	3.559	3.9	4.85	8.275	14.5
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	24	1.15	1.341	2.7	0.79	0.268	0.517	0.885	1.	1.4	2.35
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	24	10.5	12.292	30.	5.	43.868	6.623	5.	7.25	15.	24.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	24	13.	15.654	37.	6.7	56.462	7.514	10.	11.	17.	29.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	24 ##	0.05	0.065	0.4	0.05	0.005	0.071	0.05	0.05	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	24 ##	5.	5.875	26.	5.	18.375	4.287	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	24 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	24 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	24	162.5	191.333	466.	62.	11259.536	106.111	75.	108.5	246.	372.5
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	24 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	24	44.5	70.917	438.	20.	8069.732	89.832	20.	27.75	79.25	175.5
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	24	27.	48.167	437.	5.	7203.449	84.873	7.5	20.	40.5	77.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	24 ##	5.	5.833	20.	5.	10.145	3.185	5.	5.	5.	7.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	24 ##	5.	11.958	99.	5.	422.998	20.567	5.	5.	5.	36.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	24	49.	87.5	771.	5.	23016.522	151.712	7.5	21.75	105.75	134.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	24	13.	31.708	169.	5.	1553.52	39.415	5.	5.	55.75	82.5
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	24 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	24	66.5	88.208	206.	43.	2291.216	47.867	43.	52.75	130.25	162.5
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	24 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	24	0.385	0.431	1.13	0.14	0.052	0.228	0.175	0.295	0.52	0.79
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	19	4.	6.526	20.	1.	27.819	5.274	2.	3.	8.	18.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	24 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	22	15.5	13.959	22.3	5.5	35.848	5.987	5.6	8.225	19.325	20.76
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	21	3.	4.371	26.	0.3	42.178	6.494	0.42	1.	3.5	17.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	22	15.	18.068	50.	2.5	197.578	14.056	5.	5.	26.25	43.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	22	143.	153.727	292.	82.	3183.065	56.419	88.3	108.	197.75	242.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	22	0.	0.136	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	22	8.5	8.209	11.5	4.	4.288	2.071	5.25	6.4	9.75	10.95
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	22	7.3	7.286	7.7	6.	0.108	0.328	7.06	7.2	7.4	7.6
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	22	7.3	7.04	7.7	6.	0.172	0.414	7.06	7.2	7.4	7.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	22	0.05	0.091	1.	0.02	0.042	0.204	0.025	0.04	0.063	0.089
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	22	7.2	7.191	7.5	6.6	0.051	0.227	6.83	7.075	7.325	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	22	7.2	7.126	7.5	6.6	0.056	0.236	6.83	7.075	7.325	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	22	0.063	0.075	0.251	0.032	0.003	0.05	0.032	0.048	0.085	0.149
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	22	27.	32.591	77.	12.	383.872	19.593	13.3	15.	46.5	66.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	22 ##	0.05	0.07	0.5	0.05	0.009	0.096	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	22	2.5	9.568	67.	0.5	330.007	18.166	1.	1.	7.75	48.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	22 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	22	0.535	0.459	0.85	0.025	0.092	0.304	0.025	0.044	0.73	0.801
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	22 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	22	34.5	45.773	98.	22.	475.708	21.811	28.	30.	56.25	84.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	22	10.3	13.691	32.1	6.1	47.865	6.918	8.09	8.75	17.55	25.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	22	2.1	2.682	6.4	1.7	1.232	1.11	1.83	2.	3.125	4.31
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	22	7.1	7.305	14.	3.4	7.959	2.821	4.09	5.	8.925	12.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	22	1.1	1.294	3.8	0.69	0.466	0.683	0.741	0.848	1.6	1.97
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	22	15.5	14.636	29.	5.	41.29	6.426	6.3	9.	18.25	24.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	22	11.5	12.359	32.	6.1	24.224	4.922	8.85	9.875	13.	15.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	21 ##	0.05	0.057	0.2	0.05	0.001	0.033	0.05	0.05	0.05	0.05
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	21 ##	5.	5.238	10.	5.	1.19	1.091	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	22 ##	5.	9.091	50.	5.	175.325	13.241	5.	5.	5.	36.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	22	203.	332.545	1660.	5.	147300.831	383.798	5.	78.5	489.5	824.7
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	22 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	22	36.	73.818	454.	13.	11255.68	106.093	16.3	22.25	74.25	258.1
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	22	30.	42.909	300.	2.	3602.372	60.02	7.4	18.75	40.75	70.1
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.

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Annual Analysis for 1996 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	22	18.	21.5	76.	5.	367.119	19.16	5.	5.	35.25	48.5
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	22	61.5	99.318	419.	10.	9868.703	99.341	26.6	36.25	126.	250.4
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	22	32.	39.818	90.	5.	662.156	25.732	10.3	16.25	62.75	75.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	22	60.5	77.091	158.	41.	1159.229	34.047	46.6	50.5	92.75	137.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	22	0.505	0.538	2.04	0.005	0.238	0.487	0.005	0.178	0.783	1.113
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	21	3.	8.905	61.	2.	205.79	14.345	2.	2.5	6.5	33.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1997 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	4	13.05	13.05	17.4	8.7	14.217	3.77	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	3	1.	1.667	4.	0.	4.333	2.082	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	4	20.	23.75	40.	15.	139.583	11.815	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	4	118.5	158.25	335.	61.	15199.583	123.287	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	4	0.	0.25	1.	0.	0.25	0.5	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	4	9.5	9.625	12.2	7.3	4.129	2.032	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	4	7.3	7.325	7.7	7.	0.109	0.33	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	4	7.255	7.238	7.7	7.	0.119	0.345	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	4	0.056	0.058	0.1	0.02	0.001	0.038	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	4	6.95	6.975	7.6	6.4	0.282	0.532	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	4	6.882	6.766	7.6	6.4	0.341	0.584	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	4	0.131	0.171	0.398	0.025	0.028	0.169	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	4	23.5	36.5	93.	6.	1515.	38.923	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	4 ##	0.275	0.275	0.5	0.05	0.068	0.26	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	4	2.5	16.375	60.	0.5	846.896	29.101	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	4	0.39	0.344	0.57	0.025	0.059	0.243	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	4	38.	56.5	130.	20.	2527.	50.269	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	4	11.15	17.725	42.8	5.8	292.423	17.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	4	2.45	2.9	5.3	1.4	2.887	1.699	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	4	3.9	4.475	7.9	2.2	6.396	2.529	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	4	2.25	2.175	2.8	1.4	0.376	0.613	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	4	5.5	7.25	16.	2.	38.25	6.185	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	4	12.	14.85	26.	9.4	59.423	7.709	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	4	246.	228.5	315.	107.	7699.667	87.748	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	4	41.	47.	84.	22.	691.333	26.293	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	4	29.5	26.75	43.	5.	372.25	19.294	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	4 ##	50.	64.	139.	17.	2742.	52.364	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	4	68.5	104.25	251.	29.	9919.583	99.597	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	4 ##	36.	48.25	116.	5.	2894.25	53.798	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	4	52.	72.	158.	26.	3533.333	59.442	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	2 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	4	0.38	0.385	0.48	0.3	0.009	0.093	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	4	4.5	18.	59.	4.	747.333	27.337	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	2 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	62	19.35	18.806	25.5	8.4	12.075	3.475	13.72	17.375	21.	22.51
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	56	0.2	1.051	19.	0.	8.89	2.982	0.01	0.1	0.4	2.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	62	22.5	29.282	166.	2.5	589.497	24.28	6.5	15.	45.	49.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	62	213.5	220.339	402.	89.	5055.08	71.099	118.2	174.25	273.75	322.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	62	0.	0.097	1.	0.	0.089	0.298	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	62	5.95	6.137	9.4	3.6	2.048	1.431	4.33	4.975	7.025	8.27
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	50	7.6	7.58	8.	7.2	0.041	0.202	7.3	7.4	7.7	7.89
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	50	7.6	7.534	8.	7.2	0.043	0.207	7.3	7.4	7.7	7.89
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	50	0.025	0.029	0.063	0.01	0.	0.014	0.013	0.02	0.04	0.05
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	62	7.3	7.287	8.	6.6	0.069	0.263	7.	7.1	7.5	7.6
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	62	7.3	7.207	8.	6.6	0.076	0.275	7.	7.1	7.5	7.6
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	62	0.05	0.062	0.251	0.01	0.002	0.044	0.025	0.032	0.079	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	62	74.	72.742	120.	26.	534.883	23.128	42.9	55.	91.	102.1
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	62 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	62	3.	6.919	75.	0.	187.904	13.708	0.1	1.	5.25	17.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	62 ##	0.01	0.028	0.24	0.01	0.002	0.043	0.01	0.01	0.01	0.1
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	62	0.31	0.592	15.	0.	3.577	1.891	0.003	0.09	0.57	0.817
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	62 ##	0.05	0.104	1.04	0.	0.034	0.184	0.025	0.038	0.05	0.352
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	62	83.5	87.968	180.	33.	987.376	31.423	43.9	66.25	110.	130.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	62	26.3	28.081	56.7	9.8	118.1	10.867	13.05	20.25	35.7	42.74
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	62	4.2	4.145	8.4	1.7	1.179	1.086	2.76	3.475	4.775	5.27
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	62	7.9	8.246	21.	1.89	11.941	3.456	4.46	6.185	9.265	12.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	62	2.03	2.021	3.98	0.95	0.381	0.617	1.13	1.578	2.3	2.87
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	62	11.5	11.823	30.	2.	32.214	5.676	5.	7.	15.	18.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	62	13.55	14.84	37.	3.	37.996	6.164	9.43	10.975	17.25	22.85
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	62 ##	0.05	0.095	0.64	0.05	0.013	0.112	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	32.5	42.417	90.	21.	409.538	20.237	21.6	30.	57.5	81.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	62 ##	5.	12.5	100.	0.	273.566	16.54	5.	5.	10.	27.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	2.5	2.917	10.	0.	11.174	3.343	0.	0.	5.	8.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	62 ##	5.	5.242	40.	0.	33.957	5.827	0.	5.	5.	8.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	62 ##	5.	6.129	50.	0.	67.557	8.219	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	62	340.5	373.565	1660.	62.	49494.643	222.474	180.	249.	450.	537.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	62 ##	50.	40.	100.	0.	344.262	18.554	10.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	61	54.	81.492	454.	20.	7863.421	88.676	30.	40.	84.5	135.6
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	62	40.	54.226	437.	5.	3017.456	54.931	21.2	30.	60.	80.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	0.	8.611	50.	0.	255.31	15.978	0.	0.	10.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	62 ##	5.	5.565	30.	0.	22.217	4.713	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	17 ##	0.	4.118	20.	0.	44.485	6.67	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	62	10.	19.129	139.	0.	650.114	25.497	0.	5.	27.75	48.5
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	62	45.5	75.355	380.	5.	7855.511	88.631	5.	11.5	90.	215.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	62	10.	28.21	140.	5.	1053.578	32.459	5.	5.	50.	77.6
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	62 ##	5.	5.484	40.	0.	40.746	6.383	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	59	116.	113.356	206.	0.	1513.061	38.898	57.	90.	145.	160.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	62 ##	0.15	0.154	0.25	0.15	0.	0.019	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	61	0.58	0.651	2.04	0.22	0.092	0.303	0.372	0.495	0.755	0.994
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	61	4.	8.459	130.	0.	323.819	17.995	1.2	2.5	5.5	20.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	62 ##	50.	64.839	100.	10.	648.334	25.462	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	44	8.9	8.691	14.3	0.9	9.221	3.037	4.8	6.4	11.275	12.85
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	36	0.9	1.893	12.	0.	7.047	2.655	0.	0.225	3.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	44	20.	40.057	524.	2.5	7137.026	84.481	5.	10.	29.5	61.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	44	113.5	129.318	264.	55.	3651.245	60.426	69.	81.25	165.	243.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	44	0.	0.182	1.	0.	0.152	0.39	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	44	9.75	9.559	11.6	5.8	2.47	1.572	6.9	8.9	10.7	11.45
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	36	7.2	7.164	7.7	6.	0.115	0.339	6.67	7.025	7.375	7.6
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	36	7.2	6.979	7.7	6.	0.15	0.388	6.67	7.025	7.375	7.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	36	0.063	0.105	1.	0.02	0.028	0.166	0.025	0.042	0.095	0.215
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	44	7.1	7.114	7.8	6.4	0.088	0.297	6.75	7.	7.3	7.45
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	44	7.1	7.014	7.8	6.4	0.098	0.314	6.75	7.	7.3	7.45
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	44	0.079	0.097	0.398	0.016	0.006	0.075	0.036	0.05	0.1	0.179
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	44	24.	33.25	102.	12.	566.378	23.799	13.	16.25	38.75	73.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	44 ##	0.05	0.06	0.5	0.05	0.005	0.068	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	44	2.	12.289	136.	0.	665.65	25.8	0.55	1.	7.	48.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	44 ##	0.01	0.021	0.14	0.01	0.001	0.032	0.01	0.01	0.01	0.1
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	44	0.195	0.493	6.4	0.	1.151	1.073	0.	0.025	0.54	0.78
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	44 ##	0.05	0.059	0.35	0.	0.005	0.067	0.	0.043	0.05	0.095
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	44	36.	46.318	120.	21.	685.989	26.191	23.5	28.	59.	98.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	44	10.05	13.952	38.9	5.2	79.761	8.931	6.3	7.9	17.5	31.75
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	44	2.3	2.693	5.3	1.2	1.099	1.048	1.7	1.925	3.325	4.45
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	44	4.3	4.925	12.	1.13	6.428	2.535	2.315	2.803	7.198	8.76
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	44	1.325	1.638	3.8	0.69	0.693	0.832	0.86	1.005	2.158	3.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	44	5.	6.909	17.	1.	18.085	4.253	2.5	3.	10.	13.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	44	13.	13.525	26.	1.4	17.135	4.139	9.6	11.	16.675	18.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	43 ##	0.1	0.092	0.2	0.05	0.002	0.05	0.05	0.05	0.1	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	38.571	50.	0.	339.286	18.42	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	20.	21.375	30.	5.	63.696	7.981	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	43 ##	5.	9.07	50.	0.	97.638	9.881	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	2.857	5.	0.	7.143	2.673	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	44 ##	5.	6.591	40.	0.	67.178	8.196	0.	5.	5.	15.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	44 ##	5.	6.705	50.	0.	106.911	10.34	0.	1.25	5.	12.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	44	185.	197.114	404.	90.	6544.568	80.899	106.5	121.25	247.5	310.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	44 ##	50.	37.386	80.	0.	405.219	20.13	5.	21.25	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	44	33.5	47.614	214.	13.	1491.405	38.619	20.	30.	57.5	100.5
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	44	30.	34.773	88.	10.	272.366	16.504	20.	20.25	40.	60.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	44 ##	5.	3.864	10.	0.	7.981	2.825	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	0.	1.538	5.	0.	5.769	2.402	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	44 ##	5.	8.568	50.	0.	93.228	9.655	0.	5.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	44	75.	244.045	2500.	5.	246989.905	496.981	5.	20.	222.5	835.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	44	40.	61.068	350.	5.	5133.274	71.647	5.	5.	100.	155.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	43 ##	5.	4.535	10.	0.	9.302	3.05	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	41	52.	66.293	158.	29.	1186.362	34.444	36.	40.5	79.5	132.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	43 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	44	0.335	0.436	2.13	0.17	0.135	0.368	0.19	0.24	0.39	0.93
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	37	5.	12.216	130.	1.	554.785	23.554	2.	3.5	7.5	40.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	43 ##	50.	68.605	100.	50.	598.007	24.454	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	34	8.8	8.232	14.6	1.3	7.023	2.65	4.55	6.675	9.45	12.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	27	3.	4.159	26.	0.	39.318	6.27	0.32	0.9	4.	12.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	34	15.	38.162	466.	2.5	6600.541	81.244	3.75	10.	32.25	66.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	34	87.5	89.441	180.	7.	1545.163	39.309	52.5	61.	109.5	150.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	34	0.	0.324	1.	0.	0.225	0.475	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	34	9.9	9.185	13.4	1.9	8.278	2.877	2.95	8.85	10.85	11.9
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	27	7.3	7.27	7.8	6.9	0.044	0.209	7.	7.1	7.4	7.52
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	27	7.3	7.224	7.8	6.9	0.046	0.214	7.	7.1	7.4	7.52
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	27	0.05	0.06	0.126	0.016	0.001	0.027	0.03	0.04	0.079	0.1
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	34	7.05	7.029	7.8	6.3	0.109	0.33	6.55	6.8	7.3	7.4
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	34	7.047	6.903	7.8	6.3	0.125	0.354	6.55	6.8	7.3	7.4
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	34	0.09	0.125	0.501	0.016	0.012	0.109	0.04	0.05	0.158	0.284
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	34	16.	17.029	51.	1.	78.272	8.847	8.5	11.75	21.	28.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	34 ##	0.05	0.222	5.	0.05	0.724	0.851	0.05	0.05	0.05	0.275
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	34	3.5	38.988	670.	0.	13375.877	115.654	0.25	2.	30.	80.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	34 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	34	0.245	0.448	3.11	0.	0.47	0.685	0.	0.048	0.595	1.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	34 ##	0.05	0.136	2.9	0.	0.24	0.489	0.01	0.05	0.05	0.12
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	34	29.	28.588	55.	18.	62.734	7.921	19.5	21.75	34.	38.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	34	8.15	8.174	17.7	4.5	7.32	2.705	5.15	5.975	10.	11.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	34	2.	1.926	2.7	1.3	0.123	0.351	1.4	1.6	2.2	2.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	34	3.57	4.285	14.	1.4	7.455	2.73	1.79	2.238	5.225	8.55
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	34	0.995	1.041	2.	0.72	0.078	0.28	0.8	0.883	1.1	1.4
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	34	4.	7.235	28.	2.	36.913	6.076	2.	3.	8.5	17.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	34	11.	11.576	21.	9.2	4.837	2.199	9.45	10.	12.625	13.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	32 ##	0.075	0.081	0.2	0.05	0.002	0.04	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	18.222	20.	5.	24.694	4.969	5.	19.5	20.	20.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	32 ##	5.	6.281	26.	0.	35.112	5.926	0.	5.	5.	17.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	4.375	5.	0.	3.125	1.768	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	34 ##	5.	3.676	10.	0.	6.529	2.555	0.	0.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	34 ##	5.	3.824	10.	0.	7.665	2.769	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	34	120.	124.676	310.	5.	4079.559	63.871	32.5	87.5	162.5	200.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	34 ##	50.	42.059	150.	0.	677.451	26.028	5.	30.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	34	30.	53.382	550.	10.	8431.334	91.822	19.5	20.	50.	97.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	34	20.	24.029	80.	2.	212.757	14.586	10.	20.	30.	41.5
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	34 ##	5.	3.529	10.	0.	6.863	2.62	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	2.5	2.5	5.	0.	6.731	2.594	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	34 ##	5.	9.118	50.	0.	137.077	11.708	0.	5.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	34	140.	253.882	1600.	5.	101197.743	318.116	29.5	70.	305.	645.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	34	60.	79.235	260.	5.	4795.943	69.253	5.	20.	110.	190.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	32 ##	5.	7.5	100.	0.	293.548	17.133	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	34	47.	52.676	289.	25.	1969.68	44.381	29.5	33.5	55.25	60.5
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	32 ##	0.15	0.147	0.15	0.05	0.	0.018	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	34	0.29	0.403	3.5	0.005	0.335	0.579	0.145	0.208	0.383	0.665
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	31	7.	25.71	200.	1.	1926.946	43.897	2.2	4.	30.	60.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	32 ##	50.	67.188	100.	50.	582.157	24.128	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	42	15.1	15.305	21.4	5.6	11.852	3.443	11.04	12.95	18.	20.08
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	39	1.	2.219	22.	0.	15.188	3.897	0.2	0.6	3.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	42	20.	29.405	348.	5.	2687.271	51.839	5.	10.	31.	41.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	42	113.5	117.571	214.	28.	1742.397	41.742	74.5	84.25	137.25	186.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	42	0.	0.095	1.	0.	0.088	0.297	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	42	8.05	7.979	10.8	5.1	1.739	1.319	6.	7.35	8.9	9.27

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	41	7.4	7.415	7.8	6.9	0.034	0.184	7.2	7.3	7.5	7.6
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	41	7.4	7.373	7.8	6.9	0.036	0.189	7.2	7.3	7.5	7.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	41	0.04	0.042	0.126	0.016	0.	0.022	0.025	0.032	0.05	0.063
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	42	7.2	7.267	7.9	6.7	0.06	0.246	7.	7.1	7.4	7.67
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	42	7.2	7.203	7.9	6.7	0.065	0.254	7.	7.1	7.4	7.67
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	42	0.063	0.063	0.2	0.013	0.001	0.036	0.022	0.04	0.079	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	42	28.	31.	69.	11.	176.341	13.279	17.	20.5	39.5	50.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	42 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	42	3.	6.833	82.	0.	176.533	13.287	0.3	2.	5.25	15.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	42 ##	0.01	0.111	1.1	0.01	0.081	0.284	0.01	0.01	0.01	0.707
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	42	0.225	0.342	1.	0.	0.101	0.317	0.025	0.06	0.675	0.859
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	42 ##	0.05	0.083	0.55	0.	0.01	0.099	0.017	0.05	0.05	0.196
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	42	41.	43.31	85.	20.	245.926	15.682	28.	30.	51.	68.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	42	11.95	12.869	27.7	5.5	25.918	5.091	7.76	8.575	15.825	21.11
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	42	2.55	2.664	6.4	1.4	0.711	0.843	1.93	2.1	2.925	3.67
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	42	4.5	4.803	14.	1.9	4.706	2.169	2.602	3.6	5.55	7.06
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	42	1.23	1.257	2.5	0.5	0.127	0.357	0.806	0.96	1.403	1.607
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	42	6.	7.619	29.	1.	31.754	5.635	3.	4.	9.25	14.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	42	11.85	12.107	32.	8.3	12.303	3.508	9.9	10.175	13.	14.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	42 ##	0.05	0.067	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	21.	30.	60.	0.	367.75	19.177	0.	20.	49.5	60.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	42 ##	5.	8.131	50.	0.	95.306	9.762	1.15	5.	5.	27.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	42 ##	5.	4.833	20.	0.	10.337	3.215	0.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	42 ##	5.	4.405	15.	0.	10.003	3.163	0.	3.75	5.	8.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	42	180.	214.929	537.	5.	18595.044	136.364	80.	118.75	295.	468.8
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	42 ##	50.	39.845	80.	0.	389.616	19.739	0.15	28.75	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	42	40.	48.262	304.	5.	2182.198	46.714	20.	29.	50.	70.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	42	33.	39.667	300.	0.	1995.398	44.67	6.5	21.5	43.5	67.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	5.	22.778	50.	0.	669.444	25.874	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	41 ##	5.	4.415	10.	0.	7.549	2.748	0.	5.	5.	9.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	4.444	20.	0.	40.278	6.346	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	42 ##	5.	10.702	50.	0.	132.891	11.528	0.	5.	10.25	31.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	42	92.5	140.143	890.	10.	32344.418	179.846	26.5	59.5	150.	217.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	42	38.	42.143	173.	5.	1079.003	32.848	5.	17.75	60.	80.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	42 ##	5.	4.071	10.	0.	6.751	2.598	0.	2.25	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	42	55.5	60.571	133.	30.	431.812	20.78	39.3	46.	68.	91.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	42 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	42	0.38	0.436	2.14	0.005	0.115	0.34	0.176	0.238	0.53	0.724
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	38	5.	8.289	70.	0.	132.211	11.498	3.	3.75	8.	17.1
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	42 ##	50.	65.476	100.	50.	547.329	23.395	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0059

NPS Station ID: CUGA0059 LAT/LON: 36.603976/ -83.688171 Agency: 11NPSWRD Date Created: 09/20/97
Location: TUNNEL CREEK: SOUTHBOUND TUNNEL DRAINAGE FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_TC8
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK IN THE SOUTHBOUND TUNNEL DRAINAGE 500 FT EAST OF SITE TC10 AND 750 FT EAST OF ITS CONFLUENCE WITH LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURINGA RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/24/91-10/24/91	1	17.8	17.8	17.8	17.8	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/24/91-10/24/91	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	10/24/91-10/24/91	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/24/91-10/24/91	1	73.	73.	73.	73.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	10/24/91-10/24/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/24/91-10/24/91	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/24/91-10/24/91	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/24/91-10/24/91	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/91-10/24/91	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	10/24/91-10/24/91	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	10/24/91-10/24/91	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/91-10/24/91	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/24/91-10/24/91	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	10/24/91-10/24/91	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/24/91-10/24/91	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/24/91-10/24/91	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/24/91-10/24/91	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/24/91-10/24/91	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/24/91-10/24/91	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10/24/91-10/24/91	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/24/91-10/24/91	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/24/91-10/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/24/91-10/24/91	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/24/91-10/24/91	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/24/91-10/24/91	1	1.53	1.53	1.53	1.53	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/24/91-10/24/91	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/24/91-10/24/91	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/24/91-10/24/91	1	1.01	1.01	1.01	1.01	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/24/91-10/24/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	10/24/91-10/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	10/24/91-10/24/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/24/91-10/24/91	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/24/91-10/24/91	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/24/91-10/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/24/91-10/24/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/24/91-10/24/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/24/91-10/24/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/24/91-10/24/91	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	10/24/91-10/24/91	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/24/91-10/24/91	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	10/24/91-10/24/91	1	3600.	3600.	3600.	3600.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	10/24/91-10/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	10/24/91-10/24/91	1	39.	39.	39.	39.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/24/91-10/24/91	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	10/24/91-10/24/91	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	10/24/91-10/24/91	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	10/24/91-10/24/91	1 ##	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0059

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0060

NPS Station ID: CUGA0060
LAT/LON: 36.603948/ -83.688670
Agency: 11NPSWRD
Date Created: 09/20/97
Location: SEDIMENT BASIN AT TUNNEL CREEK
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /RESERV/TYPA/AMBNT
STORET Station ID(s): CUGA_CPSU_SB8
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1800
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ALONG TUNNEL CREEK BELOW THE RAILROAD IN A SEDIMENT BASIN. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0060

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	12/16/91-01/13/92	2	331.	331.	616.	46.	162450.	403.051	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/16/91-01/13/92	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/16/91-01/13/92	2	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/16/91-01/13/92	2	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/16/91-01/13/92	2	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/16/91-01/13/92	2	60.	60.	102.	18.	3528.	59.397	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/16/91-01/13/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/16/91-01/13/92	2	36.5	36.5	62.	11.	1300.5	36.062	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/16/91-01/13/92	2	78.	78.	129.	27.	5202.	72.125	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/16/91-01/13/92	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/16/91-01/13/92	2 ##	0.235	0.235	0.46	0.01	0.101	0.318	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/16/91-01/13/92	2	0.625	0.625	1.1	0.15	0.451	0.672	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/16/91-01/13/92	2	0.98	0.98	1.33	0.63	0.245	0.495	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-01/13/92	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/16/91-01/13/92	2	177.5	177.5	259.	96.	13284.5	115.258	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/16/91-01/13/92	2	47.65	47.65	63.4	31.9	496.125	22.274	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/16/91-01/13/92	2	8.05	8.05	14.2	1.9	75.645	8.697	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/16/91-01/13/92	2	5.5	5.5	6.19	4.81	0.952	0.976	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/16/91-01/13/92	2	3.755	3.755	3.82	3.69	0.008	0.092	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/16/91-01/13/92	2	3.45	3.45	6.	0.9	13.005	3.606	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/16/91-01/13/92	2	110.75	110.75	145.	76.5	2346.125	48.437	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/16/91-01/13/92	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0060

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/16/91-01/13/92	2 ##	97.5	97.5	160.	35.	7812.5	88.388	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/16/91-01/13/92	2	140.	140.	250.	30.	24200.	155.563	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/16/91-01/13/92	2	85.	85.	100.	70.	450.	21.213	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/16/91-01/13/92	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/16/91-01/13/92	2	65.	65.	80.	50.	450.	21.213	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	12/16/91-01/13/92	2	50.	50.	70.	30.	800.	28.284	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/16/91-01/13/92	2 ##	10.	10.	20.	0.	200.	14.142	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/16/91-01/13/92	2	1150.	1150.	1830.	470.	924800.	961.665	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	12/16/91-01/13/92	2	75.	75.	90.	60.	450.	21.213	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	12/16/91-01/13/92	2	2020.	2020.	3870.	170.	6845000.	2616.295	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/16/91-01/13/92	2	2085.	2085.	4080.	90.	7960050.	2821.356	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/16/91-01/13/92	2 ##	10.	10.	20.	0.	200.	14.142	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/16/91-01/13/92	2	30.	30.	50.	10.	800.	28.284	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/16/91-01/13/92	2	65.	65.	80.	50.	450.	21.213	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/16/91-01/13/92	2 ##	70.	70.	140.	0.	9800.	98.995	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/16/91-01/13/92	2	75.	75.	80.	70.	50.	7.071	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/16/91-01/13/92	2	1115.	1115.	1980.	250.	1496450.	1223.295	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/16/91-01/13/92	2	770.	770.	1290.	250.	540800.	735.391	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/16/91-01/13/92	2 ##	5.	5.	10.	0.	50.	7.071	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/16/91-01/13/92	2	70.	70.	120.	20.	5000.	70.711	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	12/16/91-01/13/92	2	4850.	4850.	5400.	4300.	605000.	777.817	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/16/91-01/13/92	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/16/91-01/13/92	2	228.	228.	318.	138.	16200.	127.279	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/16/91-01/13/92	2 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/16/91-01/13/92	2 ##	5.	5.	10.	0.	50.	7.071	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/16/91-01/13/92	2	10.38	10.38	18.88	1.88	144.5	12.021	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/16/91-01/13/92	2 ##	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0060

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00				2	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00				2	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00				2	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	2	0	0.00				2	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00				2	0	0.00						
		Drinking Water	250.	2	0	0.00				2	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00				2	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00				2	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	1	0.50				2	1	0.50						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00				2	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	2	1.00				2	2	1.00						
		Drinking Water	5.	2	2	1.00				2	2	1.00						
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00				2	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	2	1	0.50				2	1	0.50						
		Drinking Water	1300.	2	0	0.00				2	0	0.00						
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	1	0.50				2	1	0.50						
		Drinking Water	15.	2	2	1.00				2	2	1.00						
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00				2	0	0.00						
		Drinking Water	100.	2	0	0.00				2	0	0.00						
01090	ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00				2	0	0.00						
		Drinking Water	5000.	2	0	0.00				2	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	1	0.50				2	1	0.50						
		Drinking Water	2.	2	1	0.50				2	1	0.50						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0061

NPS Station ID: CUGA0061
LAT/LON: 36.668059/ -83.688615
Agency: 112WRD
Date Created: / /
Location: YELLOW CR NR MIDDLESBORO,KY.
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03402000
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101046
RF1 Mile Point: 1.980
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 05130101001203.99
RF3 Mile Point: 6.16
Distance from RF3: 0.09
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00004	STREAM WIDTH (FEET)	08/27/81-08/27/81	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	214	13.15	13.936	28.5	0.5	59.007	7.682	4.	7.15	21.	24.5
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	71	31.	93.485	1140.	0.4	29374.816	171.391	7.	14.	99.	212.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	163	50.	236.84	6430.	4.	482619.518	694.708	11.	20.	139.	480.2
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	08/26/64-11/23/65	16	17.5	26.713	65.	1.2	475.957	21.816	1.9	8.5	51.25	58.
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	23	20.	60.652	700.	3.	20485.783	143.129	6.4	10.	50.	120.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	222	421.5	482.027	1750.	128.	69297.483	263.244	245.	293.75	600.	789.7
00300	OXYGEN, DISSOLVED MG/L	05/27/64-10/21/65	4	4.4	5.1	11.6	0.	24.387	4.938	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-10/21/65	4	53.	49.25	91.	0.	1692.917	41.145	**	**	**	**
00400p	PH (STANDARD UNITS)	05/27/64-03/26/81	66	7.	7.066	8.3	6.4	0.134	0.366	6.67	6.8	7.3	7.6
00400p	CONVERTED PH (STANDARD UNITS)	05/27/64-03/26/81	66	7.	6.939	8.3	6.4	0.15	0.387	6.67	6.8	7.3	7.6
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-03/26/81	66	0.1	0.115	0.398	0.005	0.007	0.086	0.025	0.05	0.158	0.215
00403	PH, LAB, STANDARD UNITS SU	03/26/81-03/26/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/26/81-03/26/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/26/81-03/26/81	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-05/09/80	10	5.5	8.49	27.	1.1	61.93	7.87	1.38	4.425	10.05	26.1
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-03/26/81	32	82.	80.625	333.	22.	3383.919	58.171	28.	39.5	101.	122.1
00440p	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	59	76.	90.407	406.	14.	4099.004	64.023	34.	42.	116.	150.
00445p	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	59	0.	0.034	2.	0.	0.068	0.26	0.	0.	0.	0.
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/27/64-03/12/73	7	1.2	1.831	5.4	0.72	2.692	1.641	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/18/80-07/18/80	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/72-07/18/80	2	0.605	0.605	0.98	0.23	0.281	0.53	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	07/18/80-07/18/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	60	170.	166.2	292.	54.	4171.654	64.588	79.	102.25	228.25	239.8
00902p	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	60	90.	91.267	153.	0.	1341.826	36.631	42.	63.	119.5	141.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	23	51.	46.174	79.	17.	299.605	17.309	20.8	31.	56.	71.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	23	19.	18.617	29.	8.9	36.715	6.059	9.98	13.	23.	28.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/64-07/18/80	8	77.5	94.75	230.	31.	4919.357	70.138	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/02/67-07/18/80	6	1.25	2.417	5.9	1.	4.222	2.055	**	**	**	**
00932	SODIUM, PERCENT	08/26/64-07/18/80	8	28.	27.75	62.	0.	520.786	22.821	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/64-07/18/80	8	5.35	5.862	9.2	3.2	5.76	2.4	**	**	**	**
00940p	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	60	21.5	40.55	250.	5.	2120.15	46.045	6.1	11.	47.5	108.5
00945p	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	66	119.	129.848	998.	39.	14006.654	118.35	54.	72.	158.	183.6
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	31	0.2	0.235	0.7	0.	0.03	0.172	0.1	0.1	0.3	0.48
00955p	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	36	6.6	8.717	54.	4.3	67.628	8.224	5.2	5.8	7.675	13.
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/18/80-07/18/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/18/80-07/18/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/18/80-07/18/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/26/64-07/18/80	4	0.	5.	20.	0.	100.	10.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/18/80-07/18/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	06/07/79-03/26/81	7	1600.	1705.714	3300.	570.	1144395.238	1069.764	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/12/73-03/26/81	8	1550.	1663.75	3400.	140.	1287255.357	1134.573	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/11/66-03/26/81	12	125.	181.667	470.	30.	21451.515	146.463	36.	90.	277.5	461.
01049	LEAD, DISSOLVED (UG/L AS PB)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/18/80-07/18/80	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	06/07/79-03/26/81	7	30.	28.571	60.	0.	547.619	23.401	**	**	**	**
01055p	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-03/26/81	38	385.	477.895	3800.	70.	352184.637	593.451	120.	200.	537.5	796.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/11/66-03/26/81	12	255.	239.167	440.	0.	16990.152	130.346	33.	142.5	327.5	431.
01077	SILVER, TOTAL (UG/L AS AG)	07/18/80-07/18/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/18/80-07/18/80	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/07/65-06/13/67	11	100.	109.091	200.	0.	4909.091	70.065	0.	100.	200.	200.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/11/66-10/11/66	1	200.	200.	200.	200.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/18/80-07/18/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-11/23/65	13	0.1	0.254	1.3	0.1	0.118	0.343	0.1	0.1	0.2	1.02
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	63	284.	331.206	1040.	80.	40390.618	200.974	134.4	176.	446.	568.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/02/67-07/18/80	6	440.	515.667	974.	266.	75731.467	275.194	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/11/66-03/26/81	28	24.3	48.019	193.	9.72	2243.145	47.362	11.43	17.175	63.4	124.6
70303p	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-03/26/81	30	0.39	0.483	1.41	0.14	0.104	0.323	0.18	0.225	0.62	0.951
70331p	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	44	90.5	87.205	100.	54.	136.399	11.679	69.	79.	96.	100.
70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	06/06/81-06/06/81	1	99.	99.	99.	99.	0.	0.	**	**	**	**
70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	06/06/81-06/06/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	06/06/81-06/06/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	06/06/81-06/06/81	1	46.	46.	46.	46.	0.	0.	**	**	**	**
70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	06/06/81-06/06/81	1	63.	63.	63.	63.	0.	0.	**	**	**	**
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	06/06/81-06/06/81	1	80.	80.	80.	80.	0.	0.	**	**	**	**
70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	06/06/81-06/06/81	1	89.	89.	89.	89.	0.	0.	**	**	**	**
71825	ACIDITY, TOTAL (MG/L AS H)	06/06/66-08/10/66	3	0.	0.033	0.1	0.	0.003	0.058	**	**	**	**
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	58	4.45	6.166	24.	0.6	26.707	5.168	2.09	3.075	7.	13.1
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	12/26/68-08/27/71	9	310.	325.556	510.	200.	10302.778	101.503	200.	245.	410.	510.
71885	IRON (UG/L AS FE)	05/27/64-08/27/71	49	780.	968.779	3600.	0.	749154.162	865.537	30.	275.	1350.01	2500.01
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/28/70-07/18/80	4	0.995	1.423	3.	0.7	1.153	1.074	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/06/70-07/18/80	2 ##	0.175	0.175	0.25	0.1	0.011	0.106	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	119	30.	132.723	8100.	5.	569686.626	754.776	9.	16.	54.	94.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	47	4.7	736.697	26700.	0.22	15933864.127	3991.724	0.902	2.3	12.	175.4
80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	09/19/80-09/19/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	09/19/80-08/27/81	2	7.5	7.5	14.	1.	84.5	9.192	**	**	**	**
80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	09/19/80-08/27/81	2	13.	13.	24.	2.	242.	15.556	**	**	**	**
80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	09/19/80-08/27/81	2	21.5	21.5	35.	8.	364.5	19.092	**	**	**	**
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	09/19/80-08/27/81	2	27.	27.	42.	12.	450.	21.213	**	**	**	**
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	09/19/80-08/27/81	2	34.5	34.5	49.	20.	420.5	20.506	**	**	**	**
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	09/19/80-08/27/81	2	48.	48.	62.	34.	392.	19.799	**	**	**	**
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	09/19/80-08/27/81	2	64.	64.	76.	52.	288.	16.971	**	**	**	**
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	09/19/80-08/27/81	2	82.5	82.5	88.	77.	60.5	7.778	**	**	**	**
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	09/19/80-08/27/81	2	100.	100.	100.	100.	0.	0.	**	**	**	**
82031	COAL IN BOTTOM MATERIAL DRY WEIGHT GRAMS/KG	07/18/80-07/18/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0061

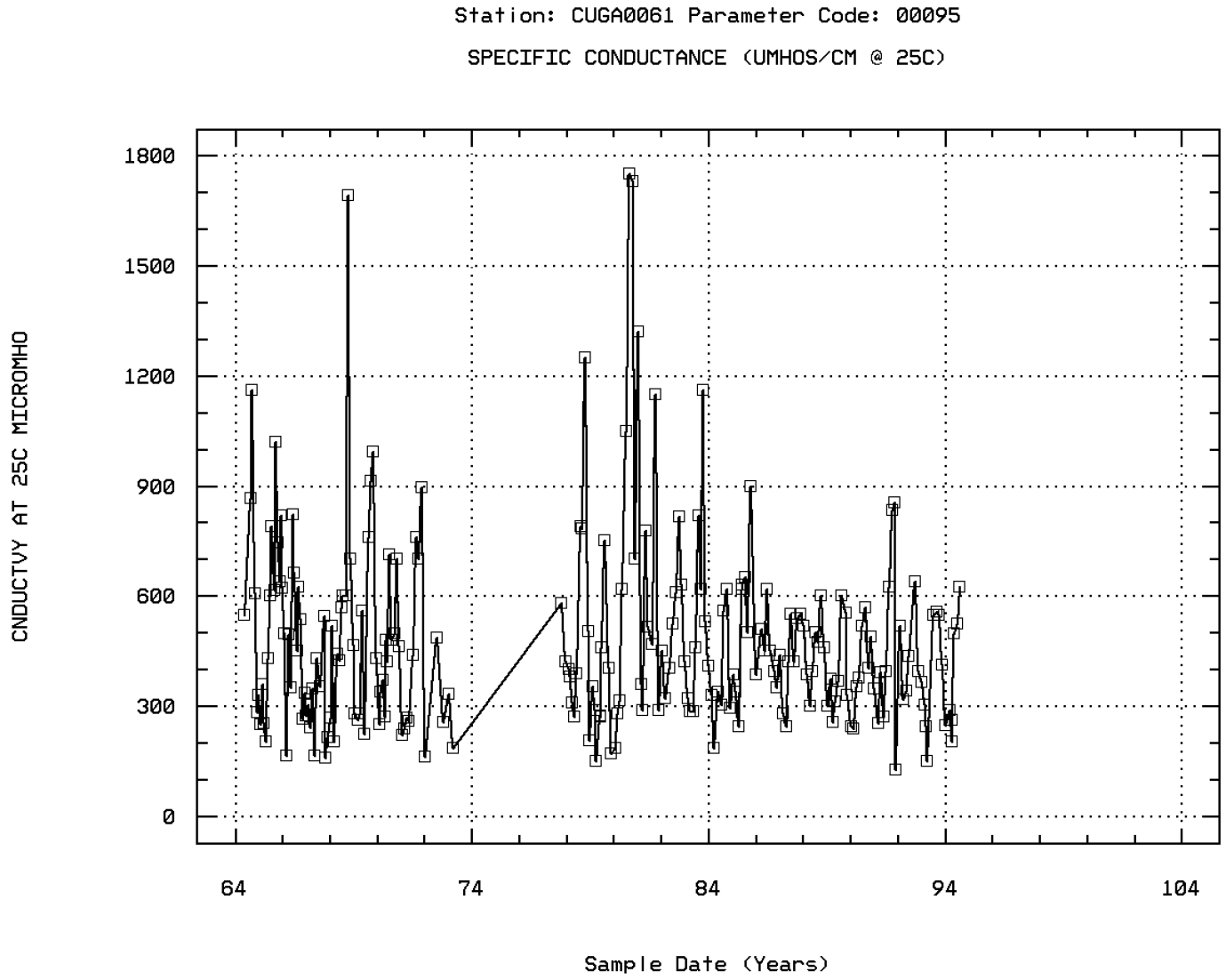
Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	2	0.50	2	2	1.00				1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0061

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	66	0	0.00	24	0	0.00	17	0	0.00	12	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	66	4	0.06	24	0	0.00	17	2	0.12	12	1	0.08	13	1	0.08
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	7	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00	1	0	0.00									
		Drinking Water	0.2	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	60	0	0.00	22	0	0.00	17	0	0.00	10	0	0.00	11	0	0.00
		Drinking Water	250.	60	1	0.02	22	1	0.05	17	0	0.00	10	0	0.00	11	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	66	2	0.03	24	2	0.08	17	0	0.00	12	0	0.00	13	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	31	0	0.00	18	0	0.00	6	0	0.00	3	0	0.00	4	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	2	0	0.00									
		Drinking Water	5.	2	0	0.00	2	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	2	0	0.00	2	0	0.00									
		Drinking Water	100.	2	0	0.00	2	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	4	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	1	1.00	1	1	1.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	58	0	0.00	21	0	0.00	16	0	0.00	10	0	0.00	11	0	0.00
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									

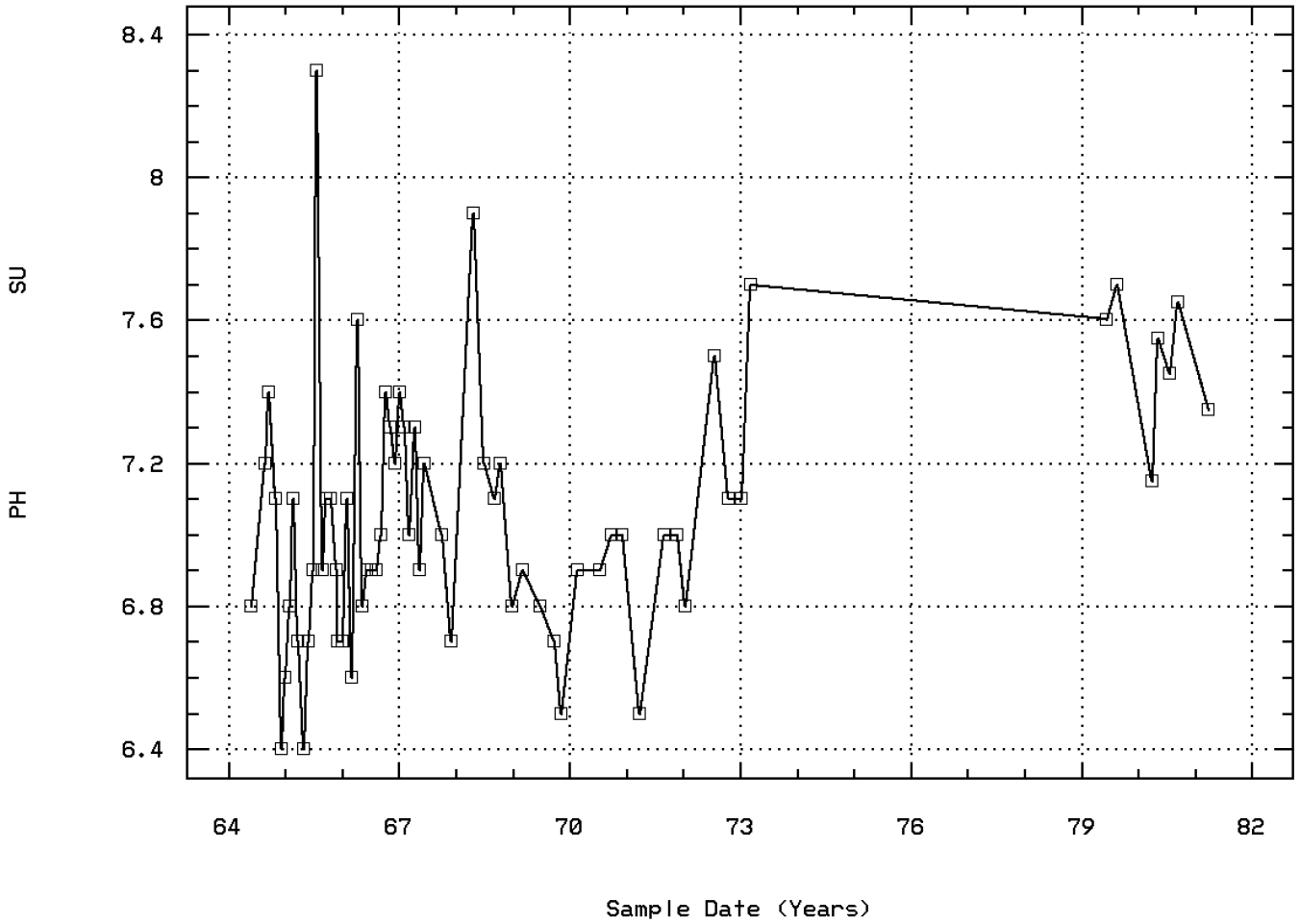
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00400

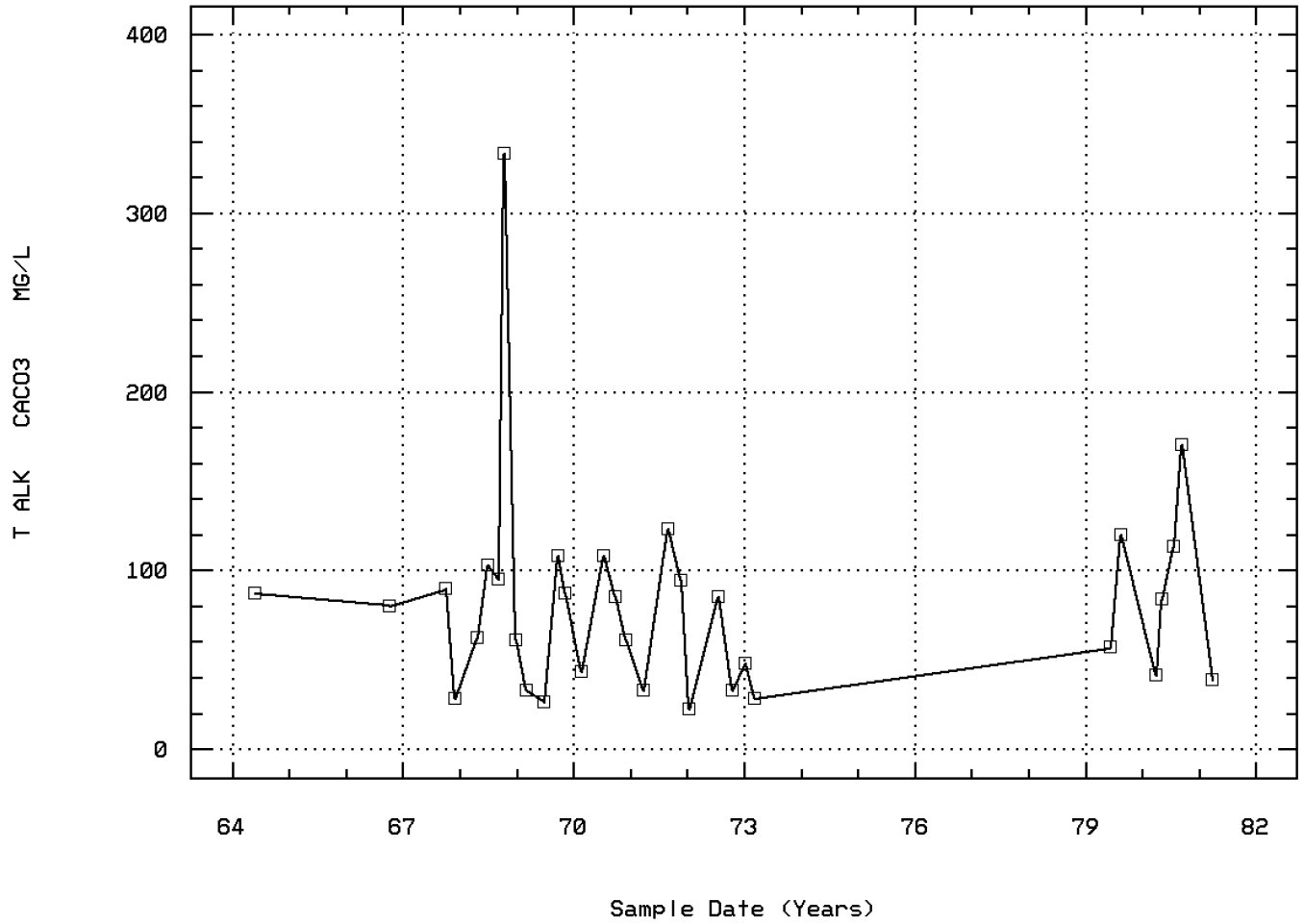
PH (STANDARD UNITS)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00410

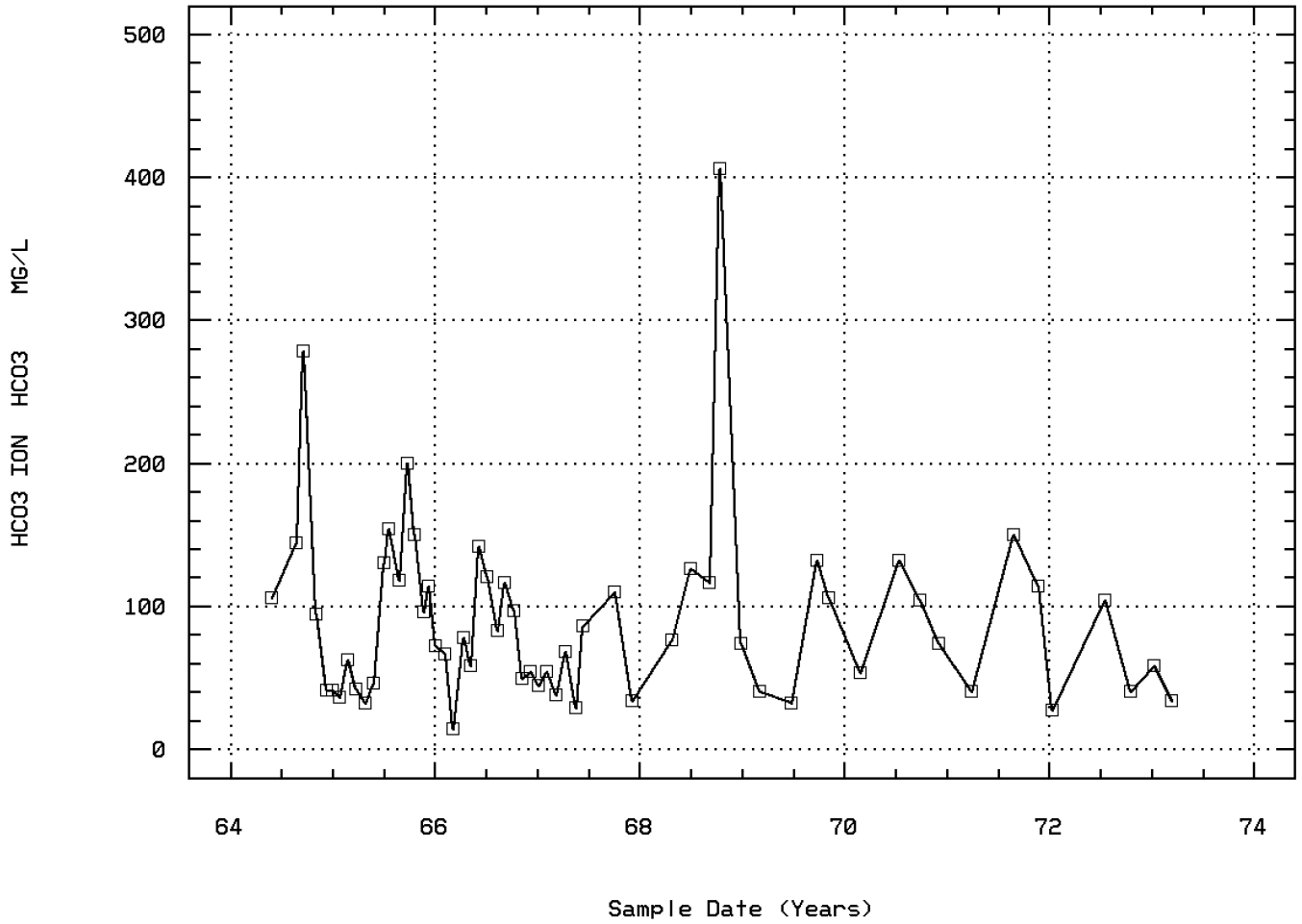
ALKALINITY, TOTAL (MG/L AS CACO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00440

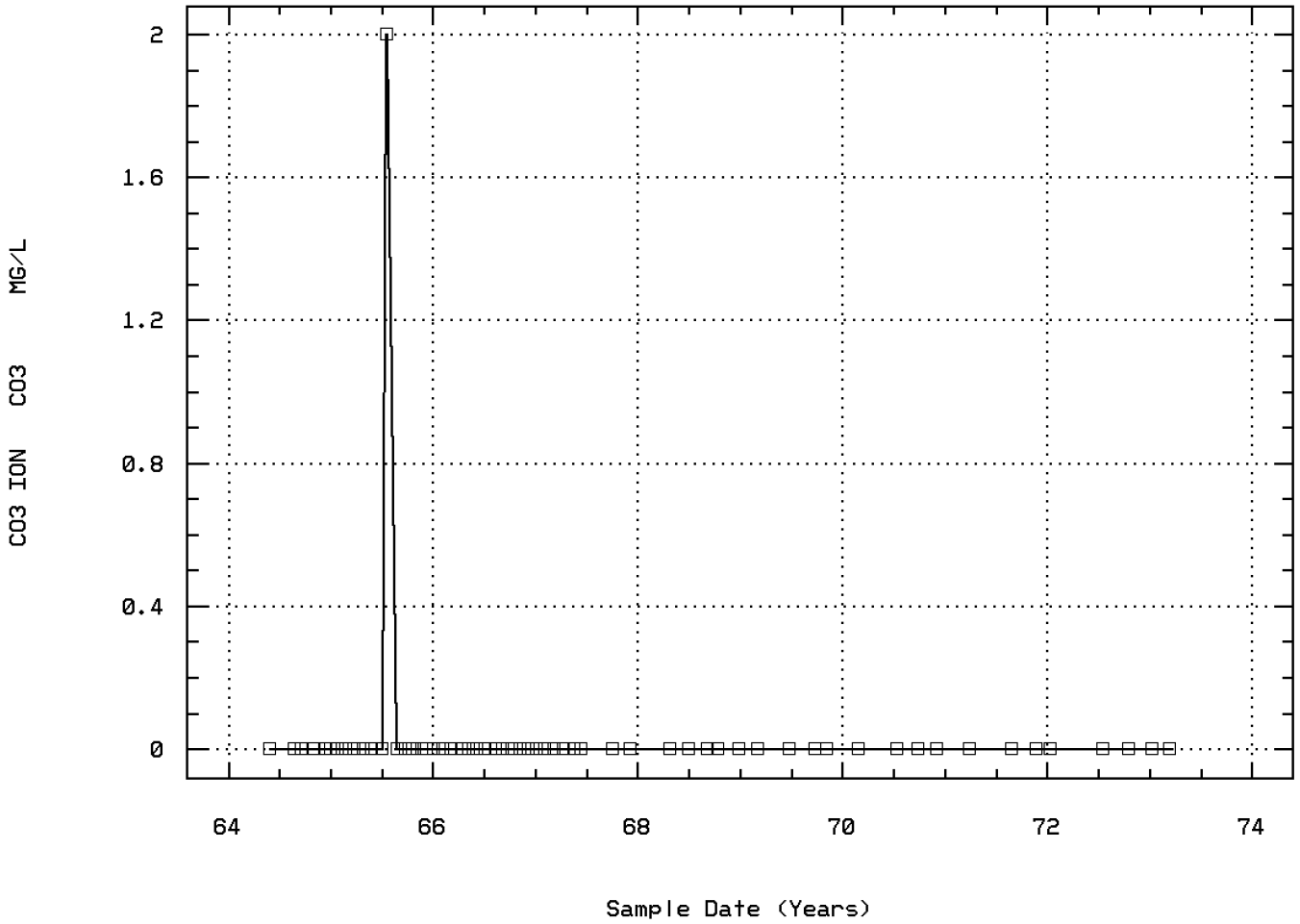
BICARBONATE ION (MG/L AS HCO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00445

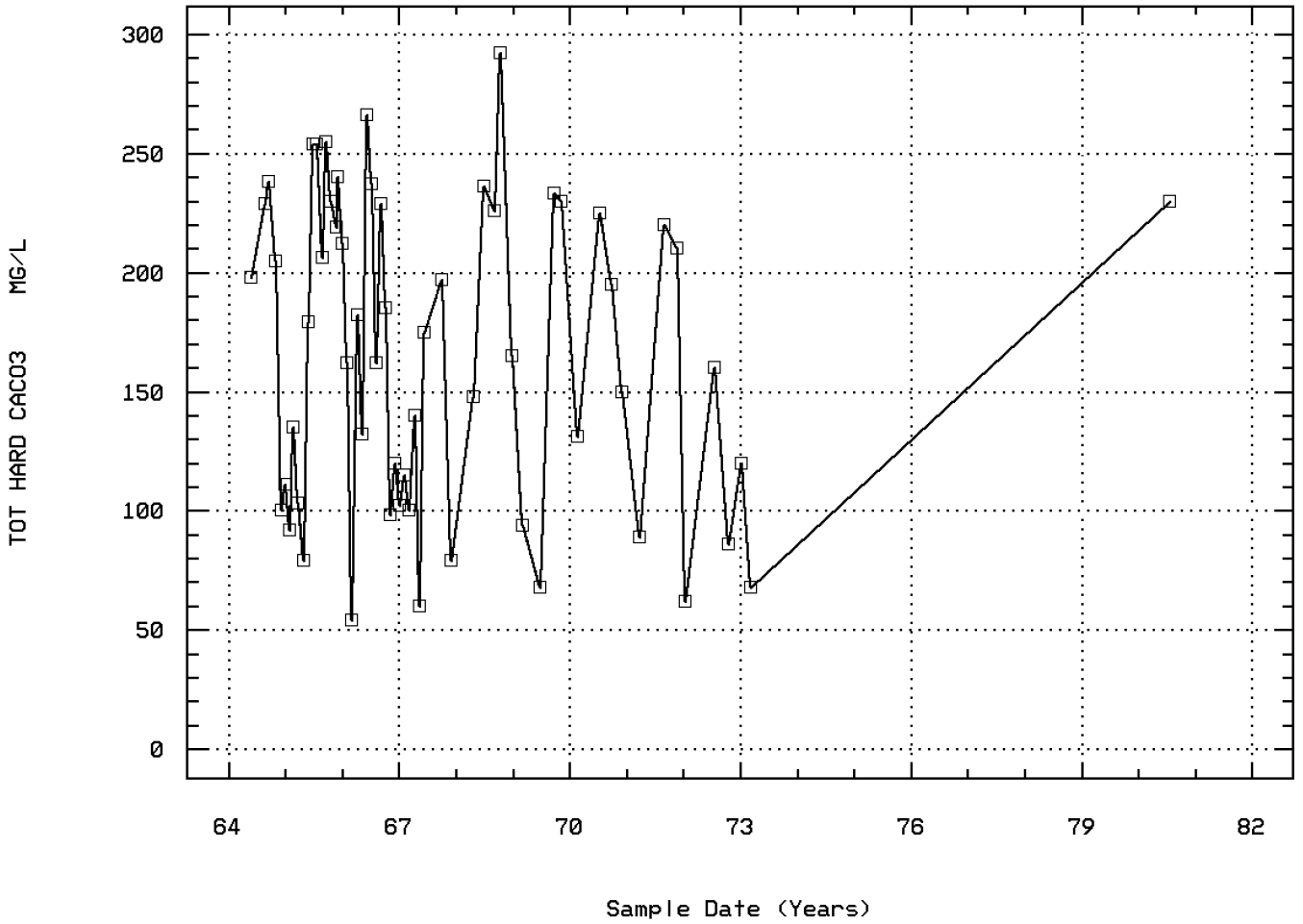
CARBONATE ION (MG/L AS CO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00900

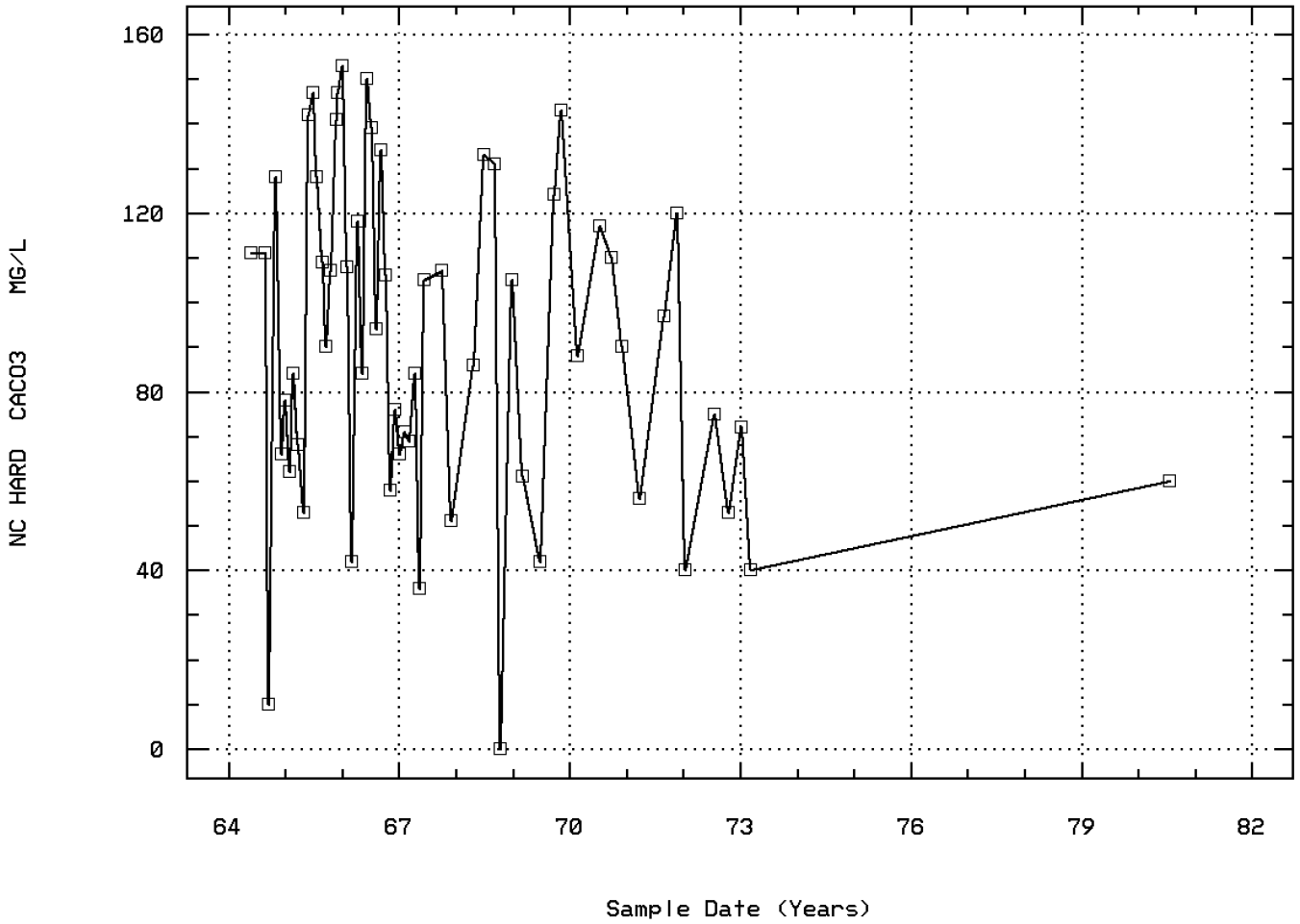
HARDNESS, TOTAL (MG/L AS CACO3)



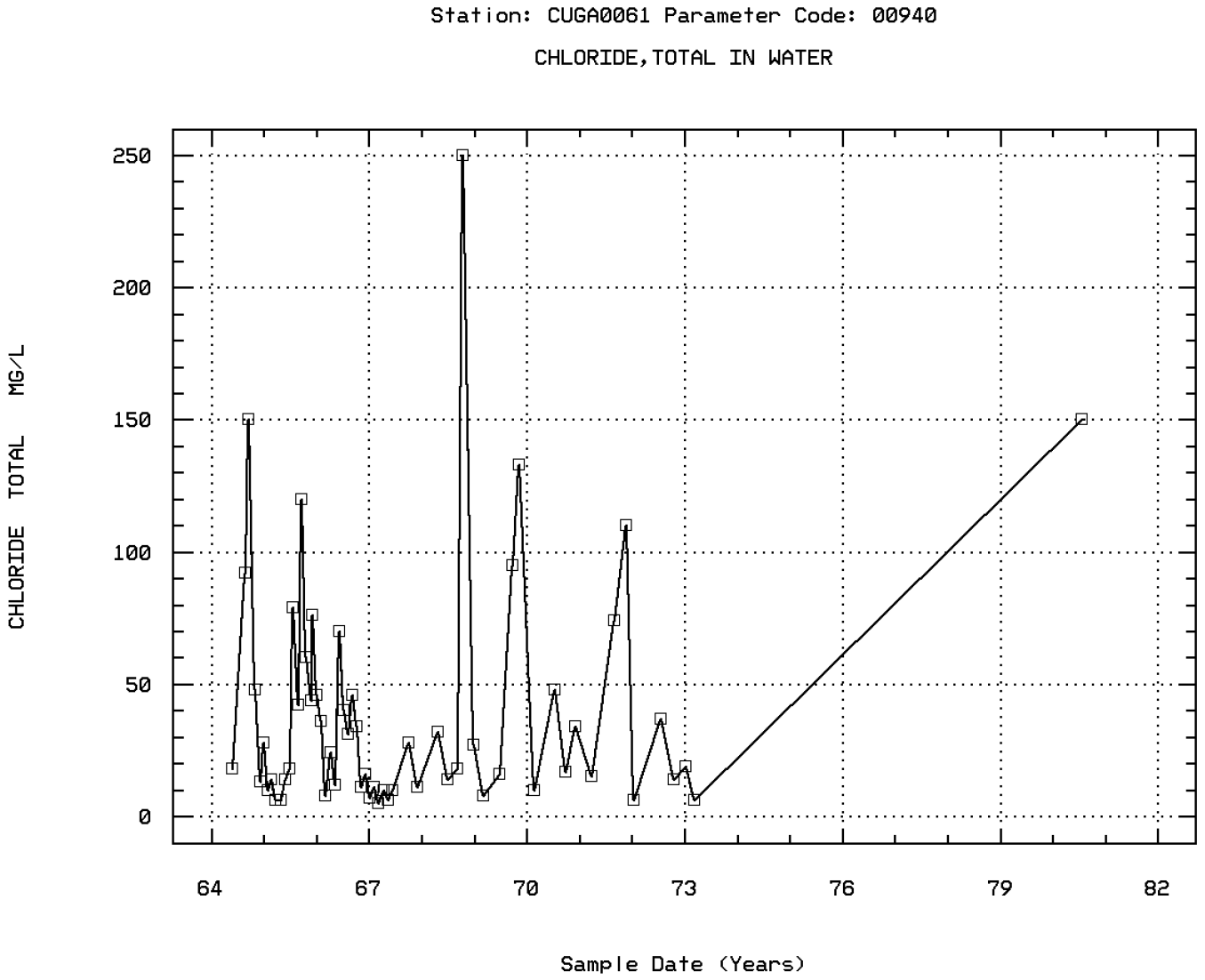
YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00902

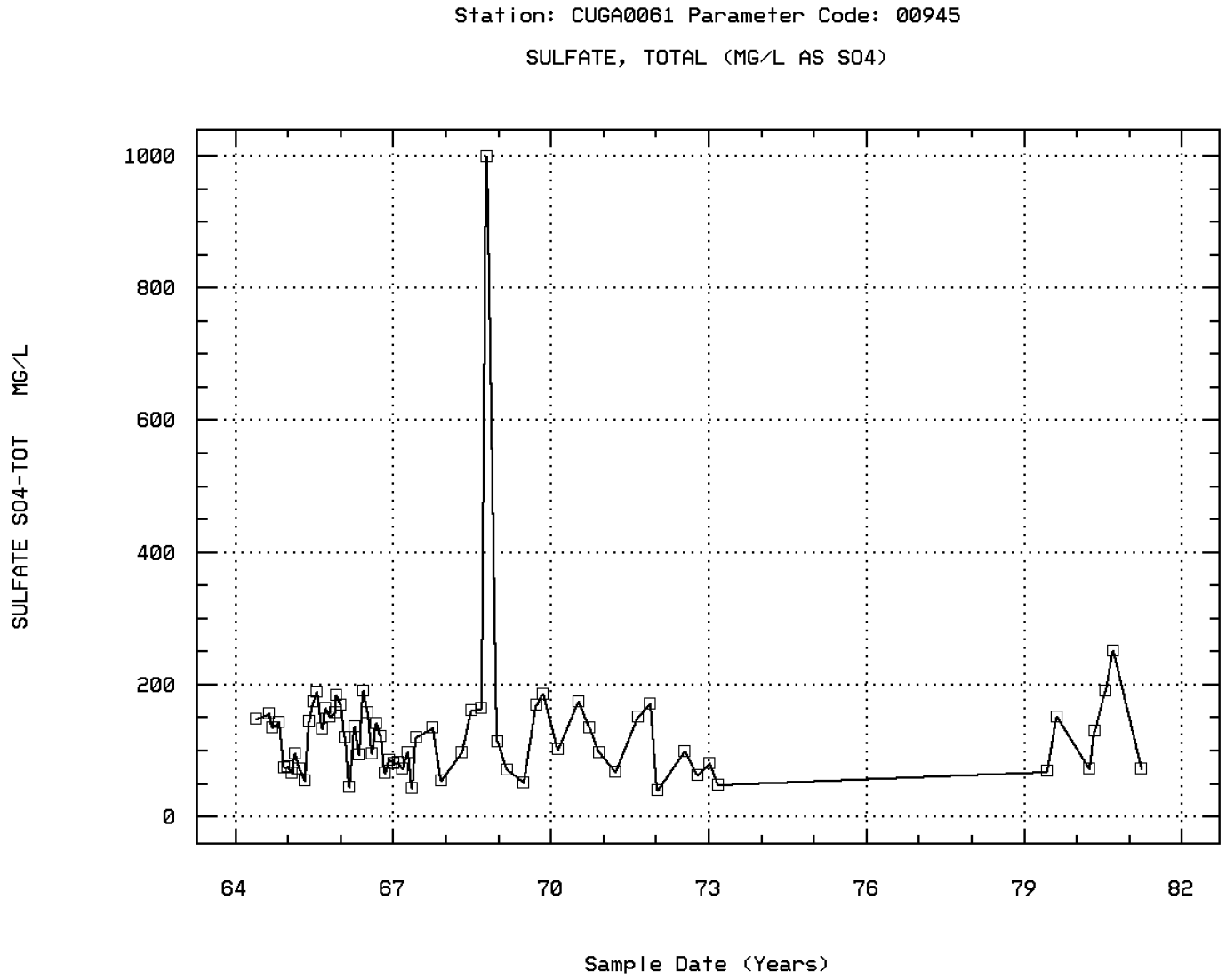
HARDNESS, NON-CARBONATE (MG/L AS CACO3)



YELLOW CR NR MIDDLESBORO,KY.



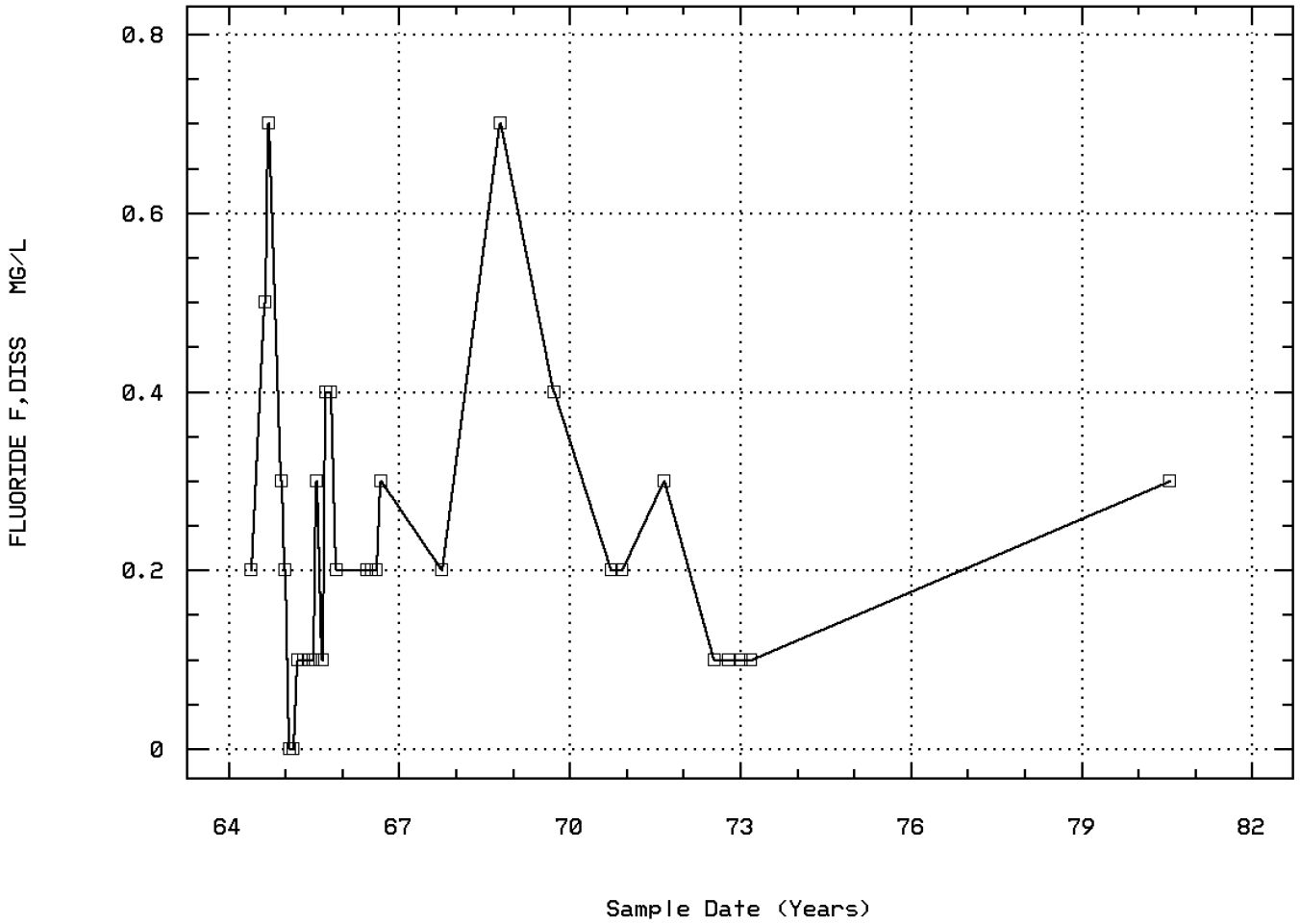
YELLOW CR NR MIDDLESBORO,KY.



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00950

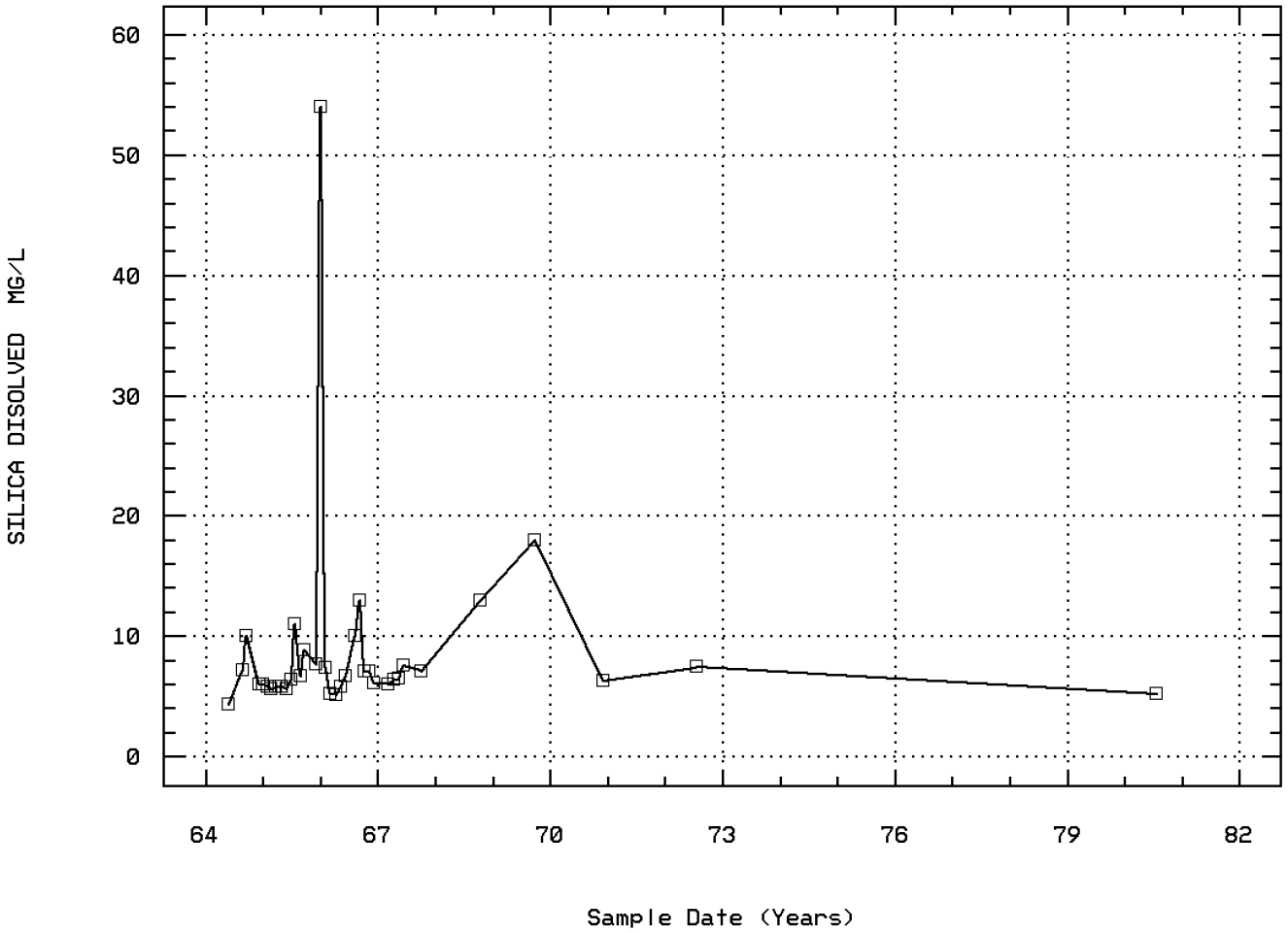
FLUORIDE, DISSOLVED (MG/L AS F)



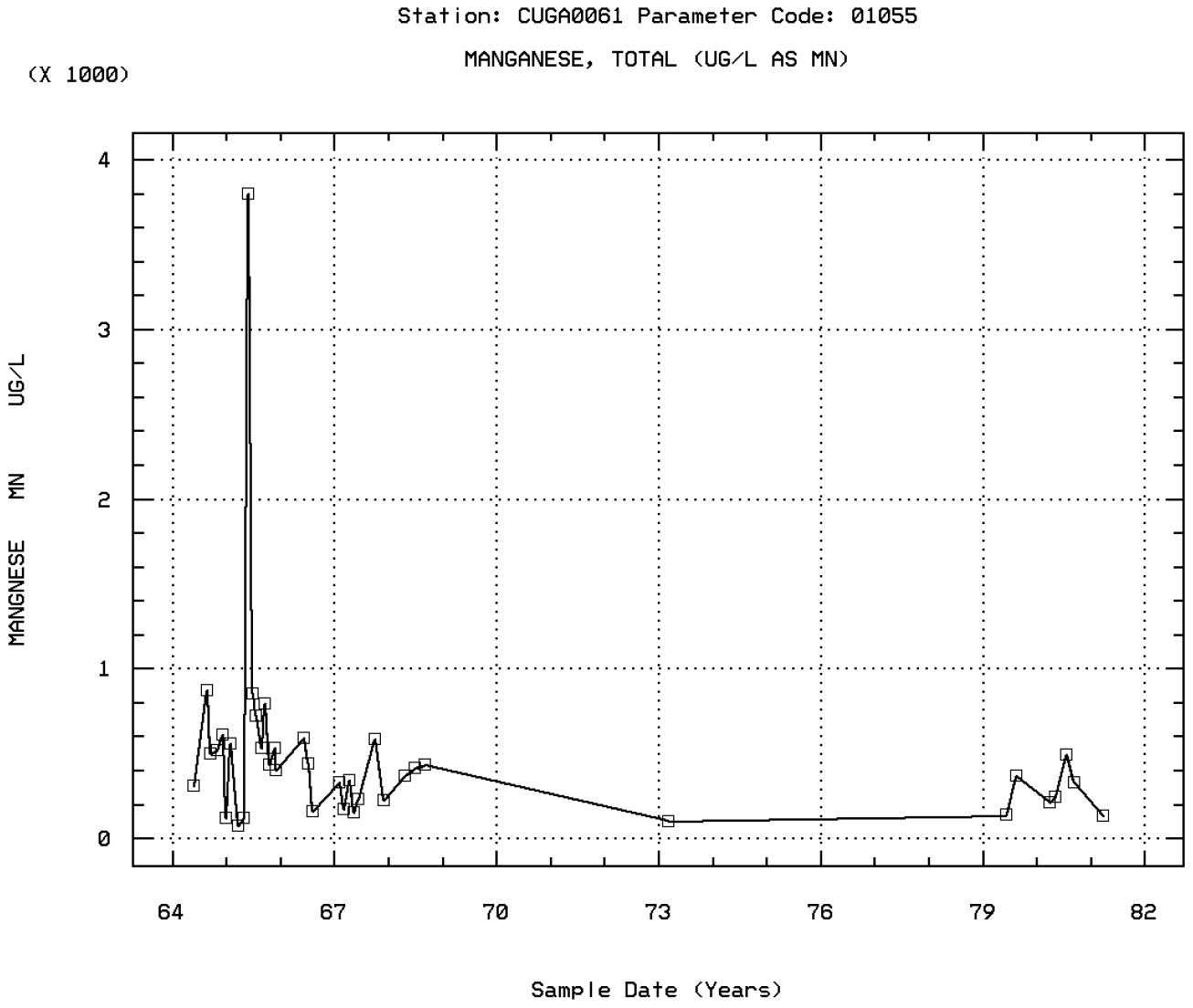
YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00955

SILICA, DISSOLVED (MG/L AS SI02)



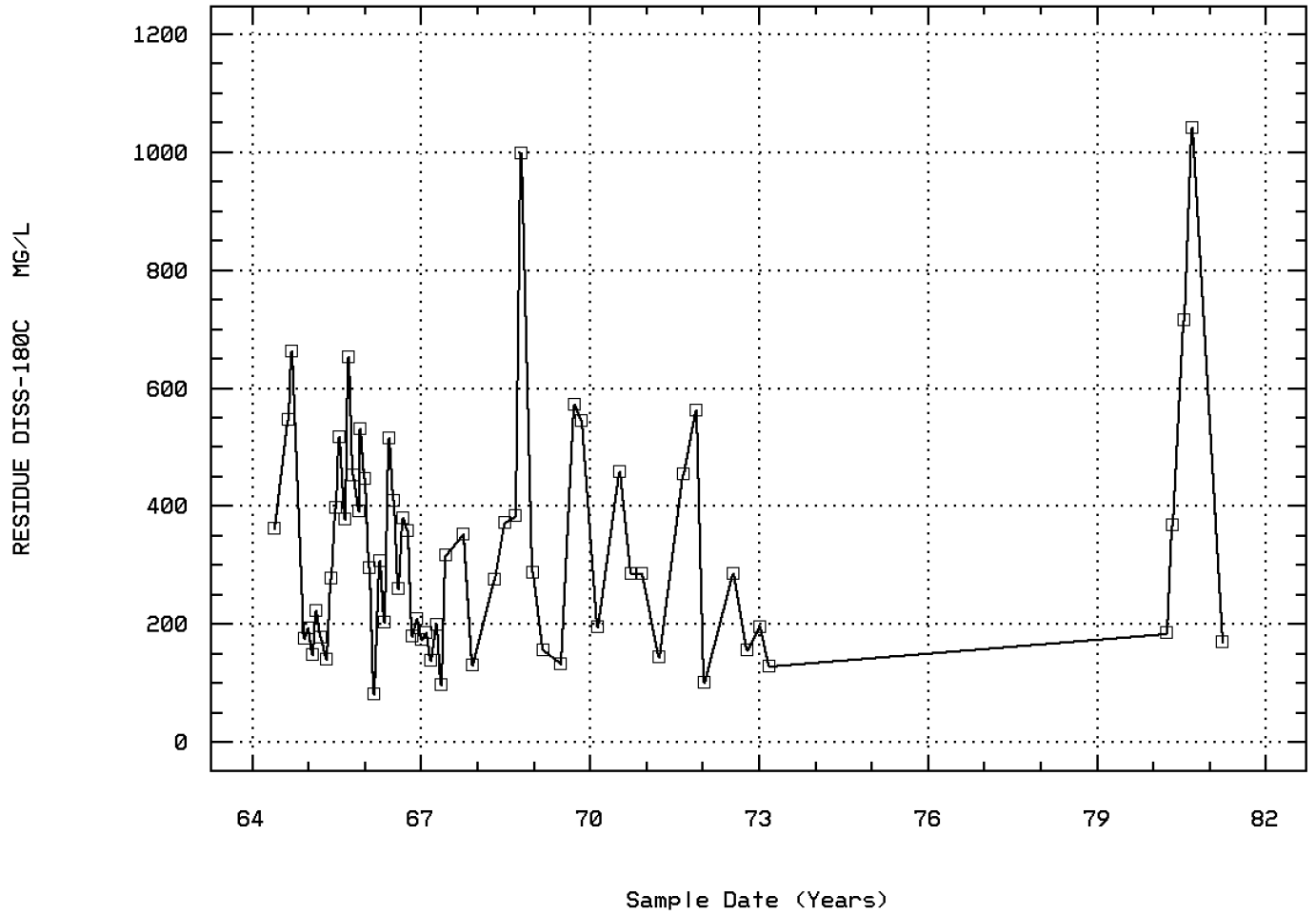
YELLOW CR NR MIDDLESBORO,KY.



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 70300

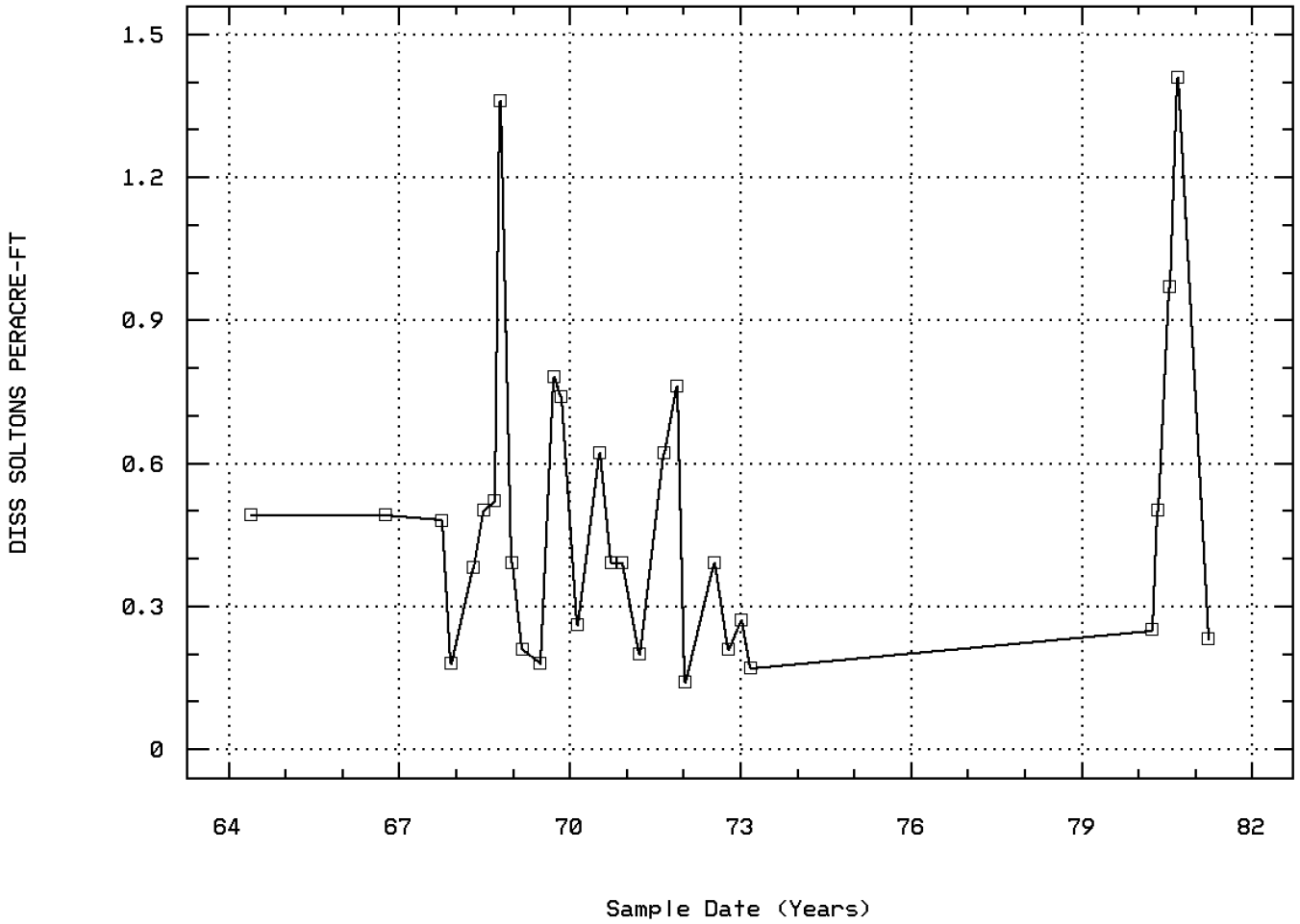
RESIDUE,TOTAL FILTRABLE (DRIED AT 180C)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 70303

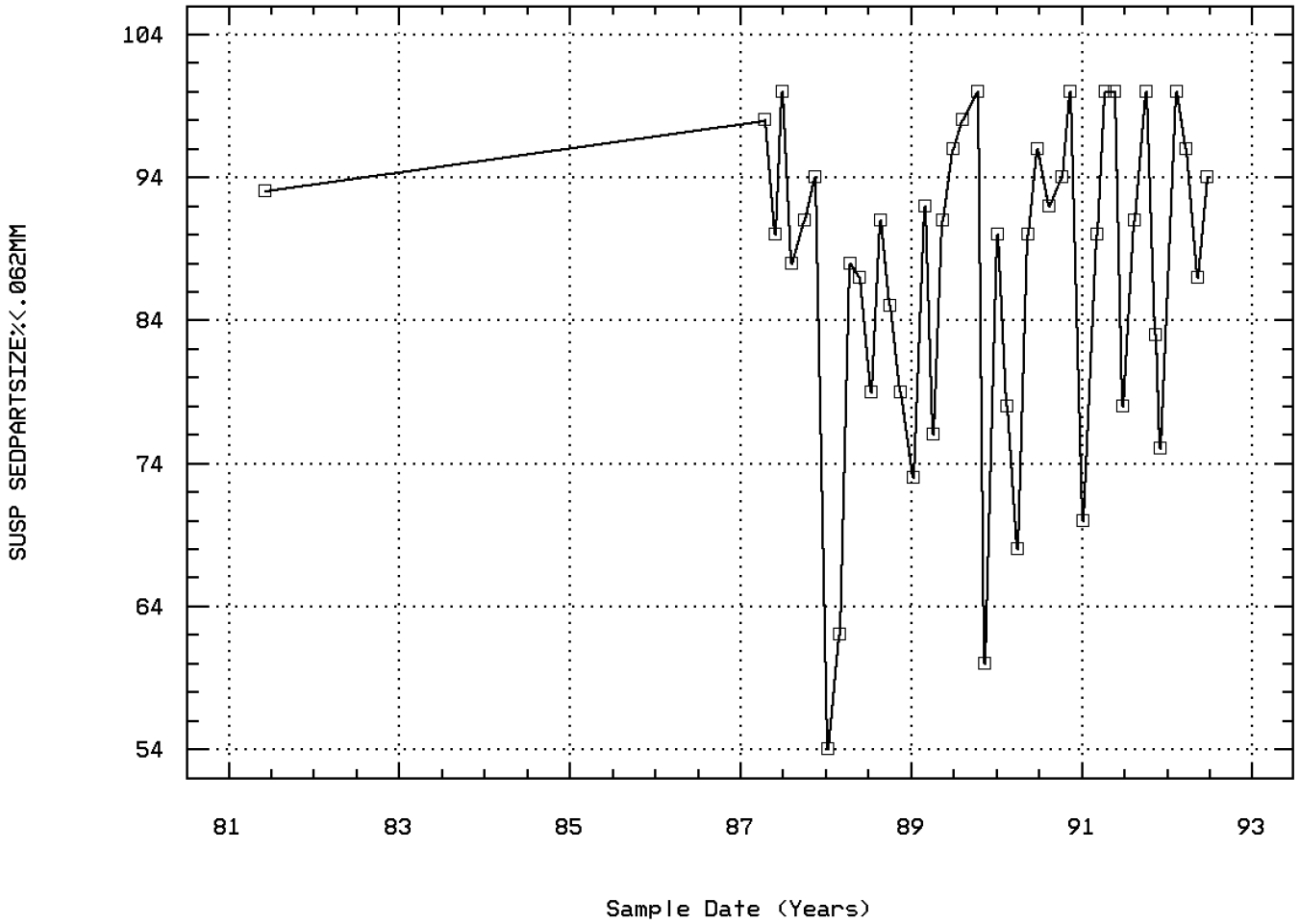
SOLIDS, DISSOLVED-TONS PER ACRE-FT



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 70331

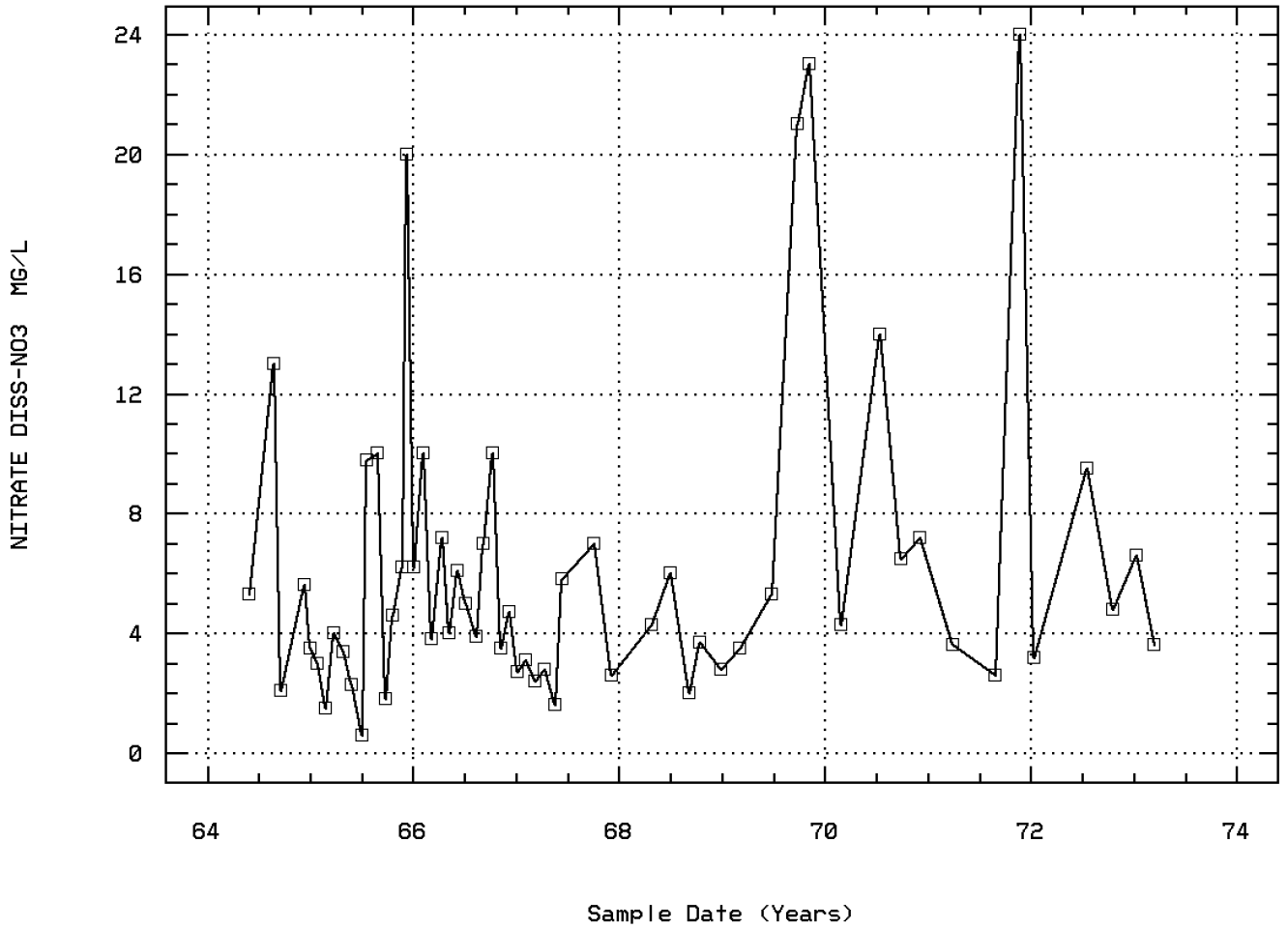
SUSPENDED SED SIEVE DIAMETER,% FINER TH



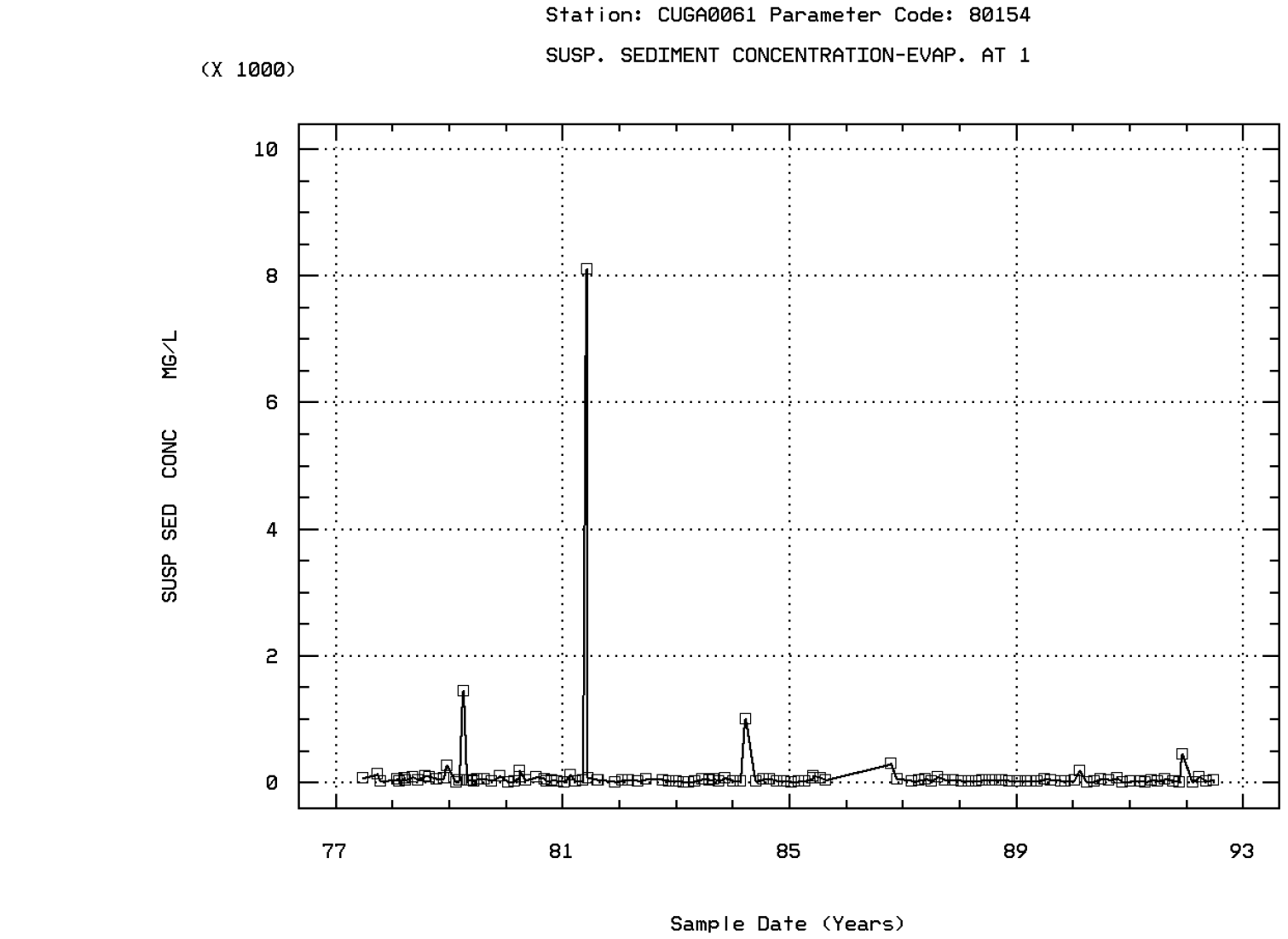
YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 71851

NITRATE NITROGEN, DISSOLVED (MG/L AS NO



YELLOW CR NR MIDDLESBORO,KY.



YELLOW CR NR MIDDLESBORO,KY.

Annual Analysis for 1964 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	3	8.3	9.067	13.3	5.6	15.263	3.907	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	4	10.	11.1	24.	0.4	137.107	11.709	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	6	578.	632.667	1160.	284.	110695.467	332.709	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1965 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	5	8.9	9.9	18.9	3.9	37.605	6.132	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	10	11.	30.3	192.	5.	3282.233	57.291	5.1	6.75	24.	175.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	12	609.5	560.583	1020.	203.	68248.447	261.244	217.1	279.75	778.25	959.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1966 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	10	12.6	13.74	25.6	0.6	62.425	7.901	1.26	8.025	20.975	25.43
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	12	23.	125.917	1140.	11.	102668.629	320.419	11.9	15.75	62.75	826.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	12	496.	485.75	822.	166.	34351.659	185.342	196.	339.5	625.	774.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1967 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	7	12.	11.6	21.1	3.9	35.1	5.925	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	10	118.5	197.6	712.	19.	50897.822	225.605	20.8	51.25	261.75	689.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	10	289.	303.9	546.	160.	14615.211	120.893	160.5	202.5	373.5	534.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	11	18.	15.182	28.	1.	85.764	9.261	2.	7.	22.	27.8
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	11	32.	63.727	239.	7.	5175.418	71.94	7.4	10.	74.	221.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	11	518.	589.182	1690.	203.	154693.364	393.311	215.8	423.	602.	1492.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	9	15.	13.667	26.	1.5	86.563	9.304	1.5	4.	21.5	26.
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	9	39.	83.222	347.	7.	11729.194	108.301	7.	15.	118.5	347.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	9	430.	522.333	994.	224.	89436.	299.059	224.	270.5	836.	994.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	11	16.5	15.455	25.5	3.5	59.173	7.692	3.9	6.5	23.	25.2
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	10	48.	73.8	230.	8.	5952.844	77.155	8.2	13.75	111.5	225.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	11	462.	452.909	714.	250.	22859.491	151.194	254.	338.	498.	711.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	12.25	13.5	24.5	0.5	87.143	9.335	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	5	146.	123.	217.	17.	8168.5	90.38	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	3	16.	97.667	269.	8.	22032.333	148.433	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	354.	473.125	897.	220.	74350.696	272.673	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	3	11.	16.667	28.5	10.5	105.083	10.251	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	3	297.	346.	716.	25.	121171.	348.096	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	3	256.	302.	487.	163.	27831.	166.826	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	2	6.	6.	11.5	0.5	60.5	7.778	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	2	167.5	167.5	263.	72.	18240.5	135.057	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	2	258.5	258.5	332.	185.	10804.5	103.945	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	3	11.	14.833	26.5	7.	106.083	10.3	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	4	38.	46.25	83.	26.	634.917	25.198	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	2	500.	500.	580.	420.	12800.	113.137	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	3	68.	70.333	132.	11.	3664.333	60.534	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	3	4.8	6.333	13.	1.2	36.573	6.048	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	11	9.5	12.818	27.	1.	78.914	8.883	1.1	7.5	23.	26.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	11	105.	145.364	613.	7.	30523.055	174.708	8.4	16.	205.	540.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	10	395.	528.5	1250.	205.	103583.611	321.844	211.5	300.	786.25	1204.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	11	61.	75.	271.	16.	4832.	69.513	18.2	30.	85.	235.6
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	11	10.	53.916	449.	0.98	17418.897	131.981	1.464	3.6	42.	368.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	10	14.25	14.25	23.5	2.	47.403	6.885	2.45	9.875	20.375	23.45
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	11	70.	264.636	1730.	13.	266491.855	516.228	14.8	35.	148.	1509.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	9	290.	347.222	750.	150.	32888.194	181.351	150.	220.	432.5	750.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	10	31.	176.8	1440.	9.	197605.733	444.529	9.9	22.5	59.25	1305.9
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	10	4.9	693.38	6730.	1.5	4501512.328	2121.677	1.51	2.125	51.	6073.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	12.	14.063	28.5	4.	81.174	9.01	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	10	25.5	183.4	958.	4.	94644.933	307.644	4.	7.75	305.	905.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	660.	828.75	1750.	185.	392791.071	626.73	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	10	28.5	52.	174.	9.	2523.111	50.231	10.1	20.75	78.75	165.6
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	9	1.8	31.082	205.	0.29	4667.212	68.317	0.29	0.48	34.15	205.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	9	17.	14.556	26.5	0.5	80.153	8.953	0.5	7.5	23.25	26.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	11	49.	163.636	1220.	9.	124728.455	353.169	10.	17.	122.	1001.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	492.5	646.75	1320.	290.	158483.071	398.099	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	9	28.	935.444	8100.	6.	7219626.028	2686.936	6.	17.	91.5	8100.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	10	5.45	2677.482	26700.	0.22	71244737.925	8440.66	0.398	2.9	16.275	24033.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	7	16.5	14.214	24.5	1.	79.905	8.939	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	7	39.	52.571	132.	12.	1992.619	44.639	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	7	525.	536.429	815.	320.	27247.619	165.069	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	6	27.5	27.333	45.	11.	128.267	11.325	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	06/29/77-06/22/82	4	5.8	6.075	10.	2.7	9.789	3.129	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	9	12.	13.167	25.	3.	71.063	8.43	3.	5.25	21.25	25.
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	9	58.	65.556	158.	4.	3411.778	58.41	4.	10.	128.	158.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	9	460.	544.444	1160.	285.	83546.528	289.044	285.	302.5	720.	1160.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	9	22.	30.111	61.	7.	441.111	21.003	7.	9.5	51.5	61.

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Annual Analysis for 1984 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	12.	12.313	24.	3.	61.353	7.833	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	8	98.5	319.75	1990.	9.	457925.071	676.702	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	335.	380.625	620.	185.	20838.839	144.357	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	8	18.	145.875	1000.	11.	119337.268	345.452	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	10	15.	15.25	26.	1.5	71.236	8.44	1.95	6.75	22.75	25.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	10	46.	58.7	156.	11.	2246.9	47.401	11.2	21.25	85.25	152.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	560.	533.75	900.	245.	44076.786	209.945	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	7	38.	41.143	93.	7.	1165.476	34.139	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	7	18.	16.571	26.	2.	59.952	7.743	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	10	83.	678.8	2120.	7.	991065.289	995.523	8.3	32.75	2120.	2120.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	7	450.	451.429	620.	350.	8289.286	91.046	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	2	171.	171.	292.	50.	29282.	171.12	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	14.15	15.663	28.	3.	83.383	9.131	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	8	29.	65.75	228.	11.	6709.357	81.911	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	430.	430.375	550.	245.	13926.839	118.012	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	7	38.	40.429	89.	10.	660.286	25.696	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	13.25	13.938	24.5	1.	69.174	8.317	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	8	26.5	41.375	123.	11.	1521.411	39.005	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	467.5	454.375	600.	300.	8603.125	92.753	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	8	22.5	25.	39.	10.	142.857	11.952	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	13.25	13.663	21.5	6.5	34.026	5.833	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	8	98.5	103.875	218.	16.	4963.268	70.45	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	349.	387.25	600.	256.	15347.929	123.887	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	8	16.	22.25	47.	10.	185.357	13.615	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	8	15.25	15.825	25.	5.	56.602	7.523	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	8	52.5	148.25	633.	9.	48119.357	219.361	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	390.5	399.75	570.	240.	14753.929	121.466	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	8	33.	49.	179.	6.	3258.286	57.081	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	9	15.5	14.356	22.	6.5	36.988	6.082	6.5	7.5	20.25	22.
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	9	89.	567.	4290.	9.	1958354.25	1399.412	9.	14.	246.5	4290.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	9	392.	455.778	854.	128.	66583.444	258.038	128.	262.5	730.	854.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	9	20.	68.556	449.	8.	20482.028	143.115	8.	12.	37.5	449.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	6	11.25	12.	19.	6.5	30.3	5.505	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	6	45.5	63.667	164.	13.	2870.267	53.575	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	6	415.5	441.5	639.	317.	14569.1	120.703	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	4	26.5	37.25	91.	5.	1394.917	37.349	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0061

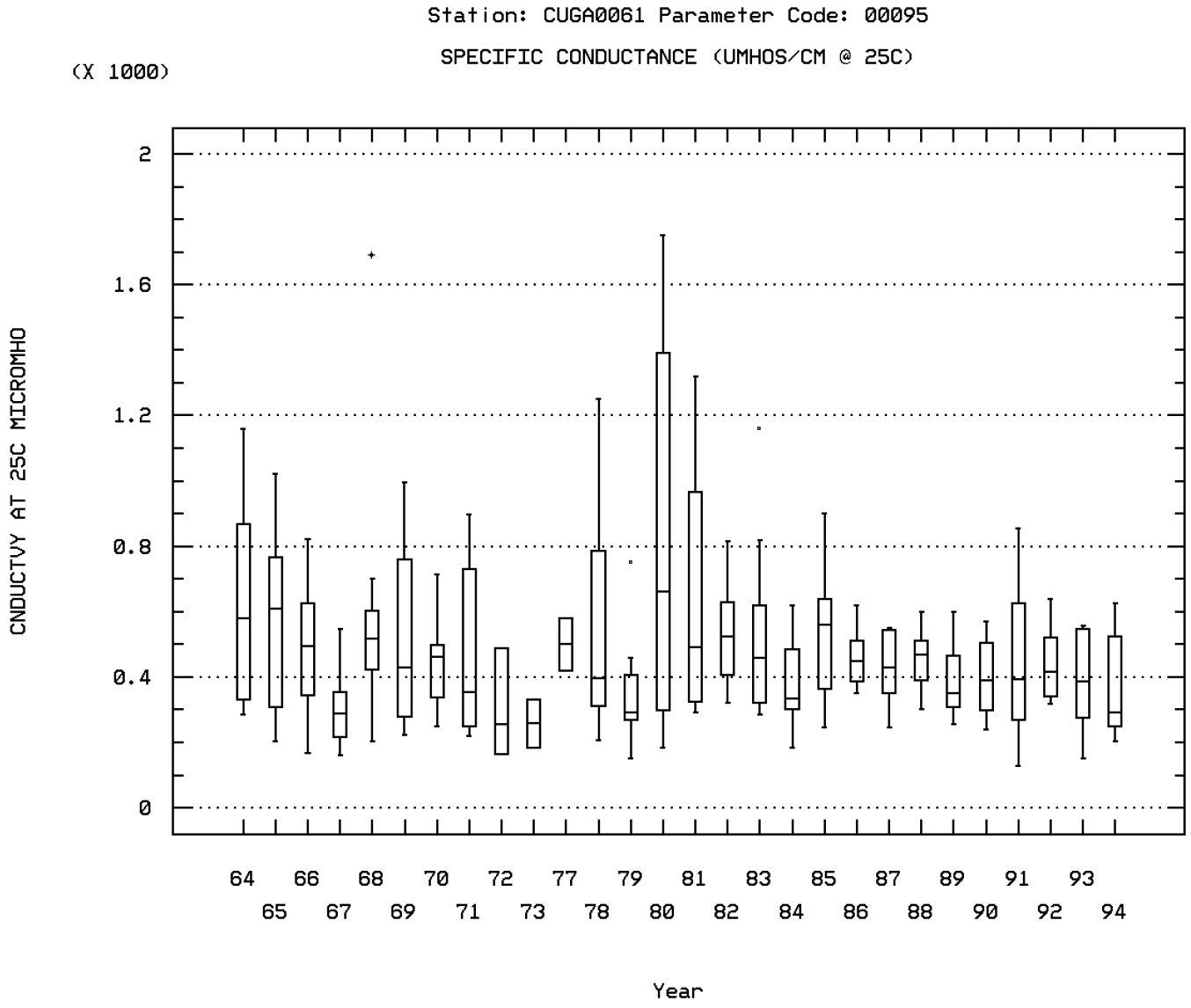
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	9	14.	14.	24.5	5.	53.563	7.319	5.	7.25	21.5	24.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	9	45.	851.556	6430.	8.	4444167.528	2108.119	8.	15.5	521.	6430.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	8	388.	391.	558.	150.	23486.571	153.253	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	7	11.	14.357	25.	5.5	53.81	7.335	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	7	181.	237.571	592.	15.	58113.952	241.068	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	7	290.	378.571	624.	203.	27453.952	165.692	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot



YELLOW CR NR MIDDLESBORO,KY.

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	64	21.75	21.202	28.5	11.	20.968	4.579	14.75	18.	24.575	26.75
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	24	13.	15.475	57.	0.4	145.815	12.075	5.5	7.25	18.75	32.
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	48	16.	29.813	297.	4.	2402.709	49.017	7.9	11.	32.5	49.1
00080p	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	11	50.	111.091	700.	7.	39607.091	199.015	9.6	20.	105.	586.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	69	610.	693.072	1750.	256.	90891.803	301.483	420.	512.	787.	1150.
00400p	PH (STANDARD UNITS)	05/27/64-03/26/81	24	7.1	7.192	8.3	6.7	0.121	0.348	6.9	6.925	7.4	7.675
00400p	CONVERTED PH (STANDARD UNITS)	05/27/64-03/26/81	24	7.1	7.095	8.3	6.7	0.131	0.362	6.9	6.925	7.4	7.675
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-03/26/81	24	0.079	0.08	0.2	0.005	0.002	0.045	0.021	0.04	0.119	0.126
00440p	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	21	126.	143.333	406.	40.	5731.433	75.706	85.8	107.	150.	262.4
00445p	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	21	0.	0.095	2.	0.	0.19	0.436	0.	0.	0.	0.
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	22	229.	217.227	292.	86.	1786.089	42.262	160.6	196.5	237.25	254.7
00902p	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	22	108.	99.182	147.	0.	1508.823	38.844	22.9	86.25	128.75	137.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	12	55.	55.833	79.	43.	79.97	8.943	43.9	51.75	58.25	73.9
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	12	22.5	22.5	29.	14.	21.727	4.661	14.9	19.25	27.	29.
00940p	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	22	44.	66.227	250.	14.	3409.327	58.389	14.9	25.5	92.75	150.
00945p	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	24	153.	185.333	998.	62.	31287.884	176.884	96.5	134.25	172.5	220.
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	18	0.3	0.306	0.7	0.1	0.035	0.186	0.1	0.175	0.4	0.7
00955p	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	14	8.15	9.357	18.	5.2	12.035	3.469	5.8	7.	11.5	15.5
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	23	409.	481.217	1040.	155.	46933.451	216.641	269.	358.	572.	884.4
70331p	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	12	91.5	92.417	100.	79.	42.447	6.515	80.8	88.75	99.5	100.
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	21	6.	6.9	21.	0.6	24.28	4.927	1.84	3.15	9.9	13.8
71885	IRON (UG/L AS FE)	05/27/64-08/27/71	17	1200.01	1570.594	3600.	100.	1079860.875	1039.164	260.	730.	2550.01	3120.008
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	35	39.	50.829	292.	10.	2416.558	49.158	17.8	27.	52.	91.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	55	7.	6.985	15.	0.5	16.905	4.112	1.	3.9	9.5	13.12
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	20	31.5	93.6	712.	2.	24711.621	157.199	7.6	19.	114.	194.
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	39	60.	255.615	4290.	8.	491259.138	700.899	12.	31.	136.	628.
00080p	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	6	10.	12.667	27.	3.	82.267	9.07	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	56	389.5	433.25	1320.	128.	51827.5	227.657	199.	275.5	519.5	735.4
00400p	PH (STANDARD UNITS)	05/27/64-03/26/81	17	6.8	6.882	7.4	6.4	0.078	0.279	6.48	6.7	7.1	7.32
00400p	CONVERTED PH (STANDARD UNITS)	05/27/64-03/26/81	17	6.8	6.803	7.4	6.4	0.085	0.291	6.48	6.7	7.1	7.32
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-03/26/81	17	0.158	0.157	0.398	0.04	0.009	0.097	0.048	0.079	0.2	0.333
00440p	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	17	58.	66.353	114.	27.	858.118	29.294	32.6	41.	95.	114.
00445p	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	17	120.	147.941	240.	62.	3553.809	59.614	75.6	99.	211.	232.
00902p	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	17	78.	93.882	153.	40.	1411.61	37.571	48.8	64.	134.5	148.2
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	5	23.	31.8	55.	20.	225.7	15.023	**	**	**	**
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	5	12.	13.26	20.	9.3	16.088	4.011	**	**	**	**
00940p	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	17	27.	37.588	133.	6.	1361.507	36.899	6.8	11.	47.	114.6
00945p	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	17	86.	108.	185.	39.	2393.125	48.92	51.	70.	163.	183.4
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	6	0.2	0.167	0.3	0.	0.011	0.103	**	**	**	**
00955p	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	8	6.2	12.375	54.	5.8	283.302	16.832	**	**	**	**
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	16	201.5	283.688	562.	100.	25151.296	158.592	121.	172.5	432.	549.4
70331p	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	10	77.	77.8	100.	54.	211.956	14.559	54.6	67.5	91.	99.4
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	16	5.15	7.8	24.	2.6	54.861	7.407	2.67	3.05	7.05	23.3
71885	IRON (UG/L AS FE)	05/27/64-08/27/71	13	780.	760.773	1600.01	10.	304429.186	551.751	18.	195.	1250.01	1560.01
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	25	14.	51.16	449.	6.	9808.723	99.039	7.6	9.5	46.	167.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	40	7.25	6.908	12.5	0.6	7.932	2.816	2.15	5.	8.9	9.5
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	10	151.	238.1	1140.	24.	105013.211	324.057	30.2	86.75	222.5	1049.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	33	160.	620.152	6430.	35.	1501979.883	1225.553	74.8	121.	365.	2120.
00080p	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	2	12.5	12.5	15.	10.	12.5	3.536	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	40	297.	301.5	520.	150.	6094.308	78.066	186.8	250.75	351.25	384.5
00400p	PH (STANDARD UNITS)	05/27/64-03/26/81	12	7.05	7.025	7.7	6.5	0.114	0.338	6.53	6.75	7.263	7.595
00400p	CONVERTED PH (STANDARD UNITS)	05/27/64-03/26/81	12	7.047	6.914	7.7	6.5	0.128	0.357	6.53	6.75	7.262	7.595
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-03/26/81	12	0.09	0.122	0.316	0.02	0.008	0.09	0.027	0.055	0.181	0.297
00440p	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	10	41.	44.3	66.	14.	228.9	15.129	16.	37.	56.	65.6
00445p	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	10	101.5	105.1	162.	54.	1033.433	32.147	55.4	83.75	132.	159.3
00902p	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	10	68.5	68.7	108.	40.	434.9	20.854	40.2	52.5	85.	106.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	2	27.	27.	31.	23.	32.	5.657	**	**	**	**
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	2	12.5	12.5	14.	11.	4.5	2.121	**	**	**	**
00940p	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	10	9.	11.9	36.	5.	82.989	9.11	5.1	6.	14.25	33.9
00945p	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	12	72.	76.25	119.	44.	446.386	21.128	45.2	67.75	91.75	113.9
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	3	0.1	0.067	0.1	0.	0.003	0.058	**	**	**	**
00955p	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	5	5.8	6.	7.4	5.2	0.7	0.837	**	**	**	**
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	12	172.5	172.5	294.	80.	2799.909	52.914	94.4	139.5	191.75	272.4
70331p	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	6	91.	86.333	100.	62.	197.467	14.052	**	**	**	**
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	10	3.6	3.98	10.	1.5	5.146	2.269	1.59	2.925	4.075	9.43
71885	IRON (UG/L AS FE)	05/27/64-08/27/71	8	375.	555.001	2000.01	0.	395946.986	629.243	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	24	23.5	84.625	1000.	5.	40578.158	201.44	7.5	10.75	82.75	176.5

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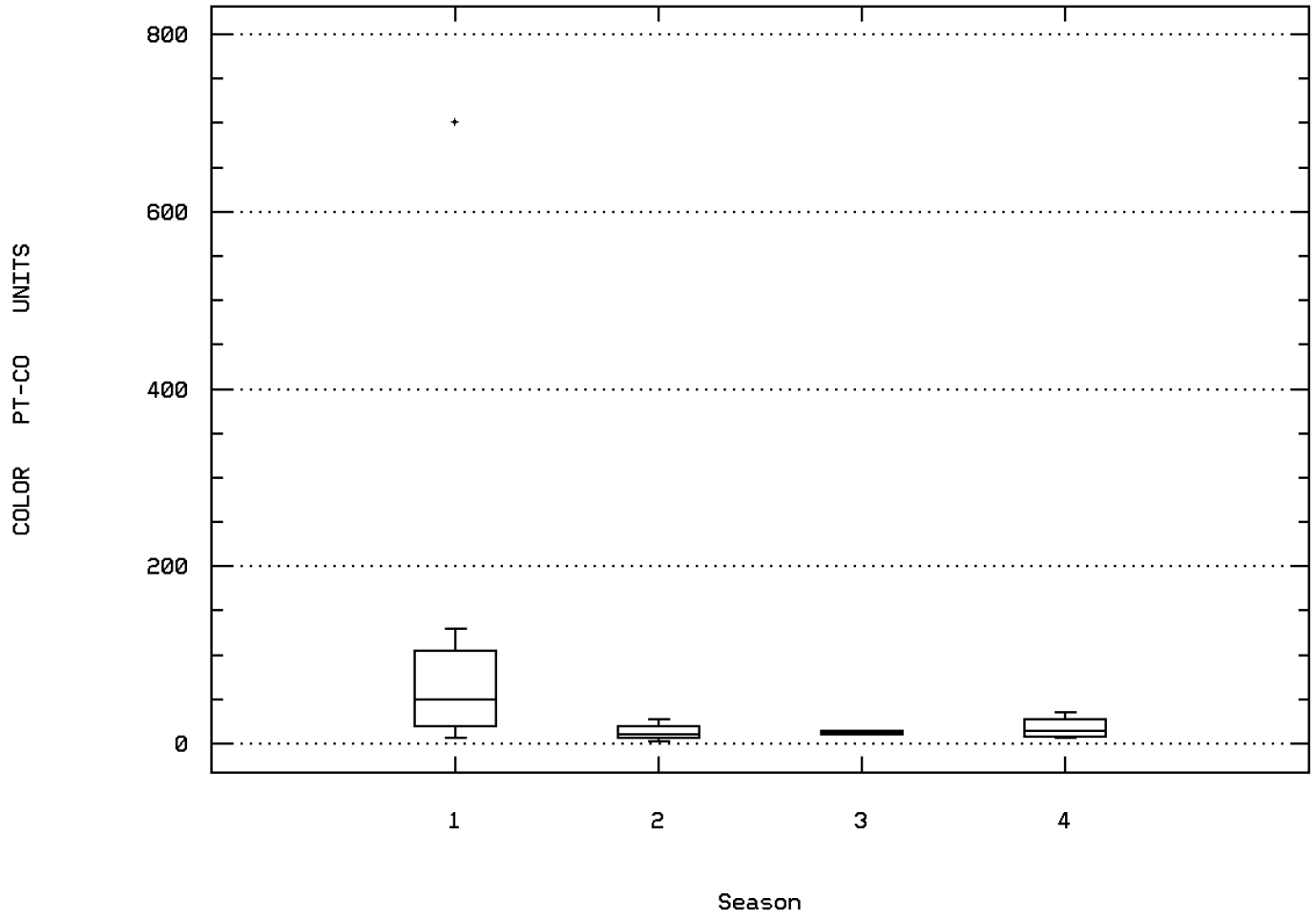
Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/64-08/18/94	55	17.2	17.542	26.5	7.	24.051	4.904	10.8	13.3	21.5	23.7
00060	FLOW, STREAM, MEAN DAILY CFS	09/18/64-09/27/71	17	63.	118.412	486.	11.	17030.757	130.502	19.8	34.5	169.	374.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/01/70-08/18/94	43	66.	156.744	1730.	7.	98683.576	314.139	21.4	34.	135.	280.8
00080p	COLOR (PLATINUM-COBALT UNITS)	05/27/64-07/19/72	4	15.	18.	35.	7.	159.333	12.623	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-08/18/94	57	395.	401.158	822.	150.	20768.457	144.113	240.8	272.5	496.	620.
00400p	PH (STANDARD UNITS)	05/27/64-03/26/81	13	6.9	7.112	7.9	6.4	0.199	0.446	6.52	6.8	7.575	7.78
00400p	CONVERTED PH (STANDARD UNITS)	05/27/64-03/26/81	13	6.9	6.93	7.9	6.4	0.235	0.485	6.52	6.8	7.575	7.78
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-03/26/81	13	0.126	0.118	0.398	0.013	0.011	0.106	0.018	0.027	0.158	0.319
00440p	BICARBONATE ION (MG/L AS HCO3)	05/27/64-03/12/73	11	68.	68.455	142.	29.	1210.273	34.789	29.6	32.	86.	134.8
00445p	CARBONATE ION (MG/L AS CO3)	05/27/64-03/12/73	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-07/18/80	11	148.	147.909	266.	60.	3849.491	62.044	61.6	79.	182.	252.4
00902p	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-07/18/80	11	86.	91.909	150.	36.	1439.091	37.935	37.2	53.	118.	148.4
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-07/18/80	4	42.5	44.75	77.	17.	626.917	25.038	**	**	**	**
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-07/18/80	4	18.5	16.725	21.	8.9	28.769	5.364	**	**	**	**
00940p	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-07/18/80	11	14.	19.818	70.	6.	337.164	18.362	6.	10.	24.	62.4
00945p	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-03/26/81	13	97.	105.462	190.	42.	1950.436	44.164	45.6	61.5	140.	173.2
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-07/18/80	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00955p	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-07/18/80	9	5.8	5.978	7.6	4.3	0.924	0.961	4.3	5.35	6.6	7.6
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-03/26/81	12	277.	265.75	514.	97.	14203.841	119.18	107.5	154.75	350.5	469.9
70331p	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/06/81-06/23/92	16	90.5	89.5	100.	68.	80.267	8.959	73.6	87.	96.	100.
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-03/12/73	11	4.3	4.373	7.2	1.6	3.028	1.74	1.74	2.8	5.8	6.98
71885	IRON (UG/L AS FE)	05/27/64-08/27/71	11	420.	585.456	1400.01	0.	255130.331	505.104	0.	150.	1000.	1380.01
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/29/77-06/23/92	35	30.	305.857	8100.	6.	1896071.832	1376.979	10.	20.	55.	88.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: CUGA0061 Parameter Code: 00080

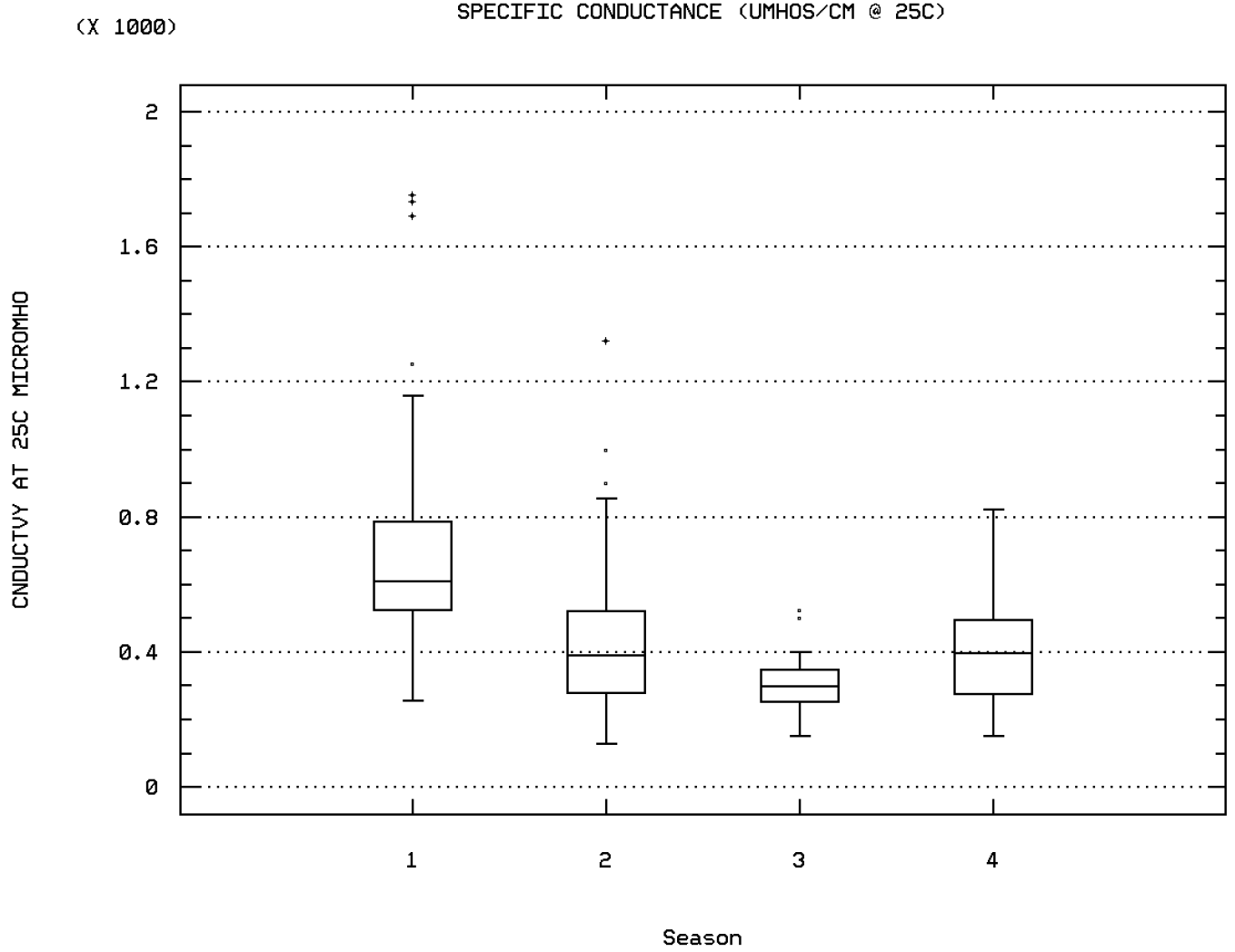
COLOR (PLATINUM-COBALT UNITS)



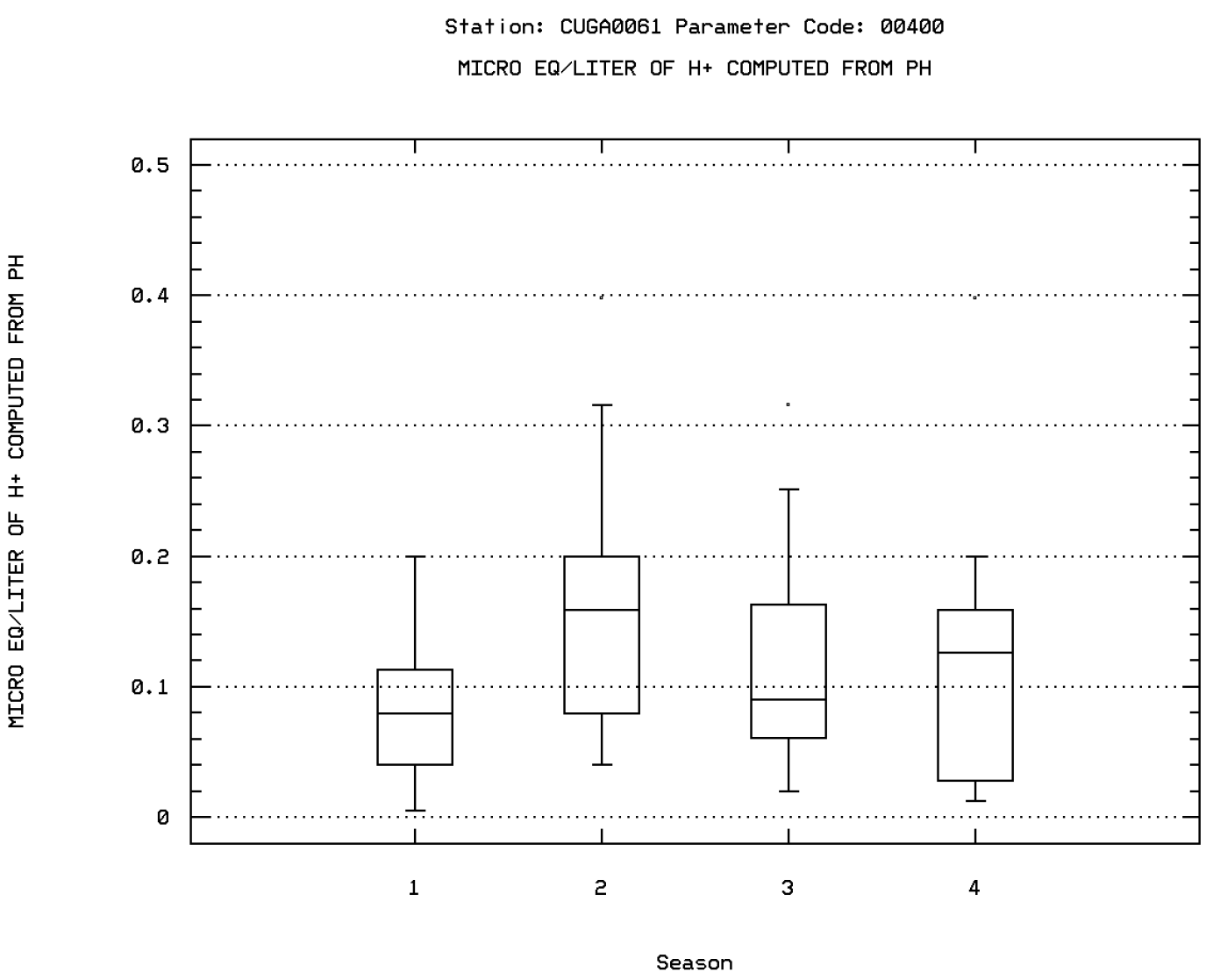
YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



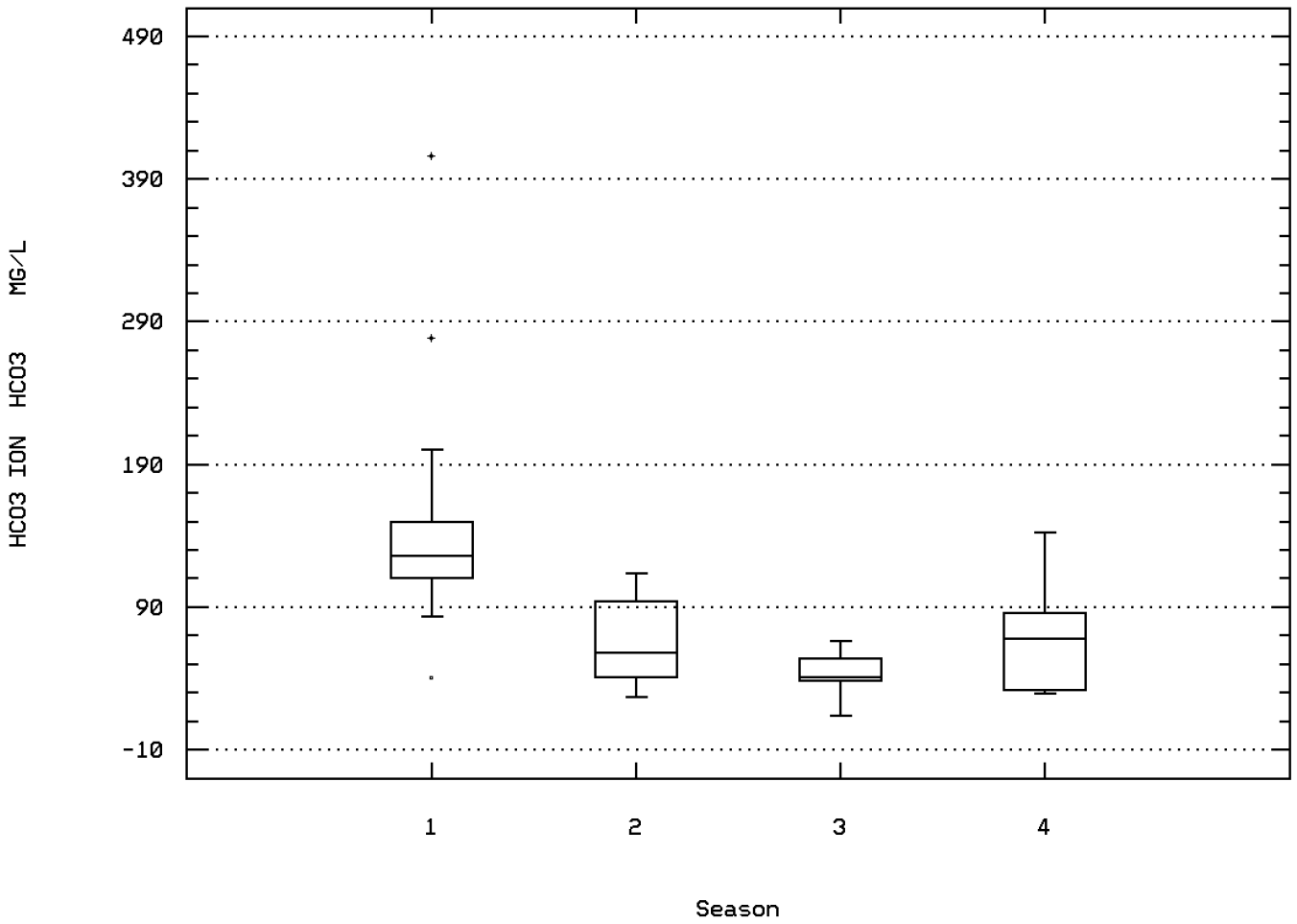
YELLOW CR NR MIDDLESBORO,KY.



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00440

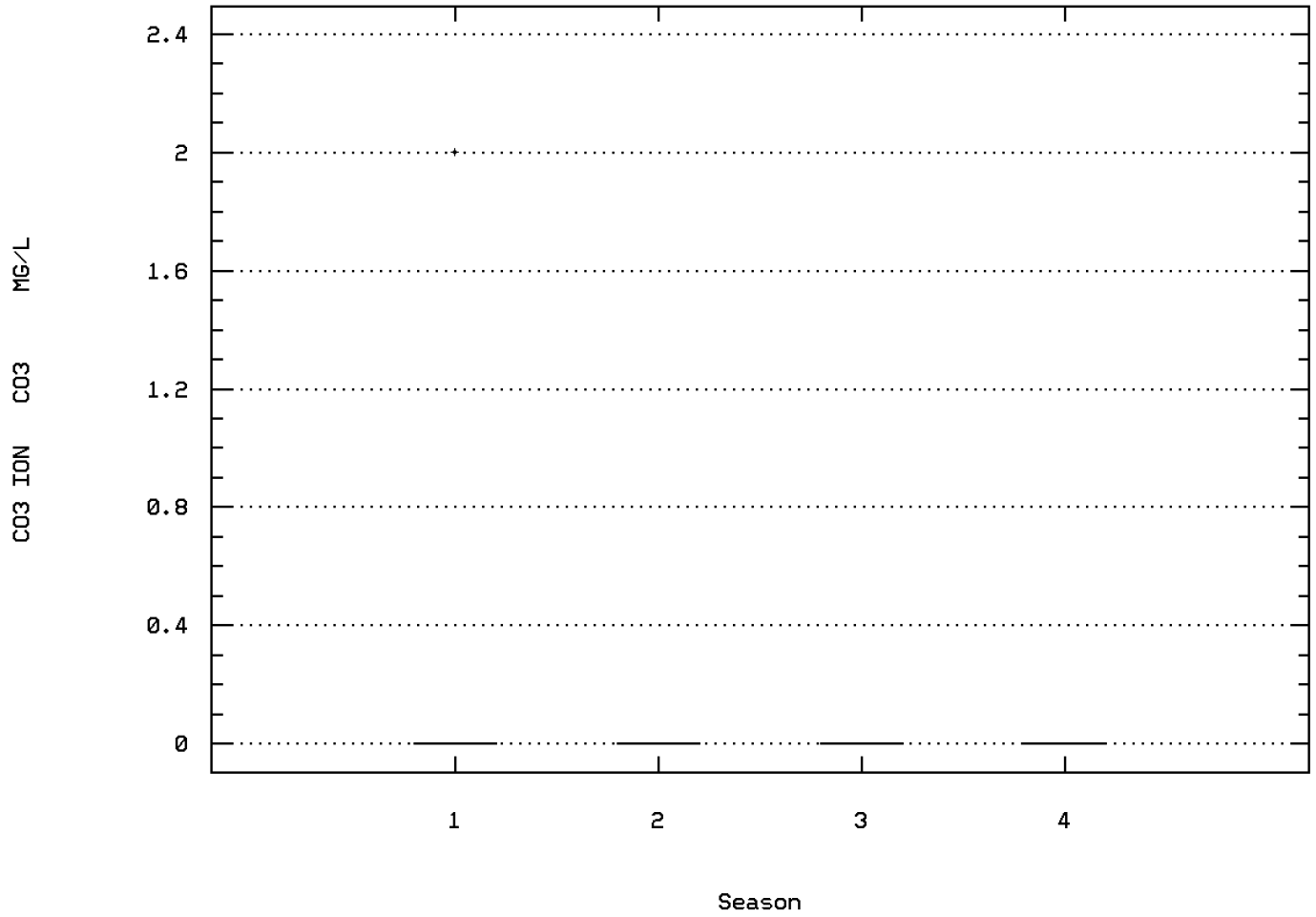
BICARBONATE ION (MG/L AS HCO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00445

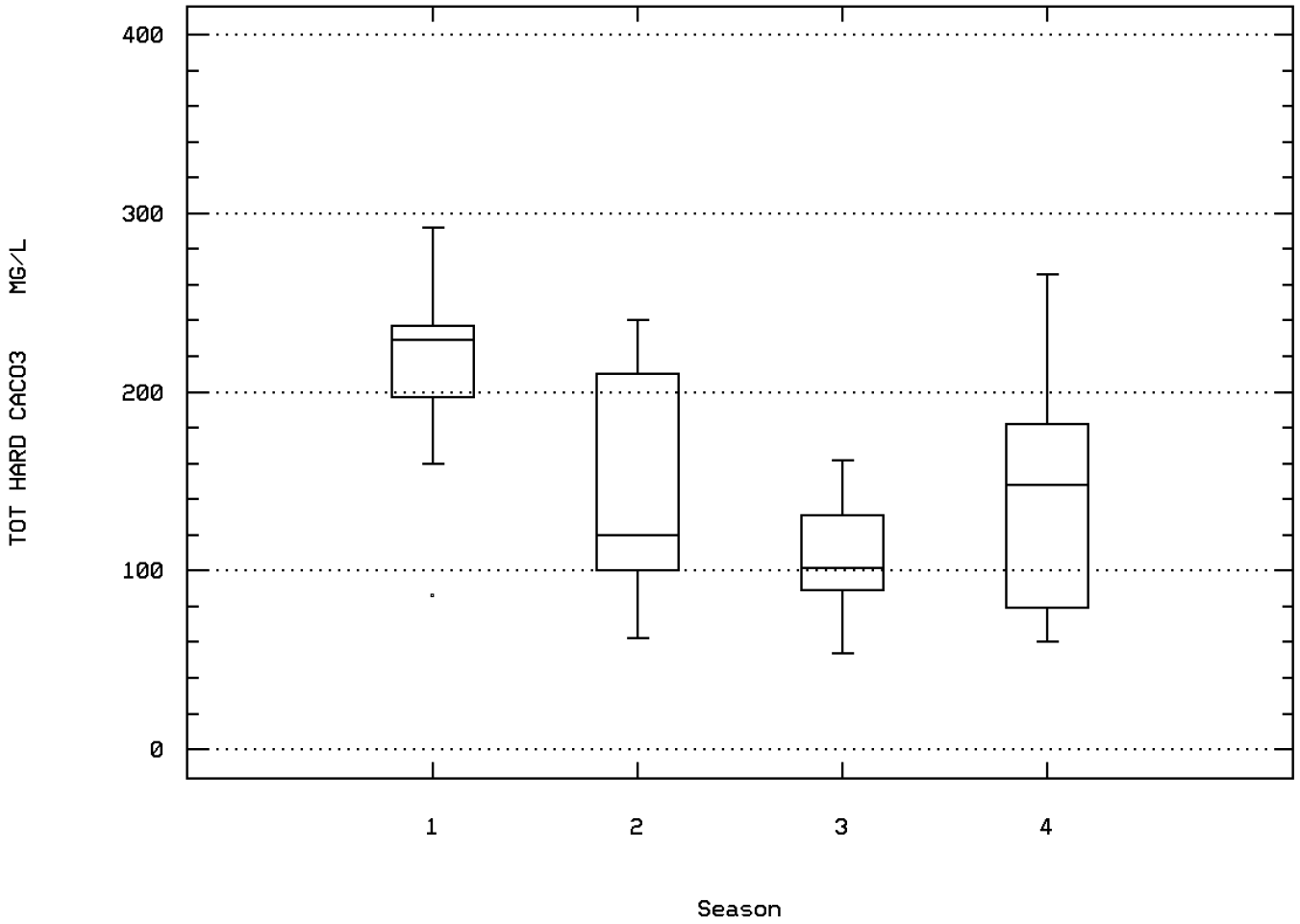
CARBONATE ION (MG/L AS CO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00900

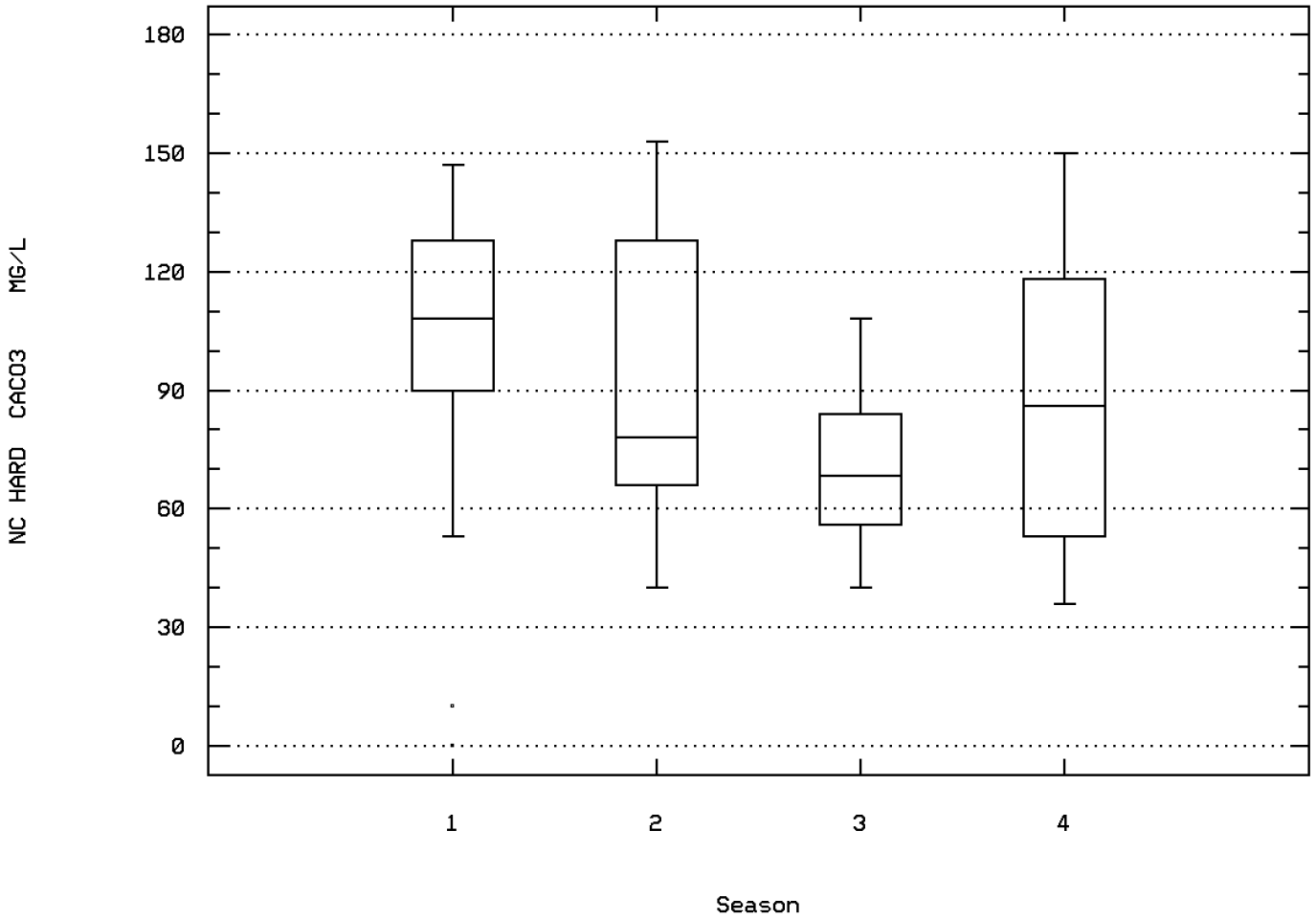
HARDNESS, TOTAL (MG/L AS CACO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00902

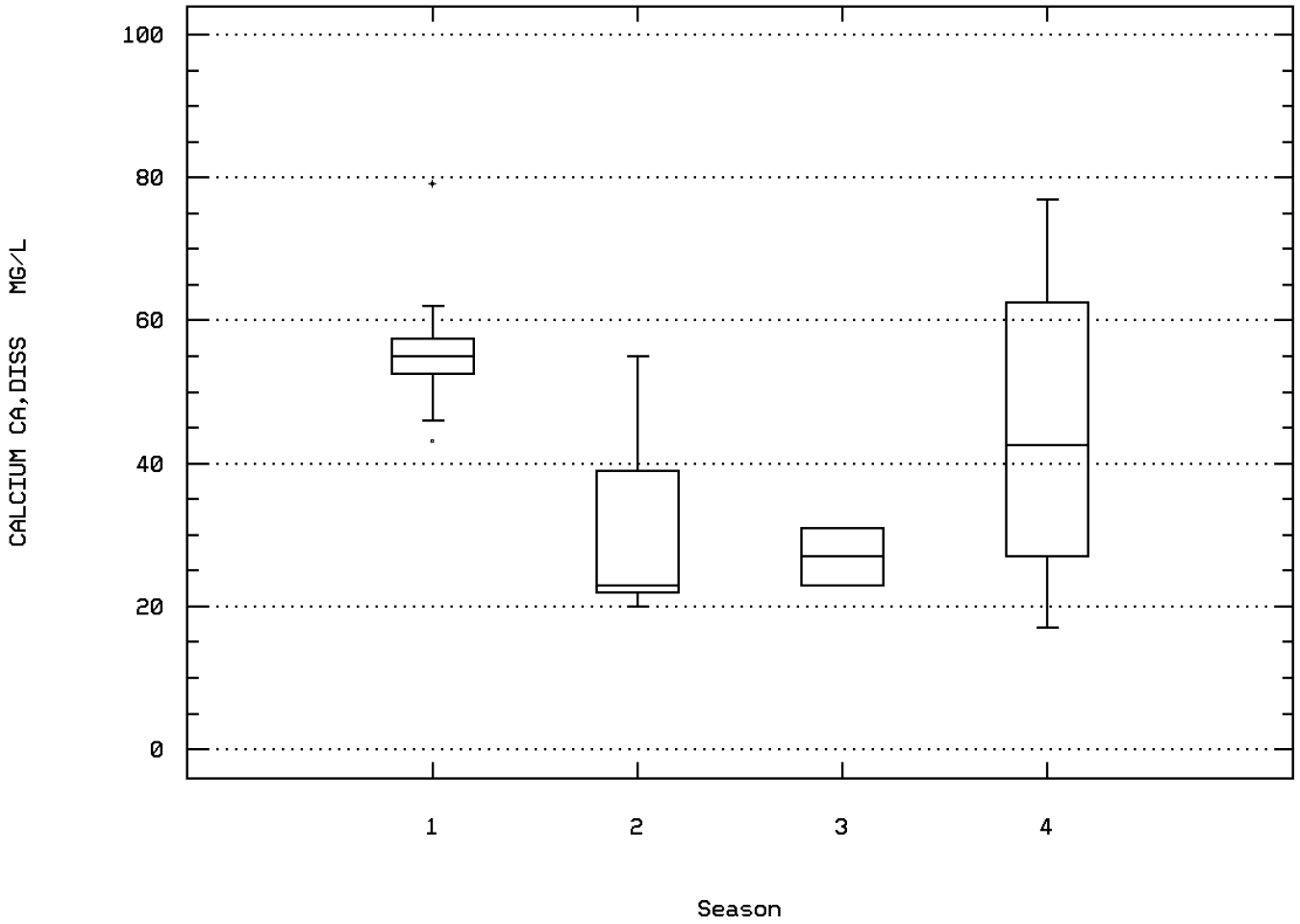
HARDNESS, NON-CARBONATE (MG/L AS CACO3)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00915

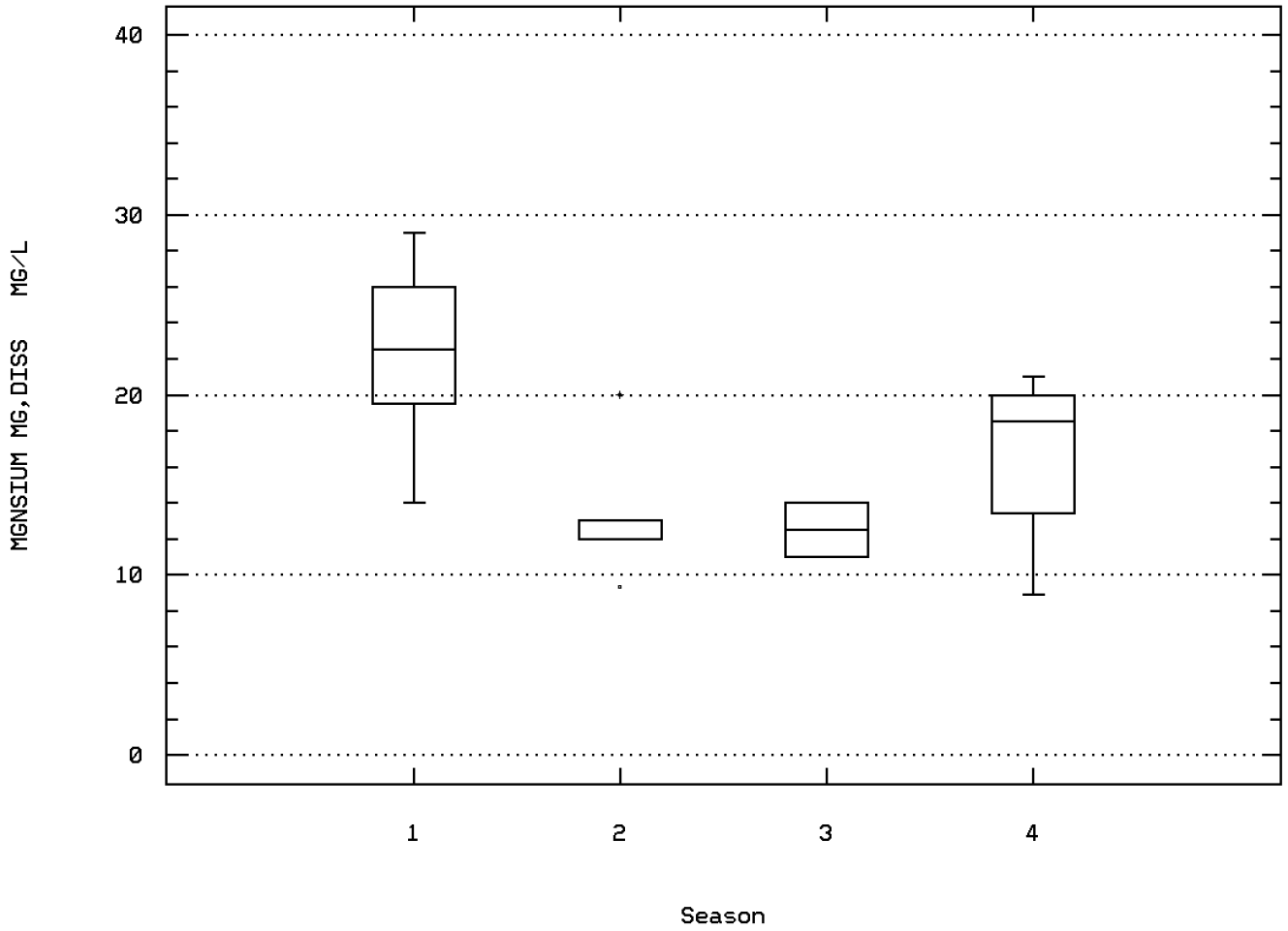
CALCIUM, DISSOLVED (MG/L AS CA)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00925

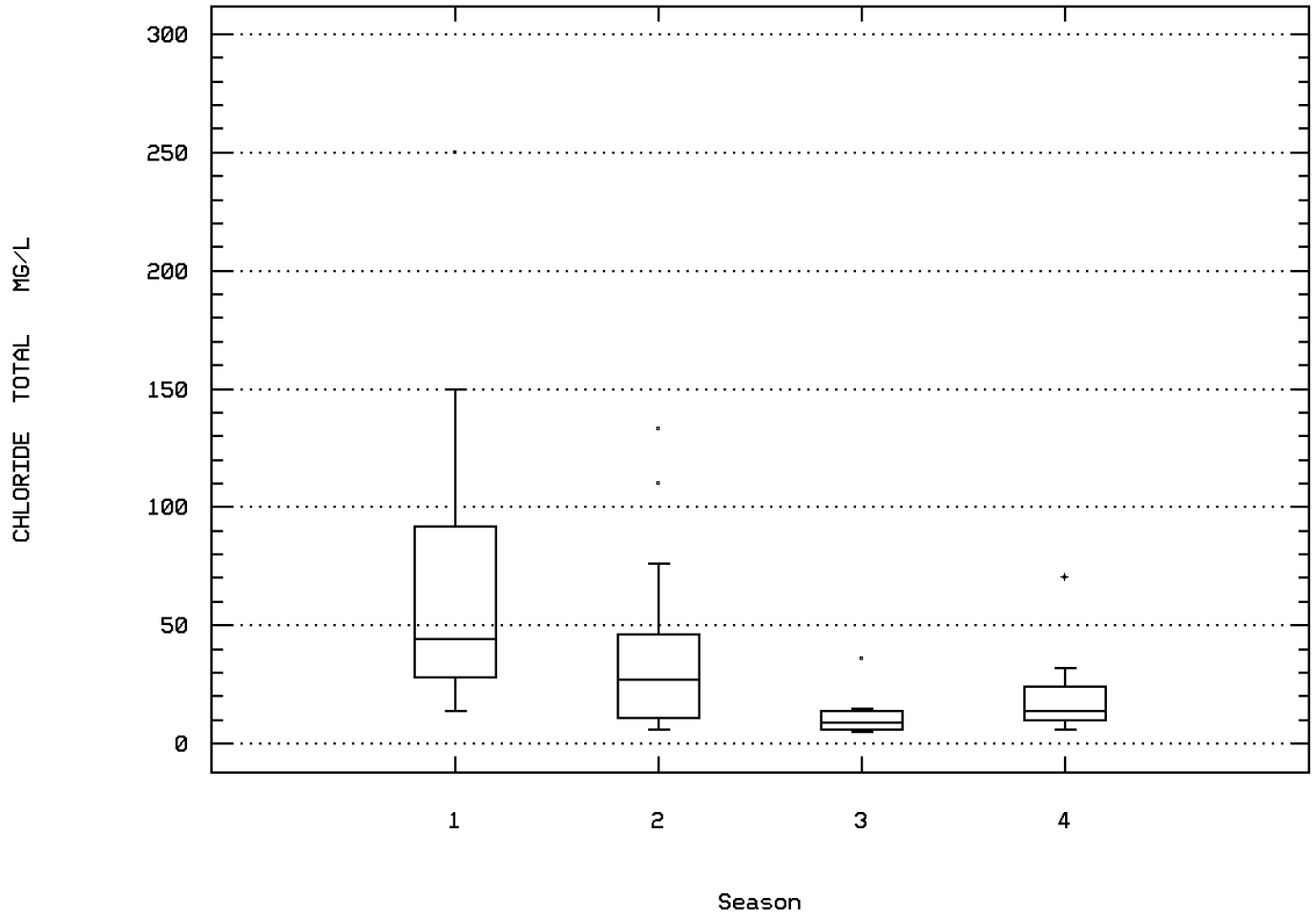
MAGNESIUM, DISSOLVED (MG/L AS MG)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00940

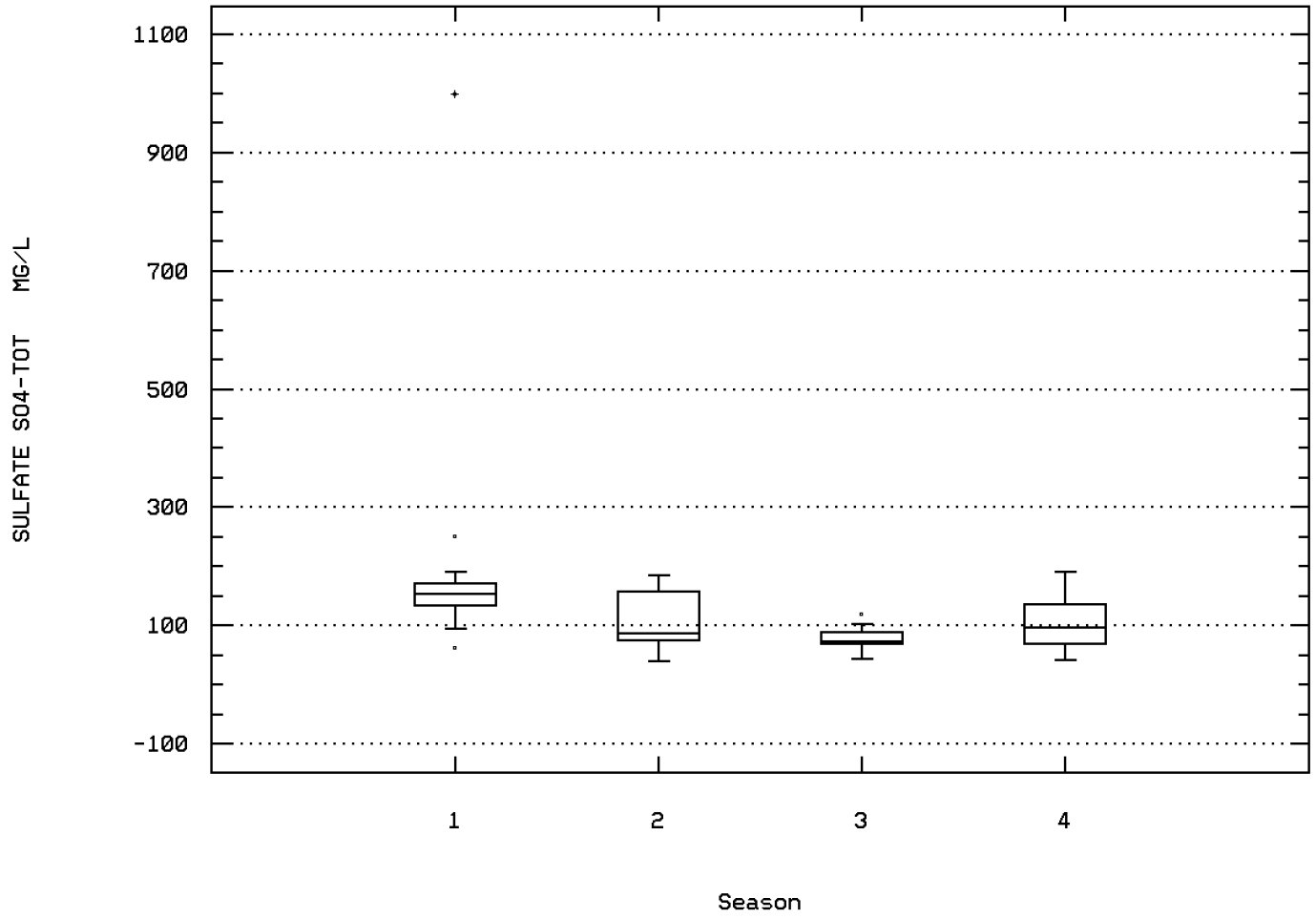
CHLORIDE,TOTAL IN WATER



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00945

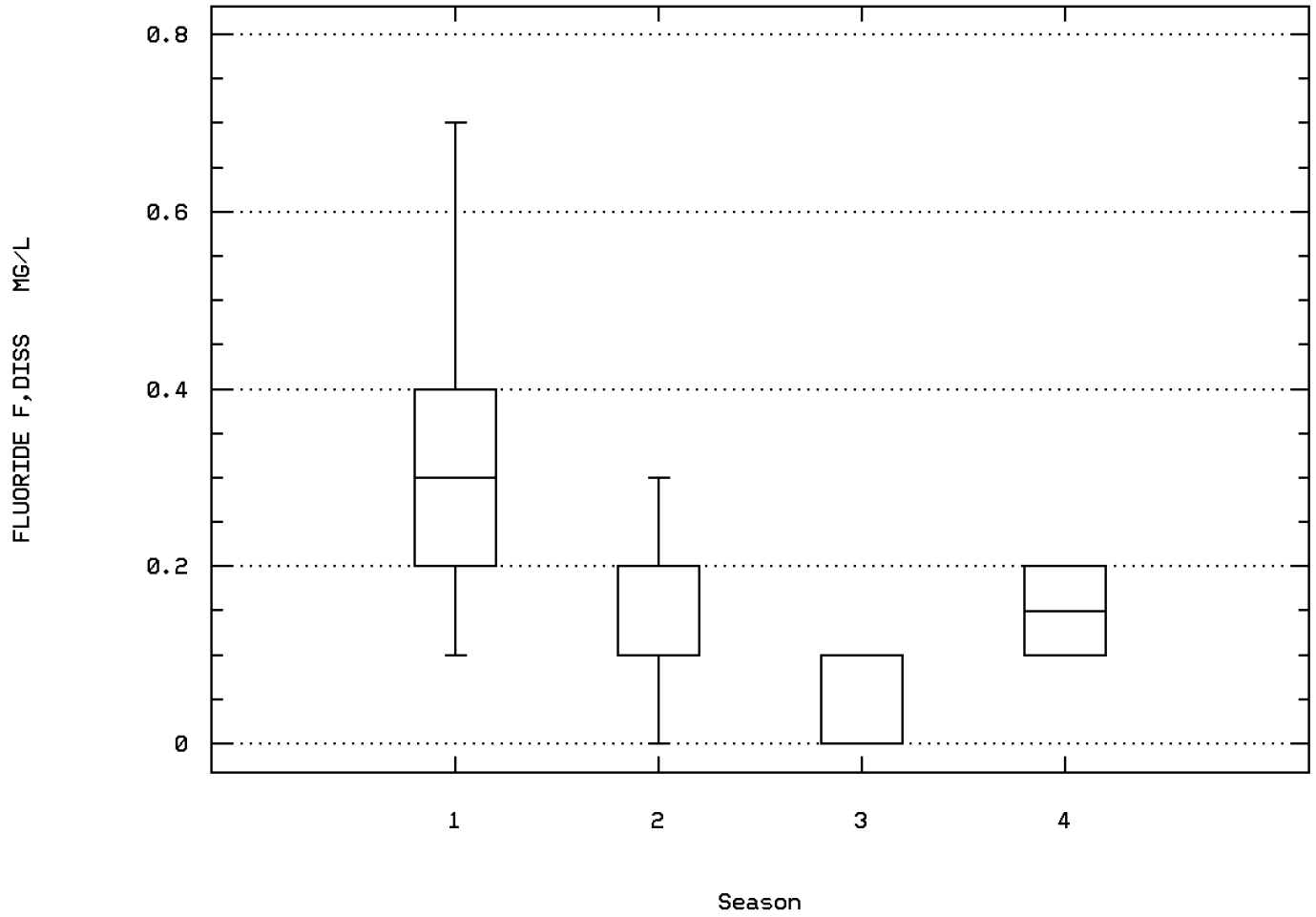
SULFATE, TOTAL (MG/L AS SO4)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00950

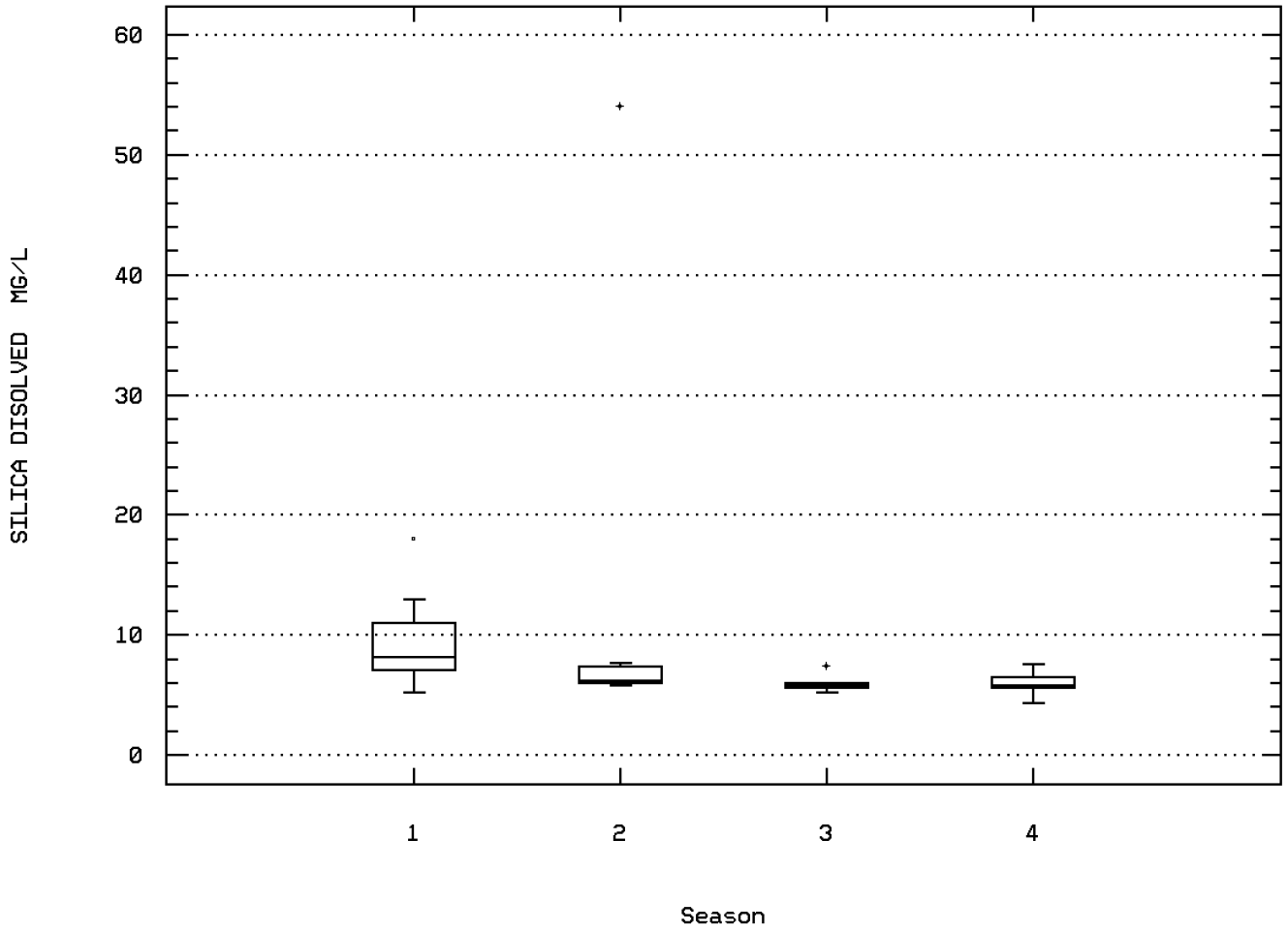
FLUORIDE, DISSOLVED (MG/L AS F)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 00955

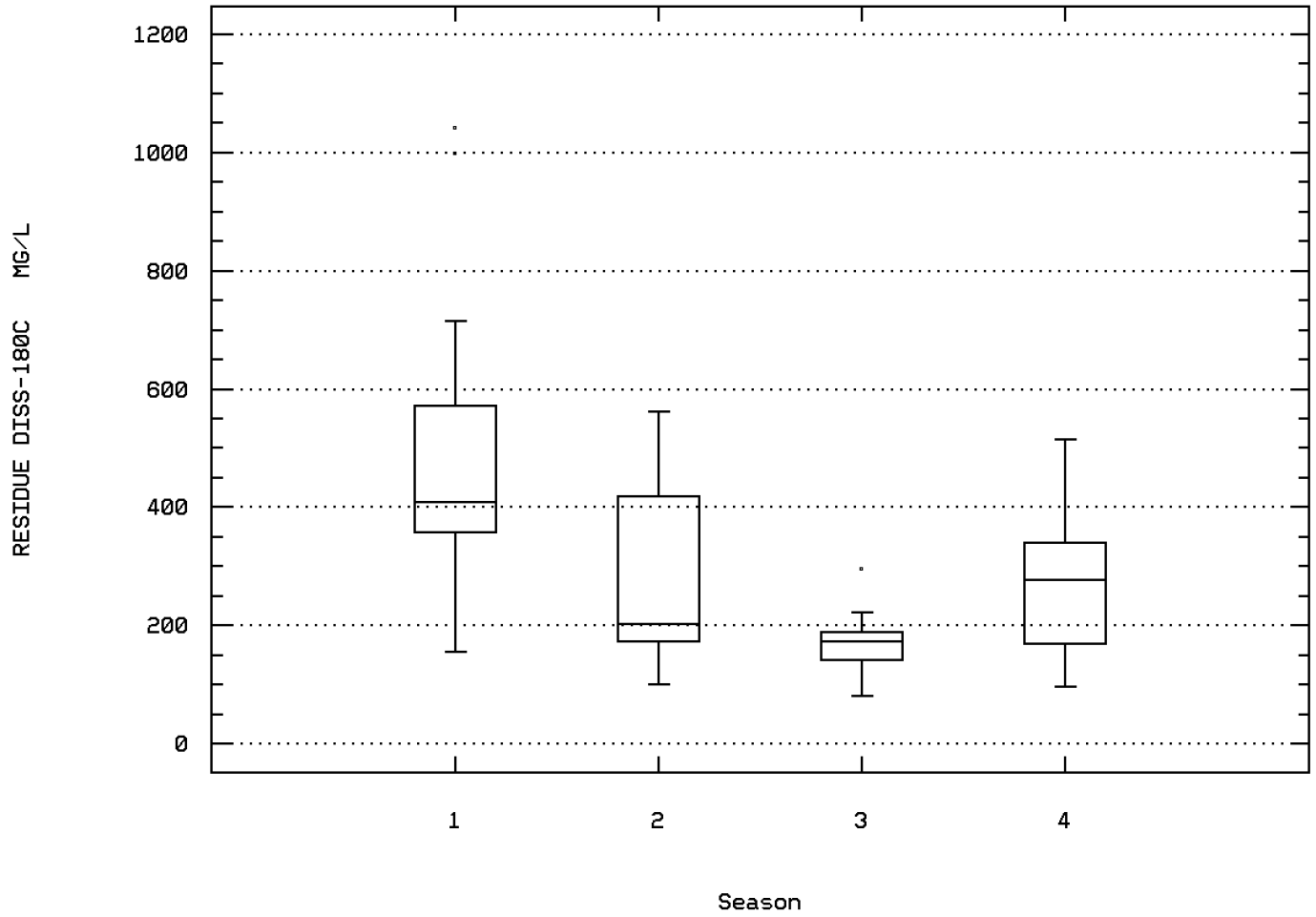
SILICA, DISSOLVED (MG/L AS SI02)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 70300

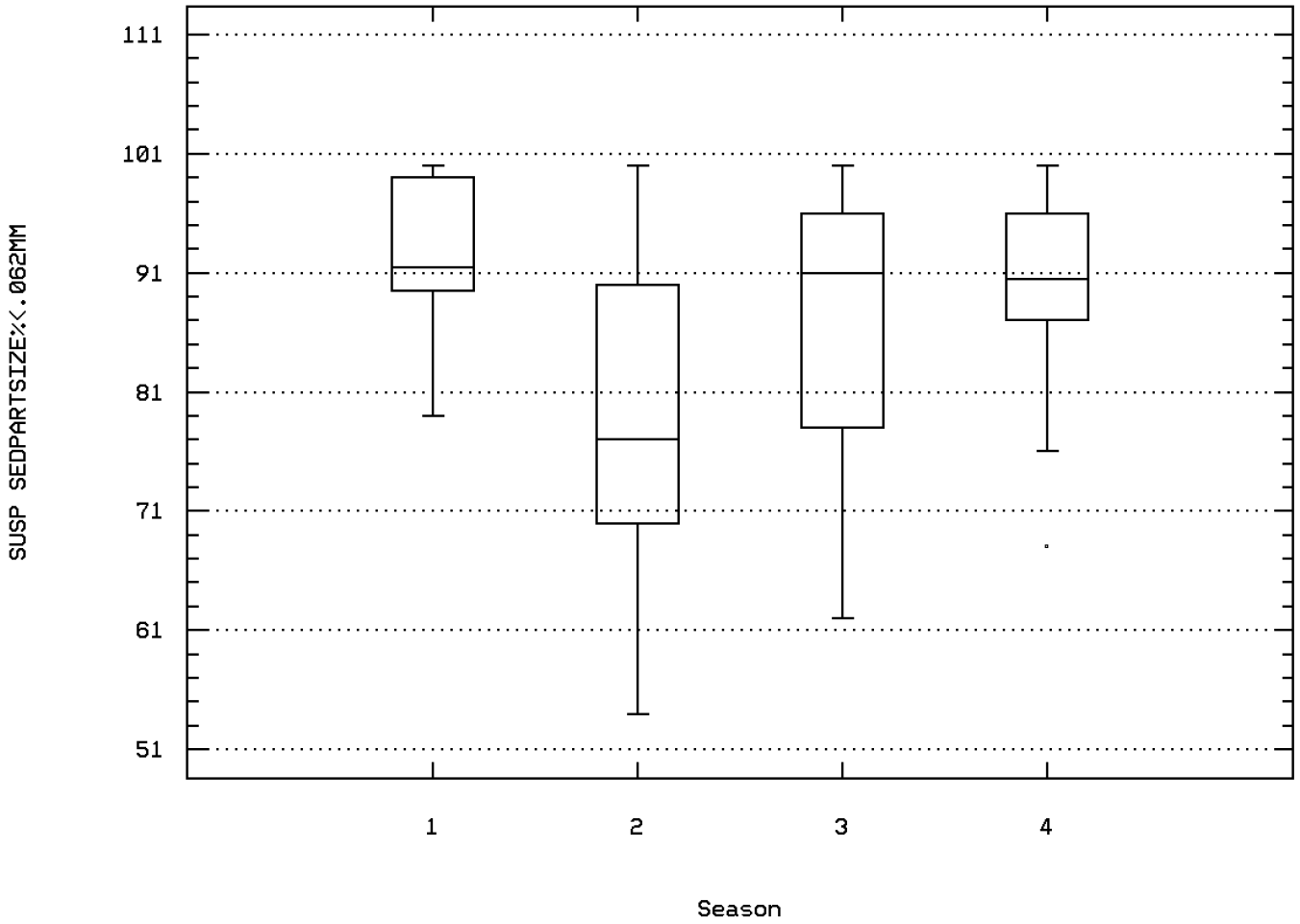
RESIDUE,TOTAL FILTRABLE (DRIED AT 180C)



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 70331

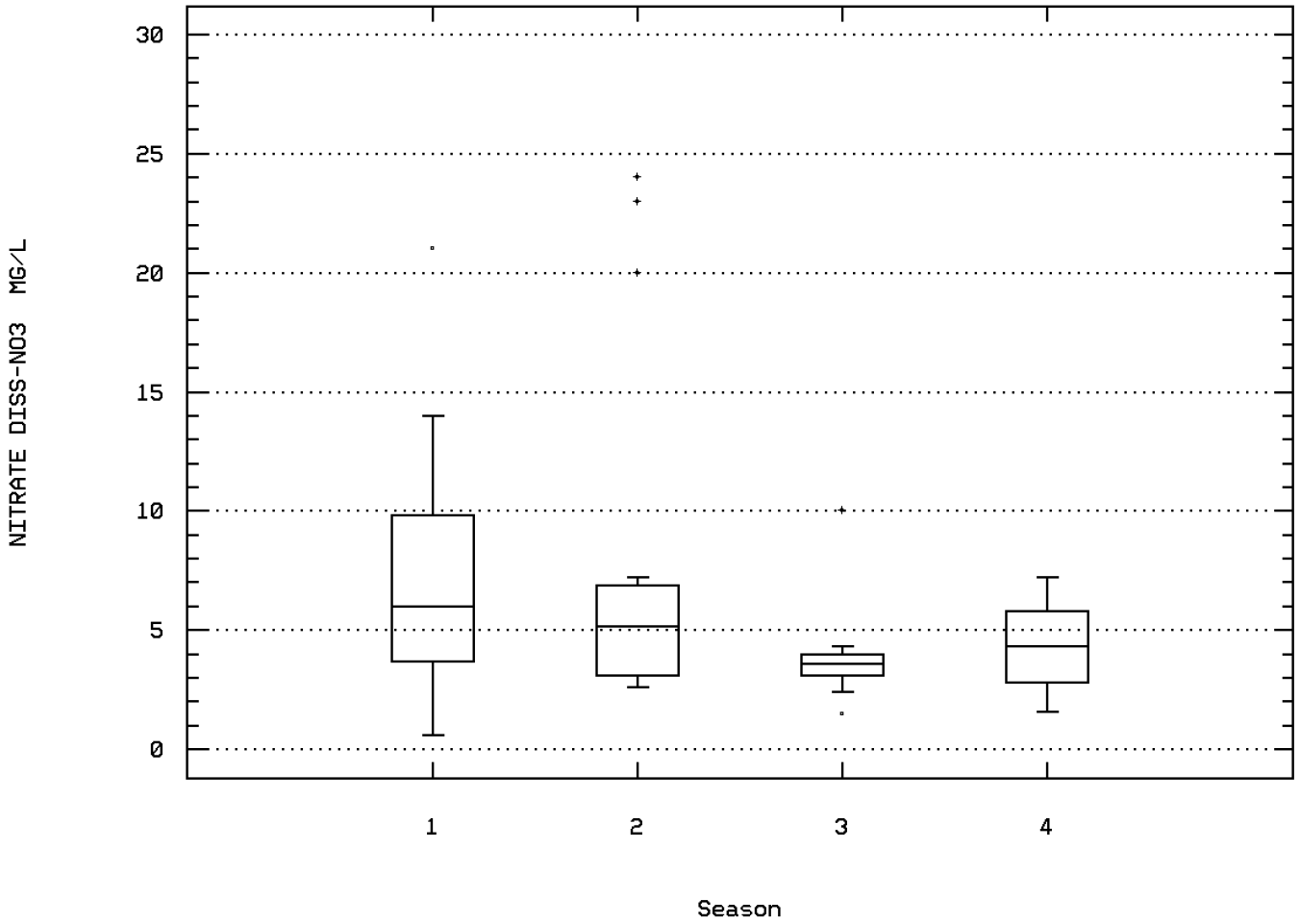
SUSPENDED SED SIEVE DIAMETER,% FINER TH



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 71851

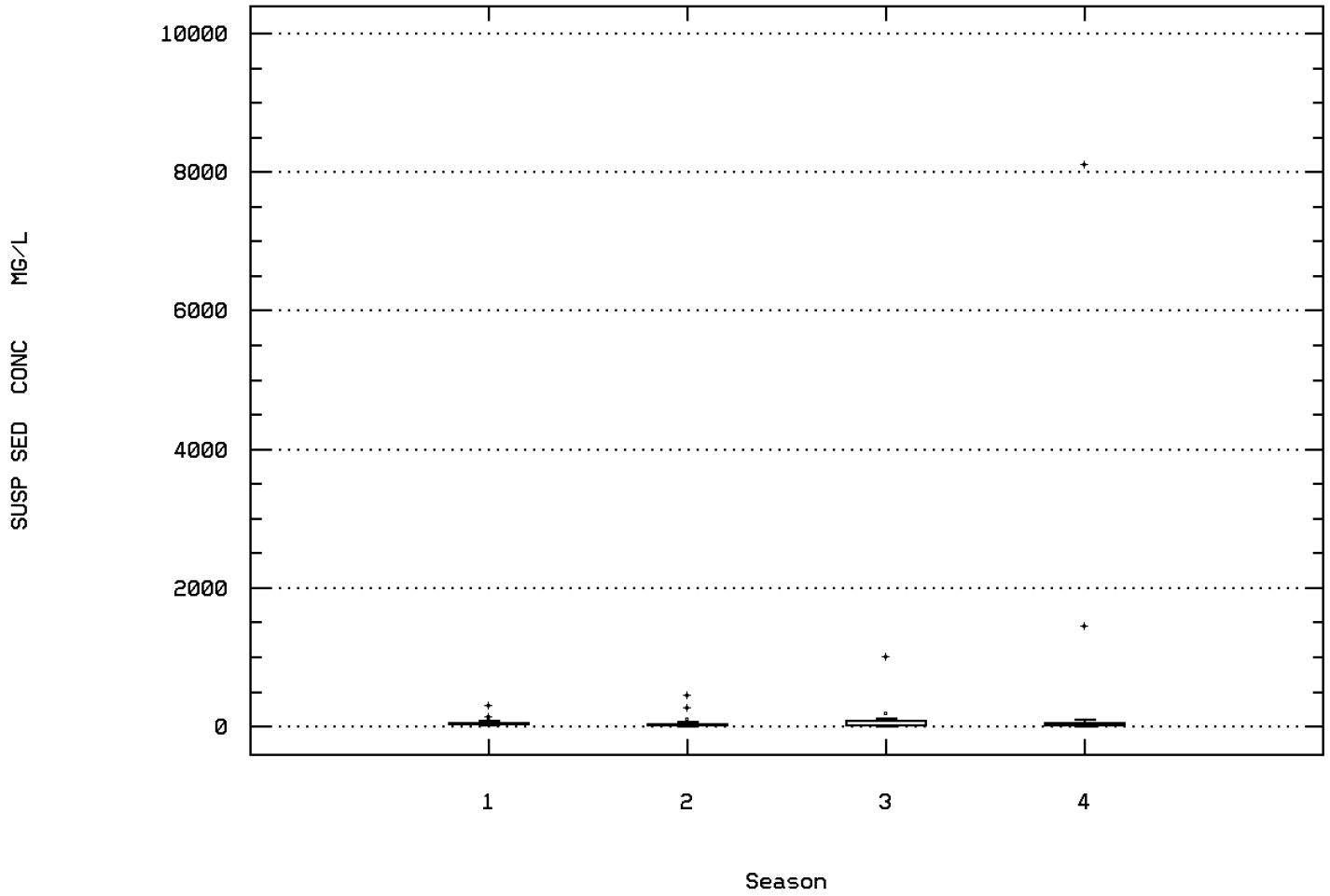
NITRATE NITROGEN, DISSOLVED (MG/L AS NO



YELLOW CR NR MIDDLESBORO,KY.

Station: CUGA0061 Parameter Code: 80154

SUSP. SEDIMENT CONCENTRATION-EVAP. AT 1



YELLOW CR NR MIDDLESBORO,KY.

Station Inventory for Station: CUGA0062

NPS Station ID: CUGA0062 LAT/LON: 36.603892/ -83.688977 Agency: 11NPSWRD Date Created: 09/20/97
Location: SEDIMENT BASIN - WEST SIDE AT TUNNEL CREEK FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /RESERV/TYPA/AMBNT STORET Station ID(s): CUGA_CPSU_SB8W
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1800 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ALONG TUNNEL CREEK BELOW THE RAILROAD ON THE WEST END OF THE SEDIMENT BASIN. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0062

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/30/91-12/30/91	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/30/91-12/30/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/17/91-01/13/92	3	430.	384.	460.	262.	11388.	106.715	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/30/91-12/30/91	1	469.	469.	469.	469.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/17/91-01/13/92	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/30/91-12/30/91	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/17/91-01/13/92	3	6.9	7.	7.6	6.5	0.31	0.557	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/17/91-01/13/92	3	6.9	6.808	7.6	6.5	0.366	0.605	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/17/91-01/13/92	3	0.126	0.156	0.316	0.025	0.022	0.148	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	12/30/91-12/30/91	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/30/91-12/30/91	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/30/91-12/30/91	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/17/91-01/13/92	3	79.	66.667	86.	35.	764.333	27.647	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/17/91-01/13/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/17/91-01/13/92	3	48.	40.333	52.	21.	284.333	16.862	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/17/91-01/13/92	3	30.	47.	83.	28.	973.	31.193	**	**	**	**
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/17/91-01/13/92	3 ##	0.01	0.007	0.01	0.	0.	0.006	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/17/91-01/13/92	3 ##	0.01	0.06	0.16	0.01	0.008	0.087	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/17/91-01/13/92	3	0.91	0.707	1.21	0.	0.397	0.63	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/17/91-01/13/92	3	1.15	1.077	1.74	0.34	0.494	0.703	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/13/92-01/13/92	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/17/91-01/13/92	3	217.	180.	227.	96.	5317.	72.918	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0062

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/17/91-01/13/92	3	50.3	43.467	54.4	25.7	240.943	15.522	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/17/91-01/13/92	3	12.3	8.867	12.9	1.4	41.903	6.473	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/17/91-01/13/92	3	5.3	5.447	5.8	5.24	0.095	0.307	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/17/91-01/13/92	3	3.45	3.52	3.96	3.15	0.168	0.41	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/17/91-01/13/92	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/17/91-01/13/92	3	121.	105.767	122.3	74.	757.263	27.518	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/17/91-01/13/92	3	0.27	0.43	0.92	0.1	0.187	0.433	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/17/91-01/13/92	2 ##	35.	35.	35.	35.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/17/91-01/13/92	2	30.	30.	40.	20.	200.	14.142	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/17/91-01/13/92	3	80.	86.667	130.	50.	1633.333	40.415	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/17/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/17/91-01/13/92	3	20.	33.333	60.	20.	533.333	23.094	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	12/17/91-01/13/92	3	70.	56.667	70.	30.	533.333	23.094	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/17/91-01/13/92	3 ##	0.	13.333	40.	0.	533.333	23.094	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/17/91-01/13/92	3	16190.	11573.333	18200.	330.	95819433.333	9788.74	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	12/17/91-01/13/92	3	130.	106.667	160.	30.	4633.333	68.069	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	12/17/91-01/13/92	3	3790.	2593.333	3920.	70.	4779633.333	2186.237	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/17/91-01/13/92	3	3940.	2646.667	3950.	50.	5057033.333	2248.785	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/17/91-01/13/92	2	35.	35.	60.	10.	1250.	35.355	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/17/91-01/13/92	3	50.	36.667	50.	10.	533.333	23.094	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/17/91-01/13/92	2	90.	90.	110.	70.	800.	28.284	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/17/91-01/13/92	2 ##	35.	35.	70.	0.	2450.	49.497	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/17/91-01/13/92	3	50.	326.667	910.	20.	255433.333	505.404	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/17/91-01/13/92	3	140.	1886.667	5420.	100.	9363733.333	3060.022	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/17/91-01/13/92	3	130.	1576.667	4480.	120.	6322033.333	2514.365	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/17/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/17/91-01/13/92	2	145.	145.	210.	80.	8450.	91.924	**	**	**	**
01140	SILICON, DISSOLVED (UG/L AS SI)	12/17/91-01/13/92	3	4000.	4100.	4700.	3600.	310000.	556.776	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/17/91-01/13/92	3	10.	13.333	20.	10.	33.333	5.774	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/17/91-01/13/92	3	264.	227.667	268.	151.	4412.333	66.425	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/17/91-01/13/92	3 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/17/91-01/13/92	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/17/91-01/13/92	3	19.21	13.987	21.61	1.14	125.218	11.19	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/30/91-12/30/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/17/91-01/13/92	3 ##	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0062

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	1	1.00				1	1	1.00						
00403	PH, LAB	Fresh Chronic	9.	3	0	0.00				3	0	0.00						
		Other-Lo Lim.	6.5	3	1	0.33				3	1	0.33						
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3	0	0.00				3	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00				3	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00				3	0	0.00						
		Drinking Water	250.	3	0	0.00				3	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00				3	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00				3	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	0	0.00				2	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00				2	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00				2	0	0.00						
		Drinking Water	5.	2	0	0.00				2	0	0.00						
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00				3	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	1	0.33				3	1	0.33						
		Drinking Water	1300.	3	0	0.00				3	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0062

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	2	0.67				3	2	0.67						
		Drinking Water	15.	3	3	1.00				3	3	1.00						
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00				3	0	0.00						
		Drinking Water	100.	3	0	0.00				3	0	0.00						
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	1	0.33				3	1	0.33						
		Drinking Water	5000.	3	0	0.00				3	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00				2	0	0.00						
		Drinking Water	2.	2	0	0.00				2	0	0.00						
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0063

NPS Station ID: CUGA0063 LAT/LON: 36.606392/ -83.689392 Agency: 11NPSWRD Date Created: 07/12/97
Location: DAVIS BRANCH NORTH OF LITTLE YELLOW CREEK FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CMRC_DB10
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON DAVIS BRANCH APPROXIMATELY 300 FEET NORTH OF THE LITTLE YELLOW CREEK CONFLUENCE AND 200 FEET NORTH OF THE OLD WILDERNESS ROAD.
THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850 DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0063

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	31250.	700000.	0.	20394021739.13	142807.639	0.	0.	0.	25000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.439	5.845	0.	2.244	1.498	0.	0.	0.	2.349
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			2.75								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	14583.333	300000.	0.	3799818840.58	61642.671	0.	0.	0.	25000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.424	5.477	0.	2.077	1.441	0.	0.	0.	2.349
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			2.655								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	2916.667	40000.	0.	99818840.58	9990.938	0.	0.	0.	15000.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	1333.333	30000.	0.	37362318.841	6112.472	0.	0.	0.	1000.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	6250.	100000.	0.	502717391.304	22421.36	0.	0.	0.	25000.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.404	5.	0.	1.877	1.37	0.	0.	0.	2.349
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			2.536								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	170833.333	4000000.	0.	665634057971.014	815863.995	0.	0.	0.	50000.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.483	6.602	0.	2.738	1.655	0.	0.	0.	2.5
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			3.044								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0063

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	2	0.08	8	1	0.13	6	0	0.00	3	0	0.00	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0064

NPS Station ID: CUGA0064
LAT/LON: 36.606115/ -83.689448
Agency: 112WRD
Date Created: / /
Location: DAVIS B AT MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401390
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 23.00
On/Off RF1:
RF3 Index: 05130101050601.53
RF3 Mile Point: 1.52
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0064

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/22/64	2	6.	6.	10.	2.	32.	5.657	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/22/64	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/22/64	2	270.	270.	325.	215.	6050.	77.782	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-09/22/64	2	7.35	7.35	7.7	7.	0.245	0.495	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-09/22/64	2	7.222	7.222	7.7	7.	0.278	0.527	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-09/22/64	2	0.06	0.06	0.1	0.02	0.003	0.057	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/22/64	2	91.5	91.5	121.	62.	1740.5	41.719	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/22/64	2	112.	112.	148.	76.	2592.	50.912	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/22/64	2	117.5	117.5	156.	79.	2964.5	54.447	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/22/64	2	26.	26.	35.	17.	162.	12.728	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/22/64	2	17.5	17.5	22.	13.	40.5	6.364	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/22/64	2	23.	23.	30.	16.	98.	9.899	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	2	320.	320.	360.	280.	3200.	56.569	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/22/64	2	215.	215.	360.	70.	42050.	205.061	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/22/64-09/22/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0064

				Total	Exceed	Prop.	7/01-10/31			11/01-1/31			2/01-3/31			4/01-6/30		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Fresh Chronic	9.	2	0	0.00	1	0	0.00							1	0	0.00
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00							1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00							1	0	0.00
		Drinking Water	250.	2	0	0.00	1	0	0.00							1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00							1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0065

NPS Station ID: CUGA0065 LAT/LON: 36.603892/ -83.689865 Agency: 11NPSWRD Date Created: 09/20/97
Location: TUNNEL CREEK:NEAR LITTLE YELLOW CREEK CONFLUENCE FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_TC10
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON TUNNEL CREEK BELOW THE OUTLET OF THE EXISTING DOUBLE 4' X 3' BOX CULVERT UNDER THE SKYLAND ROAD AND OLD BARLETT PARK ROAD INTERSECTION. THIS IS IMMEDIATELY BELOW THE LAST SEDIMENT BASIN. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 INDICATES WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	196	14.35	13.988	27.8	5.9	13.683	3.699	8.84	11.2	16.9	18.46
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	182	1.	1.81	21.	0.	4.944	2.224	0.6	0.9	2.	3.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	198	10.5	86.97	3440.	0.5	104250.788	322.879	5.	5.	28.	124.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	196	208.5	200.23	513.	29.	7198.793	84.846	95.	137.5	237.75	301.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	199	0.	0.146	1.	0.	0.125	0.354	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	195	8.5	8.453	12.	1.4	2.483	1.576	6.5	7.8	9.4	10.3
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	170	7.9	7.721	11.	4.3	0.687	0.829	7.2	7.5	8.1	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	170	7.9	5.875	11.	4.3	4.115	2.029	7.2	7.5	8.1	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	170	0.013	1.333	50.119	0.	44.878	6.699	0.005	0.008	0.032	0.063
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	197	7.9	7.743	10.4	4.2	0.668	0.817	7.2	7.5	8.1	8.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	197	7.9	5.893	10.4	4.2	4.106	2.026	7.2	7.5	8.1	8.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	197	0.013	1.279	63.096	0.	50.161	7.082	0.005	0.008	0.032	0.063
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	198	53.5	60.192	220.	0.	1117.79	33.433	24.	33.	91.	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	198 ##	0.05	1.141	78.	0.05	66.165	8.134	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	144	24.	29.504	134.	0.	366.692	19.149	9.5	18.25	37.75	58.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	199	8.	34.089	616.	0.	5625.661	75.004	1.	3.	20.	106.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	110 ##	0.01	1.167	34.	0.	16.159	4.02	0.	0.	0.525	3.23
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	198 ##	0.01	0.052	0.58	0.01	0.01	0.101	0.01	0.01	0.01	0.191
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	198	0.47	0.786	8.46	0.	1.228	1.108	0.025	0.168	0.933	1.664

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	198 ##	0.05	0.102	1.65	0.	0.042	0.205	0.02	0.05	0.05	0.231
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	28	1.65	3.864	23.	0.	31.282	5.593	0.	0.55	4.95	13.77
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	02/24/97-03/03/97	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	198	88.	87.162	241.	0.015	1425.047	37.75	41.	55.	110.	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	199	30.4	29.314	93.5	0.01	185.089	13.605	12.1	17.2	38.1	42.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	198	2.7	2.763	6.1	0.005	0.895	0.946	1.6	2.1	3.5	3.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	198	1.895	3.323	21.48	0.01	12.032	3.469	0.778	1.2	4.125	8.307
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	198	2.5	3.212	11.18	0.92	4.015	2.004	1.279	1.8	4.085	6.105
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	198	1.	1.182	6.	0.4	0.509	0.713	0.7	0.8	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	198	17.	28.718	176.	0.025	858.47	29.3	9.8	12.	33.	75.38
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	195 ##	0.1	0.196	1.34	0.05	0.054	0.233	0.05	0.05	0.2	0.496
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	31 ##	50.	49.194	250.	0.	3476.828	58.965	0.	0.	50.	82.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	40	20.	17.5	50.	0.	114.205	10.687	5.	10.	20.	30.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	02/24/97-03/03/97	2 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	194 ##	5.	14.17	362.	0.	1253.137	35.4	0.	5.	10.75	24.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	37 ##	5.	6.216	110.	0.	315.841	17.772	0.	0.	5.	6.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	198 ##	5.	5.96	60.	0.	49.856	7.061	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	110 ##	5.	8.027	100.	0.	232.339	15.243	0.	0.	6.25	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	198 ##	5.	5.662	50.	0.	52.966	7.278	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	198	40.	82.571	1880.	5.	29350.916	171.321	10.	25.5	70.	144.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	198 ##	50.	39.136	120.	0.	449.387	21.199	5.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	197	50.	76.046	500.	5.	4609.574	67.894	29.8	40.	90.	160.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	197	39.	47.843	271.	0.	1722.46	41.503	10.	24.	59.5	92.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	56 ##	0.	17.589	50.	0.	512.719	22.643	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	197 ##	5.	4.97	40.	0.	23.57	4.855	0.	5.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/97-03/03/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-03/23/93	41 ##	0.	51.22	800.	0.	16055.976	126.712	0.	0.	60.	98.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	55 ##	0.	3.182	30.	0.	35.522	5.96	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	198	10.	15.475	94.	0.	310.149	17.611	0.	5.	20.	40.
01097	ANTIMONY, TOTAL (UG/L AS SB)	02/24/97-03/03/97	2 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	197	180.	1187.254	27100.	5.	9594566.211	3097.51	40.	80.	565.	2980.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	198	55.	247.803	6800.	5.	756048.9	869.511	5.	20.	104.5	267.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-12/17/92	40 ##	0.	5.375	50.	0.	229.984	15.165	0.	0.	0.	46.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-12/17/92	40 ##	10.	27.25	140.	0.	1317.885	36.303	0.	0.	50.	79.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	111	4000.	4578.405	40000.	1170.	13675391.88	3698.025	2576.	3200.	4900.	6688.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/97-03/03/97	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	195 ##	5.	6.621	250.	0.	358.587	18.936	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	192	110.5	114.724	356.	40.	3274.609	57.224	49.	76.	128.75	182.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	195 ##	0.15	0.162	2.	0.15	0.018	0.133	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	53 ##	0.	22.547	100.	0.	694.829	26.36	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	197	0.26	0.698	19.36	0.	3.146	1.774	0.14	0.17	0.505	1.398
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	180	9.	31.033	349.	0.	2784.088	52.764	2.	4.	27.	92.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	194 ##	50.	67.629	100.	10.	610.929	24.717	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0065

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	195	3	0.02	74	0	0.00	46	0	0.00	33	3	0.09	42	0	0.00
00403	PH, LAB	Fresh Chronic	9.	170	5	0.03	62	0	0.00	37	3	0.08	29	1	0.03	42	1	0.02
		Other-Lo Lim.	6.5	170	8	0.05	62	7	0.11	37	1	0.03	29	0	0.00	42	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	197	8	0.04	74	2	0.03	46	4	0.09	34	1	0.03	43	1	0.02
		Other-Lo Lim.	6.5	197	10	0.05	74	9	0.12	46	1	0.02	34	0	0.00	43	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	0	0.00							2	0	0.00			
		Drinking Water	0.2	2	0	0.00							2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
		Drinking Water	250.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0065

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	195	0	0.00	74	0	0.00	45	0	0.00	33	0	0.00	43	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	1	0.09	5	0	0.00	3	1	0.33	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	40	0	0.00	14	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00							2	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	17 &	3	0.18	9	2	0.22	3	0	0.00	2	1	0.50	3	0	0.00
		Drinking Water	5.	17 &	3	0.18	9	2	0.22	3	0	0.00	2	1	0.50	3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	196 &	7	0.04	73	1	0.01	45	4	0.09	35	0	0.00	43	2	0.05
		Drinking Water	1300.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	198	6	0.03	74	3	0.04	46	1	0.02	35	1	0.03	43	1	0.02
		Drinking Water	15.	71 &	38	0.54	31	19	0.61	17	7	0.41	10	5	0.50	13	7	0.54
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	197	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	42	0	0.00
		Drinking Water	100.	197	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	42	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	2	0	0.00							2	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
		Drinking Water	5000.	198	0	0.00	74	0	0.00	46	0	0.00	35	0	0.00	43	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00							2	0	0.00			
		Drinking Water	50.	2	0	0.00							2	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	0	0.00	11	0	0.00	10	0	0.00	6	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	180	32	0.18	72	16	0.22	39	9	0.23	30	5	0.17	39	2	0.05

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	17	16.5	14.506	19.9	7.3	14.389	3.793	7.86	10.6	17.2	18.06
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	17	0.6	0.7	3.	0.	0.445	0.667	0.	0.5	0.85	1.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	17	26.	28.412	64.	11.	155.632	12.475	15.8	20.	32.5	49.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	17	98.	104.882	209.	84.	786.11	28.038	85.6	94.5	106.	133.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	17	9.2	9.624	11.4	8.4	0.951	0.975	8.72	9.	10.55	11.4
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	17	7.7	7.676	7.9	7.5	0.014	0.12	7.5	7.6	7.8	7.82
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	17	7.7	7.661	7.9	7.5	0.015	0.121	7.5	7.6	7.8	7.82
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	17	0.02	0.022	0.032	0.013	0.	0.006	0.015	0.016	0.025	0.032
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	17	36.	35.824	49.	24.	32.029	5.659	26.4	33.5	38.5	43.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	17	21.	20.412	30.	0.	39.882	6.315	12.	19.	23.	26.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	17	5.	5.824	16.	0.	15.529	3.941	0.8	3.5	7.	12.8
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	17 ##	0.01	0.067	1.	0.	0.058	0.24	0.	0.01	0.01	0.208
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	17 ##	0.	0.041	0.3	0.	0.006	0.08	0.	0.	0.1	0.14
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	17	0.05	0.085	0.4	0.	0.015	0.121	0.	0.	0.115	0.312
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	17	41.	45.235	99.	37.	201.566	14.197	37.8	40.	44.5	59.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	17	12.5	13.518	29.1	11.	17.242	4.152	11.08	11.9	13.2	18.06
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	17	2.4	2.688	6.1	2.1	0.826	0.909	2.18	2.3	2.8	3.54
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	17	0.79	0.841	1.32	0.59	0.039	0.198	0.622	0.705	0.96	1.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	17	1.38	1.547	3.55	1.03	0.315	0.561	1.11	1.275	1.685	2.15
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	17	0.7	0.9	3.	0.4	0.44	0.663	0.4	0.5	1.	2.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	17	8.9	12.547	49.	7.	104.829	10.239	7.	7.3	13.6	25.96
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	17 ##	0.1	0.186	1.34	0.1	0.091	0.302	0.1	0.1	0.1	0.524
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	17 ##	0.	2.353	20.	0.	31.618	5.623	0.	0.	0.	12.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	17 ##	0.	1.765	20.	0.	27.941	5.286	0.	0.	0.	12.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	17 ##	0.	2.941	40.	0.	97.059	9.852	0.	0.	0.	16.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	17 ##	0.	2.647	15.	0.	25.368	5.037	0.	0.	5.	11.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	17	60.	61.765	120.	30.	440.441	20.987	38.	50.	70.	96.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	17	10.	17.647	80.	0.	544.118	23.326	0.	0.	35.	56.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	17	50.	59.412	100.	50.	255.882	15.996	50.	50.	65.	92.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	17	30.	34.118	90.	0.	325.735	18.048	16.	30.	40.	58.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	17 ##	0.	2.941	20.	0.	34.559	5.879	0.	0.	5.	12.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	17 ##	0.	4.706	20.	0.	38.971	6.243	0.	0.	10.	12.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	17	110.	120.588	220.	50.	2555.882	50.556	58.	85.	155.	220.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	17	40.	46.471	130.	20.	1011.765	31.808	20.	20.	60.	106.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	17	3210.	3150.588	4000.	2240.	215505.882	464.226	2440.	2835.	3520.	3736.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	17 ##	0.	7.059	90.	0.	472.059	21.727	0.	0.	5.	26.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	17	49.	53.118	118.	43.	294.61	17.164	43.8	46.	52.5	69.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	17	0.24	0.243	0.44	0.14	0.004	0.065	0.148	0.21	0.265	0.32
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	17	7.	7.	19.	0.	21.25	4.61	0.	3.5	9.	13.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	42	14.75	14.069	19.	6.3	11.342	3.368	8.76	11.125	17.	17.74
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	42	1.	2.243	21.	0.4	15.665	3.958	0.7	0.875	2.	4.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	42	99.5	350.024	3440.	5.	409176.268	639.669	11.	19.75	421.75	986.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	42	161.5	189.81	513.	29.	13682.256	116.971	82.2	89.	253.	381.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	42	0.	0.143	1.	0.	0.125	0.354	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	42	9.4	9.514	12.	7.9	0.948	0.973	8.4	8.775	10.175	11.04
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	32	7.75	7.1	9.4	4.3	2.263	1.504	4.5	6.375	7.975	8.34

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	32	7.747	5.155	9.4	4.3	6.166	2.483	4.5	6.375	7.975	8.34
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	32	0.018	6.991	50.119	0.	203.95	14.281	0.005	0.011	0.439	31.623
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	42	7.5	7.133	9.5	4.2	1.894	1.376	4.53	6.825	7.725	8.86
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	42	7.5	5.228	9.5	4.2	5.614	2.369	4.53	6.825	7.725	8.86
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	42	0.032	5.919	63.096	0.	211.753	14.552	0.002	0.019	0.157	29.672
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	42	30.5	32.571	220.	0.	1214.934	34.856	0.	16.5	39.25	55.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	42 ##	0.05	5.161	78.	0.05	296.89	17.231	0.05	0.05	0.05	10.2
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	42	19.	21.062	134.	0.	552.561	23.507	0.	7.5	24.	36.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	42	28.	73.09	616.	0.	12573.768	112.133	2.	5.5	103.75	188.6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	42 ##	0.01	2.27	34.	0.	39.116	6.254	0.	0.01	0.45	8.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	42 ##	0.015	0.082	0.34	0.01	0.008	0.091	0.01	0.01	0.148	0.214
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	42	0.27	0.549	2.41	0.	0.39	0.625	0.	0.058	0.913	1.642
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	42	0.13	0.226	1.65	0.	0.115	0.34	0.02	0.029	0.28	0.438
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	42	71.5	85.381	241.	31.	3345.022	57.836	37.	40.	89.25	185.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	42	23.4	27.171	93.5	8.4	351.287	18.743	10.82	12.25	32.075	55.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	42	2.3	2.257	3.5	1.	0.357	0.598	1.36	1.9	2.55	3.07
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	42	3.315	4.726	21.48	0.49	24.862	4.986	0.583	0.74	7.62	11.879
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	42	2.905	3.61	11.18	0.99	7.592	2.755	1.153	1.398	4.738	8.452
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	42	1.	1.152	3.	0.5	0.345	0.587	0.7	0.8	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	42	19.9	33.552	122.	6.8	895.932	29.932	9.98	12.8	45.4	85.94
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	42 ##	0.165	0.342	1.	0.1	0.082	0.286	0.1	0.1	0.553	0.777
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	42	10.	21.429	160.	0.	1222.3	34.961	0.	0.	30.	47.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	42	10.	9.643	60.	0.	178.528	13.361	0.	0.	10.	30.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	42 ##	5.	12.619	100.	0.	478.339	21.871	0.	0.	20.	30.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	42 ##	0.	4.881	30.	0.	51.815	7.198	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	42	60.	189.524	1880.	10.	106619.28	326.526	30.	40.	195.	458.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	42	20.	26.429	100.	0.	758.885	27.548	0.	8.75	30.	87.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	42	100.	132.619	430.	30.	8531.998	92.369	40.	50.	192.5	240.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	42	50.	75.714	220.	10.	3317.77	57.6	20.	37.5	110.	167.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	42 ##	0.	5.238	40.	0.	74.332	8.622	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	42	10.	15.119	90.	0.	346.937	18.626	0.	0.	22.5	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	42	2305.	4363.095	27100.	40.	31616680.43	5622.871	70.	170.	7140.	11331.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	42	120.	930.714	6800.	20.	3007436.063	1734.196	30.	67.5	700.	4071.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	42	3300.	4000.952	8600.	1170.	3534125.9	1879.927	2012.	2875.	5100.	6870.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	42 ##	0.	10.833	250.	0.	1473.069	38.381	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	42	97.5	130.143	356.	40.	8747.686	93.529	44.	49.	192.5	289.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	42 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	42	0.605	1.877	19.36	0.	12.477	3.532	0.15	0.293	1.808	5.118
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	42	28.5	59.286	200.	2.	3987.429	63.146	5.	11.5	92.25	191.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	42 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	28	14.55	14.075	19.6	7.2	17.5	4.183	8.57	9.425	18.1	19.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	27	2.	1.807	8.	0.3	2.002	1.415	0.84	1.	2.	3.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	28	18.	36.196	193.	0.5	1701.562	41.25	5.	10.	61.25	85.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	28	176.	213.714	489.	133.	7583.397	87.083	136.9	150.75	257.75	340.1
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	28	8.35	8.618	11.4	6.8	1.304	1.142	7.39	7.575	9.625	10.3
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	28	7.65	7.582	8.1	7.1	0.066	0.257	7.19	7.4	7.7	7.91
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	28	7.647	7.508	8.1	7.1	0.072	0.268	7.19	7.4	7.7	7.91
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	28	0.023	0.031	0.079	0.008	0.	0.02	0.012	0.02	0.04	0.065
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	28	7.8	7.757	9.4	6.4	0.4	0.633	7.05	7.4	8.	8.47
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	28	7.8	7.343	9.4	6.4	0.578	0.76	7.05	7.4	8.	8.47

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Annual Analysis for 1992 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	28	0.016	0.045	0.398	0.	0.007	0.084	0.004	0.01	0.04	0.097
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	28	43.5	42.393	80.	13.	251.507	15.859	20.8	30.25	53.	58.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	27	26.	26.333	51.	8.	117.462	10.838	12.8	18.	33.	48.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	28	12.	22.614	154.	0.1	1325.691	36.41	1.81	4.25	19.	86.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	21	0.2	0.667	4.2	0.	1.161	1.078	0.	0.005	0.85	2.48
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	28	0.05	0.132	0.58	0.01	0.028	0.167	0.01	0.01	0.268	0.405
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	28	0.52	0.763	3.05	0.15	0.447	0.668	0.205	0.32	0.92	1.644
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	28 ##	0.025	0.076	0.55	0.	0.016	0.127	0.	0.025	0.061	0.314
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	28	72.5	80.572	199.	0.015	1652.535	40.651	45.6	55.	101.	156.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	28	25.25	29.125	77.7	0.01	264.383	16.26	15.8	17.95	37.825	59.19
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	28	1.8	1.761	2.7	0.005	0.237	0.487	1.29	1.525	2.	2.31
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	28	5.67	6.463	13.1	0.01	11.797	3.435	2.736	3.875	8.825	11.852
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	28	4.225	4.759	9.	2.06	3.804	1.95	2.498	3.113	6.135	7.953
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	28	0.95	1.157	4.	0.6	0.532	0.729	0.69	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	28	42.2	53.889	176.	10.8	1686.285	41.064	16.7	22.55	77.625	116.55
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	28 ##	0.1	0.267	1.12	0.05	0.111	0.334	0.05	0.063	0.3	1.001
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	28 ##	5.	10.321	60.	0.	156.967	12.529	0.	2.75	18.	20.8
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	28 ##	5.	6.429	30.	0.	38.772	6.227	0.	4.25	8.	13.6
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	28 ##	5.	6.714	40.	0.	95.397	9.767	0.	3.25	5.	13.9
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	28 ##	5.	5.036	50.	0.	91.517	9.566	0.	0.	5.	10.6
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	28	30.	35.429	119.	5.	813.661	28.525	9.5	17.	40.	91.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	28 ##	25.	28.179	120.	0.	652.374	25.542	3.6	18.5	28.75	46.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	28	70.	86.786	500.	10.	8080.619	89.892	26.	40.	108.75	140.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	28	34.	53.571	130.	10.	1418.18	37.659	18.1	27.	80.	121.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	28 ##	5.	4.25	20.	0.	15.898	3.987	0.	0.25	5.	5.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	28	10.	15.607	50.	0.	210.914	14.523	0.	5.	30.	40.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	28	401.5	699.	4100.	93.	657097.259	810.615	185.	317.	727.5	1627.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	28	80.	90.643	200.	30.	2027.868	45.032	30.	61.	110.	167.9
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	28	4650.	6242.964	40000.	3400.	45024843.813	6710.055	3760.	4222.5	6184.75	6870.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	28 ##	5.	6.286	20.	0.	21.545	4.642	0.	5.	9.	14.2
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	22	106.	130.727	339.	58.	4563.636	67.555	73.2	83.75	181.5	226.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	28 ##	0.15	0.216	2.	0.15	0.122	0.35	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	28	0.335	0.557	3.	0.14	0.393	0.627	0.188	0.273	0.46	1.767
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	28	18.	27.75	170.	2.	1240.935	35.227	3.	10.	27.	86.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	28 ##	50.	66.786	100.	10.	844.841	29.066	46.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	27	14.4	13.97	20.6	7.1	16.422	4.052	8.7	10.7	17.3	20.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	24	1.	1.946	5.	0.5	1.926	1.388	0.6	0.825	3.	4.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	27	10.	10.093	25.	2.5	19.462	4.412	5.	10.	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	27	216.	222.889	489.	121.	5850.872	76.491	131.6	169.	258.	308.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	27	0.	0.074	1.	0.	0.071	0.267	0.	0.	0.	0.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	26	8.25	8.281	10.3	5.8	0.911	0.955	7.03	7.85	8.8	9.41
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	27	7.6	7.885	11.	6.7	0.75	0.866	7.18	7.4	8.	9.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	27	7.6	7.494	11.	6.7	0.909	0.953	7.18	7.4	8.	9.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	27	0.025	0.032	0.2	0.	0.002	0.04	0.001	0.01	0.04	0.066
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	27	7.9	7.956	10.4	7.	0.583	0.763	7.18	7.3	8.3	9.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	27	7.9	7.597	10.4	7.	0.716	0.846	7.18	7.3	8.3	9.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	27	0.013	0.025	0.1	0.	0.001	0.026	0.001	0.005	0.05	0.066
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	27	47.	49.037	82.	20.	280.114	16.737	27.	33.	59.	75.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	27 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	27	29.	28.593	50.	5.	120.635	10.983	13.6	20.	35.	46.

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Annual Analysis for 1993 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	27	5.	28.744	483.	0.1	8591.979	92.693	2.	3.	15.	53.4
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	13	0.6	1.212	6.	0.	2.989	1.729	0.	0.	1.7	4.92
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	27 ##	0.01	0.08	0.42	0.01	0.019	0.138	0.01	0.01	0.01	0.37
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	27	1.2	1.871	8.46	0.025	4.116	2.029	0.5	0.81	1.6	5.366
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	27 ##	0.05	0.052	0.1	0.05	0.	0.01	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	27	84.	85.963	130.	42.	696.883	26.399	45.6	67.	110.	122.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	27	29.7	30.13	49.	13.5	103.562	10.177	15.84	23.	34.7	46.48
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	27	2.4	2.559	5.3	0.9	1.343	1.159	1.28	1.7	3.1	4.78
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	27	4.	4.326	17.	1.2	8.526	2.92	1.98	2.7	4.7	6.62
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	27	5.11	4.934	7.8	1.6	2.299	1.516	2.7	3.8	5.9	6.9
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	27	1.	1.389	5.	0.6	0.858	0.926	0.78	0.9	2.	2.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	27	39.	47.742	120.	0.025	1297.185	36.016	12.8	19.	62.	119.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	27	0.2	0.194	0.4	0.05	0.016	0.128	0.05	0.05	0.3	0.4
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	26 ##	7.5	14.808	60.	5.	176.962	13.303	5.	5.	20.	33.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	27 ##	5.	5.37	10.	5.	1.781	1.334	5.	5.	5.	6.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-11/15/93	23 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	27 ##	5.	7.037	20.	5.	23.575	4.855	5.	5.	5.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	27	40.	72.963	390.	5.	7681.268	87.643	9.	20.	80.	210.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	27 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	26	55.	63.462	250.	20.	2071.538	45.514	20.	40.	82.5	93.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	26	50.	51.731	120.	5.	1031.885	32.123	5.	20.	80.	90.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	27 ##	5.	6.296	20.	5.	16.524	4.065	5.	5.	5.	12.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	27	10.	17.593	60.	5.	179.558	13.4	5.	10.	20.	34.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	26	195.	392.308	3300.	40.	449402.462	670.375	47.	130.	312.5	1005.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	27	70.	100.926	390.	5.	8976.994	94.747	28.	40.	120.	274.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-11/15/93	24	4600.	4658.333	6700.	3200.	603405.797	776.792	3650.	4225.	4975.	5700.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	27 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	27	118.	122.889	207.	69.	1731.179	41.607	70.	79.	149.	193.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	26	0.26	0.419	3.1	0.1	0.327	0.572	0.144	0.2	0.415	0.673
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	23	5.	17.826	200.	2.	1764.423	42.005	2.	3.	12.	50.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	31	12.9	13.187	19.	6.5	14.025	3.745	7.44	10.2	17.	18.72
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	26	1.	1.842	7.	0.5	2.359	1.536	0.7	1.	2.	3.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	32	10.	8.203	25.	2.5	29.127	5.397	2.5	2.5	10.	15.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	31	204.	191.645	294.	93.	2124.037	46.087	103.4	172.	219.	235.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	32	0.	0.25	1.	0.	0.194	0.44	0.	0.	0.75	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	31	7.	6.813	9.6	1.4	4.096	2.024	3.62	6.	8.3	9.2
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	31	8.	7.935	8.3	7.2	0.068	0.26	7.52	7.9	8.1	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	31	8.	7.84	8.3	7.2	0.077	0.278	7.52	7.9	8.1	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	31	0.01	0.014	0.063	0.005	0.	0.013	0.006	0.008	0.013	0.03
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	31	8.	7.961	8.4	7.5	0.042	0.206	7.7	7.8	8.1	8.28
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	31	8.	7.915	8.4	7.5	0.045	0.211	7.7	7.8	8.1	8.28
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	31	0.01	0.012	0.032	0.004	0.	0.006	0.005	0.008	0.016	0.02
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	32	83.	80.406	120.	26.	531.41	23.052	41.8	63.	100.	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	32 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-12/19/94	31	51.	49.484	73.	16.	196.191	14.007	24.8	38.	61.	61.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	32	6.	24.563	234.	1.	2783.609	52.76	1.3	3.	11.5	95.9
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-12/19/94	17 ##	0.	0.124	1.3	0.	0.129	0.36	0.	0.	0.	0.9
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	32 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	32	0.4	0.46	2.1	0.025	0.172	0.415	0.045	0.173	0.59	0.918

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Annual Analysis for 1994 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	32 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	32	99.	93.031	120.	36.	558.612	23.635	43.3	84.75	110.	117.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	32	33.95	31.844	42.7	11.	73.449	8.57	14.	29.05	38.225	40.11
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	32	3.5	3.319	4.1	1.9	0.332	0.576	2.13	3.125	3.7	3.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	32	1.55	1.68	3.6	0.96	0.233	0.483	1.3	1.4	1.8	2.27
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	32	2.45	2.488	3.5	1.7	0.21	0.458	1.9	2.125	2.9	3.1
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	32	1.	0.975	2.	0.5	0.091	0.302	0.66	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	32	13.5	14.181	27.	3.7	18.444	4.295	9.86	11.25	17.75	19.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	32 ##	0.05	0.097	0.3	0.05	0.006	0.079	0.05	0.05	0.175	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	32 ##	5.	15.781	240.	5.	1698.564	41.214	5.	5.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	32 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	32 ##	5.	5.938	30.	5.	20.06	4.479	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	32	50.	57.5	250.	20.	1529.032	39.103	30.	40.	70.	80.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	32 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	32	40.	54.063	150.	30.	670.06	25.886	30.	40.	67.5	87.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	32	30.	35.781	60.	5.	156.628	12.515	20.	30.	40.	57.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	31 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	32 ##	7.5	15.313	70.	5.	328.931	18.136	5.	5.	17.5	47.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	32	75.	271.25	2200.	5.	221809.677	470.967	13.	22.5	280.	899.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	32	10.	28.438	180.	5.	1950.706	44.167	5.	5.	20.	94.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	32 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	32	108.5	103.406	143.	52.	469.346	21.664	61.3	95.	117.75	124.5
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	32 ##	0.15	0.155	0.3	0.15	0.001	0.027	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	32	0.19	0.343	1.3	0.12	0.108	0.329	0.14	0.16	0.328	1.055
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	25	4.	26.36	200.	2.	2801.24	52.927	2.	2.5	22.	110.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	32 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	25	13.6	13.944	27.8	5.9	19.503	4.416	8.18	11.1	16.05	18.72
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	22	1.	1.223	4.	0.3	0.548	0.74	0.76	1.	1.	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	26	5.	7.308	25.	2.5	42.962	6.555	2.5	4.375	6.25	21.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	25	232.	217.84	279.	33.	2611.473	51.103	142.4	204.5	243.5	270.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	27	0.	0.111	1.	0.	0.103	0.32	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	25	7.8	7.864	9.9	4.5	2.356	1.535	5.76	6.65	9.5	9.74
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	26	8.	7.927	8.3	7.	0.084	0.289	7.47	7.8	8.1	8.23
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	26	8.	7.798	8.3	7.	0.101	0.318	7.47	7.8	8.1	8.23
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	26	0.01	0.016	0.1	0.005	0.	0.019	0.006	0.008	0.016	0.034
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	26	7.95	8.008	8.6	7.5	0.054	0.231	7.74	7.9	8.2	8.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	26	7.947	7.95	8.6	7.5	0.057	0.239	7.74	7.9	8.2	8.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	26	0.011	0.011	0.032	0.003	0.	0.006	0.005	0.006	0.013	0.019
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	26	95.5	91.	110.	43.	174.24	13.2	74.8	84.25	99.	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	27	8.	21.956	204.	0.3	2315.042	48.115	0.9	3.	15.	75.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	26 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	26	0.445	0.54	2.2	0.025	0.248	0.498	0.025	0.225	0.65	1.36
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	26	105.	99.5	120.	60.	262.82	16.212	74.5	86.5	110.	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	27	35.4	33.178	40.7	5.	62.228	7.888	20.84	29.1	38.2	40.02
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	26	3.45	3.392	4.8	2.4	0.314	0.561	2.57	3.05	3.7	4.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	26	1.4	1.477	2.7	1.	0.127	0.357	1.1	1.2	1.65	1.9
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	26	2.2	2.075	2.7	0.92	0.28	0.529	0.967	2.	2.425	2.6
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	26	1.	1.05	2.	0.8	0.083	0.287	0.8	1.	1.	1.3
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	26	13.	15.227	36.	9.5	46.841	6.844	9.8	11.	17.	26.6

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Annual Analysis for 1995 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	26 ##	0.05	0.083	0.3	0.05	0.004	0.062	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	26 ##	5.	5.5	13.	5.	3.3	1.817	5.	5.	5.	6.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	26	30.	48.115	297.	5.	3393.146	58.251	13.5	22.25	40.75	107.8
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	26	48.	62.423	186.	5.	1473.134	38.381	38.8	40.	74.	135.7
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	26	38.	33.308	61.	5.	281.342	16.773	5.	23.75	43.25	55.5
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	26 ##	5.	5.192	10.	5.	0.962	0.981	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	26 ##	5.	9.846	79.	5.	227.175	15.072	5.	5.	6.25	18.1
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	26	93.5	149.038	656.	13.	28975.238	170.221	20.	42.25	148.5	493.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	26	43.5	44.308	134.	5.	1417.742	37.653	5.	5.	62.	111.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	26	112.	112.846	143.	72.	220.775	14.859	97.8	103.75	123.	133.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	26 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	26	0.18	0.28	0.9	0.005	0.057	0.238	0.14	0.15	0.328	0.853
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	20	8.	9.7	42.	2.	89.905	9.482	2.1	4.25	10.75	25.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	22	15.45	14.532	18.	9.4	6.508	2.551	10.77	12.45	16.325	18.
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	21	2.	2.238	6.	1.	1.59	1.261	1.	1.5	2.5	4.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	22	5.	10.568	40.	2.5	78.531	8.862	5.	5.	16.25	20.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	22	234.5	243.909	453.	112.	4728.277	68.762	185.8	211.5	256.5	362.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	22	0.	0.136	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	22	8.	8.145	9.6	6.6	0.392	0.626	7.18	8.	8.425	8.97
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	22	8.	7.995	8.4	7.	0.097	0.311	7.63	7.9	8.225	8.37
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	22	8.	7.844	8.4	7.	0.121	0.348	7.63	7.9	8.225	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	22	0.01	0.014	0.1	0.004	0.	0.02	0.004	0.006	0.013	0.024
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	22	8.1	8.055	8.6	7.6	0.072	0.269	7.6	7.9	8.2	8.44
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	22	8.1	7.976	8.6	7.6	0.079	0.28	7.6	7.9	8.2	8.44
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	22	0.008	0.011	0.025	0.003	0.	0.007	0.004	0.006	0.013	0.025
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	22	97.5	100.273	140.	80.	192.113	13.86	83.5	90.5	110.	117.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	22 ##	0.05	0.07	0.5	0.05	0.009	0.096	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	22	8.5	34.95	301.	0.9	4808.274	69.342	1.	1.75	33.5	131.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	22 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	22	0.59	1.251	6.2	0.33	1.934	1.391	0.359	0.47	1.625	3.26
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	22 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	22	110.	108.364	140.	72.	200.909	14.174	95.	98.	120.	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	22	37.6	35.836	48.5	3.3	85.182	9.229	22.96	34.475	41.55	42.74
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	22	3.6	3.7	5.8	2.9	0.361	0.601	3.13	3.275	3.925	4.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	22	1.2	2.056	11.	0.91	4.554	2.134	0.97	1.075	2.55	3.18
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	22	1.75	2.077	4.1	1.2	0.704	0.839	1.23	1.5	2.55	3.76
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	22	1.	1.541	6.	0.9	1.218	1.104	1.	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	22	13.	15.636	35.	10.	36.433	6.036	11.	12.	17.75	23.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	21 ##	0.05	0.117	0.3	0.05	0.008	0.091	0.05	0.05	0.2	0.28
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	21 ##	5.	5.714	20.	5.	10.714	3.273	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	22 ##	5.	9.091	50.	5.	175.325	13.241	5.	5.	5.	36.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	22	15.	48.045	668.	5.	19477.95	139.563	5.	5.	32.75	63.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	22 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	22	32.5	39.682	120.	5.	662.323	25.736	16.	26.	46.75	82.1
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	22	19.5	33.682	271.	3.	3052.513	55.25	8.	15.	28.	70.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	22 ##	17.	21.727	70.	5.	365.065	19.107	5.	5.	38.25	49.1
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	22	149.	265.182	1700.	11.	157447.489	396.797	41.6	58.25	211.5	912.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	22	32.5	56.227	433.	5.	7643.422	87.427	8.	18.75	56.75	88.7
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	22	124.	127.364	182.	102.	373.481	19.326	105.9	113.	137.	156.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	22	0.21	0.424	1.66	0.005	0.261	0.511	0.005	0.098	0.49	1.37
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	21	6.	41.476	349.	2.	6531.262	80.816	2.	3.	47.5	140.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1997 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	4	13.9	13.925	16.5	11.4	5.462	2.337	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	3	1.	2.	4.	1.	3.	1.732	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	4	15.	16.25	30.	5.	106.25	10.308	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	4	172.	183.75	272.	119.	5496.25	74.137	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	4	0.	0.25	1.	0.	0.25	0.5	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	4	10.3	10.4	11.	10.	0.207	0.455	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	4	8.05	8.05	8.4	7.7	0.083	0.289	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	4	8.047	7.98	8.4	7.7	0.09	0.3	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	4	0.009	0.01	0.02	0.004	0.	0.007	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	4	7.65	7.75	8.4	7.3	0.217	0.465	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	4	7.647	7.606	8.4	7.3	0.244	0.494	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	4	0.023	0.025	0.05	0.004	0.	0.019	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	4	86.	71.25	89.	24.	996.917	31.574	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	4 ##	0.275	0.275	0.5	0.05	0.068	0.26	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	4	6.5	14.5	43.	2.	369.667	19.227	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	4	0.79	0.94	1.8	0.38	0.395	0.629	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	4 ##	0.05	0.413	1.5	0.05	0.526	0.725	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	4	105.	94.5	120.	48.	1027.667	32.057	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	4	37.	32.575	41.	15.3	138.116	11.752	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	4	2.95	3.075	4.	2.4	0.463	0.68	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	4	2.45	2.525	3.1	2.1	0.189	0.435	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	4	2.55	3.1	4.9	2.4	1.46	1.208	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	4	2.	2.	3.	1.	0.667	0.816	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	4	15.5	18.	31.	10.	95.333	9.764	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	2 ##	183.5	183.5	362.	5.	63724.5	252.437	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	4	40.5	57.25	132.	16.	2820.917	53.112	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	4 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	4	18.5	23.75	53.	5.	434.25	20.839	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	4 ##	12.	17.	39.	5.	258.667	16.083	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	4 ##	50.	53.25	94.	19.	951.583	30.848	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	4	107.5	107.	208.	5.	6870.	82.885	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	4	128.	155.75	362.	5.	22508.917	150.03	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	4	111.	104.75	138.	59.	1092.917	33.059	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	2 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	4	0.085	0.118	0.26	0.04	0.011	0.104	**	**	**	**

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Annual Analysis for 1997 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	4	4.	16.5	57.	1.	733.667	27.086	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	2 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	74	17.05	17.027	27.8	9.4	5.78	2.404	14.3	15.775	18.325	19.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	71	1.	1.2	6.	0.	0.936	0.967	0.5	0.7	1.	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	74	15.	90.243	1285.	0.5	39633.2	199.081	2.5	5.	36.5	357.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	74	225.	231.176	513.	33.	9352.804	96.71	99.5	172.75	273.75	366.5
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	74	0.	0.081	1.	0.	0.076	0.275	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	74	8.4	8.038	10.3	4.1	1.742	1.32	5.95	7.4	8.925	9.35
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	62	7.75	7.406	8.4	4.3	1.179	1.086	4.69	7.4	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	62	7.747	5.442	8.4	4.3	5.1	2.258	4.69	7.4	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	62	0.018	3.611	50.119	0.004	116.029	10.772	0.008	0.01	0.04	21.36
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	74	7.8	7.48	9.4	4.2	1.139	1.067	5.55	7.5	8.	8.25
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	74	7.8	5.474	9.4	4.2	5.219	2.284	5.55	7.5	8.	8.25
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	74	0.016	3.361	63.096	0.	127.637	11.298	0.006	0.01	0.032	10.175
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	74	48.5	58.595	140.	0.	1335.532	36.545	3.	35.75	99.	107.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	74 ##	0.05	2.951	78.	0.05	173.245	13.162	0.05	0.05	0.05	0.525
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	74	8.	34.665	311.	0.	3716.996	60.967	2.	4.	40.	112.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	74 ##	0.01	0.06	0.58	0.01	0.011	0.104	0.01	0.01	0.091	0.18
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	74	0.47	0.863	6.2	0.	1.276	1.13	0.	0.1	1.065	1.8
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	74 ##	0.05	0.123	1.65	0.	0.076	0.276	0.015	0.025	0.05	0.3
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	74	87.5	96.892	241.	39.	1952.618	44.188	42.5	69.5	117.	162.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	74	30.45	32.465	93.5	11.9	229.441	15.147	12.95	23.35	40.125	48.65
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	74	2.65	2.795	6.1	1.	0.958	0.979	1.65	2.1	3.5	4.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	74	3.15	4.394	21.48	0.01	16.903	4.111	0.89	1.29	6.18	10.14
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	74	3.18	3.576	11.03	0.92	4.493	2.12	1.355	1.79	4.903	6.555
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	74	1.	1.214	4.	0.5	0.427	0.653	0.7	0.9	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	74	18.	31.973	176.	6.8	1017.69	31.901	8.75	11.6	40.55	81.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	74	0.1	0.244	1.34	0.05	0.069	0.262	0.05	0.05	0.305	0.615
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	14	20.	18.143	40.	0.	129.363	11.374	2.5	10.	20.25	40.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	74 ##	5.	19.689	362.	0.	2779.888	52.725	0.	5.	20.	35.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	14 ##	2.5	3.214	10.	0.	13.874	3.725	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	74 ##	5.	6.824	60.	0.	81.9	9.05	0.	5.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	74 ##	5.	5.757	50.	0.	45.255	6.727	0.	3.75	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	74	50.	108.892	820.	5.	27896.18	167.021	12.5	28.25	80.	320.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	74 ##	50.	37.162	120.	0.	508.275	22.545	2.5	23.75	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	73	60.	88.904	500.	5.	6443.088	80.269	27.2	40.	100.	206.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	74	30.	57.189	271.	5.	3010.073	54.864	10.	20.	80.	140.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	20 ##	0.	8.5	50.	0.	239.737	15.483	0.	0.	8.75	47.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	74 ##	5.	4.797	40.	0.	29.753	5.455	0.	0.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	19 ##	0.	1.842	10.	0.	8.918	2.986	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	74	10.	20.189	94.	0.	473.443	21.759	0.	5.	30.	48.5
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	73	190.	1621.493	11520.	5.	8107079.781	2847.293	40.	100.	2135.	7044.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	74	70.	491.703	6800.	5.	1745680.212	1321.242	7.5	37.5	160.	1270.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	74 ##	5.	5.946	90.	0.	116.216	10.78	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	71	123.	136.113	356.	47.	5093.13	71.366	49.6	103.	149.	245.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	74 ##	0.15	0.153	0.25	0.15	0.	0.017	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	73	0.32	0.697	5.58	0.005	0.852	0.923	0.144	0.2	0.715	1.81
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	72	12.	37.764	349.	0.	3487.084	59.052	2.	5.25	44.5	100.7
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	74 ##	50.	69.865	100.	10.	705.461	26.561	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	46	10.4	10.391	14.9	6.5	3.907	1.977	7.84	8.9	12.	12.83
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	41	1.	2.449	21.	0.5	15.021	3.876	0.7	1.	2.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	46	10.	181.424	3440.	2.5	370937.789	609.047	2.5	5.	21.25	415.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	46	197.5	183.152	340.	29.	4851.51	69.653	97.7	126.	238.25	271.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	46	0.	0.174	1.	0.	0.147	0.383	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	46	9.4	9.23	11.4	5.8	1.685	1.298	7.64	8.2	10.125	11.23
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	37	7.9	7.781	9.4	6.3	0.397	0.63	7.	7.4	8.	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	37	7.9	7.373	9.4	6.3	0.568	0.754	7.	7.4	8.	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	37	0.013	0.042	0.501	0.	0.007	0.086	0.005	0.01	0.04	0.1
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	46	7.9	7.857	9.5	6.4	0.445	0.667	7.17	7.5	8.1	8.96
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	46	7.9	7.421	9.5	6.4	0.639	0.8	7.17	7.5	8.1	8.96
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	46	0.013	0.038	0.398	0.	0.006	0.074	0.001	0.008	0.032	0.068
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	46	56.	62.326	220.	17.	1423.914	37.735	27.	31.	95.	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	46 ##	0.05	0.06	0.5	0.05	0.004	0.066	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	46	9.5	47.176	616.	0.	10993.626	104.85	1.	3.	29.	165.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	46 ##	0.01	0.069	0.42	0.01	0.015	0.124	0.01	0.01	0.01	0.312
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	46	0.48	0.755	5.1	0.	0.777	0.881	0.07	0.205	0.93	1.7
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	46 ##	0.05	0.1	1.38	0.	0.041	0.204	0.024	0.05	0.07	0.186
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	46	91.	83.739	177.	0.015	1308.719	36.176	39.7	54.5	110.	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	46	31.35	27.705	60.	0.01	186.846	13.669	11.31	16.025	39.15	42.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	46	2.8	2.968	5.3	0.005	1.251	1.119	1.51	2.3	3.825	4.35
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	46	2.	3.253	15.66	0.58	13.063	3.614	0.647	1.375	3.65	9.11
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	46	2.7	3.422	11.18	1.03	5.463	2.337	1.249	2.1	3.65	8.059
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	46	1.	1.167	6.	0.4	0.754	0.868	0.57	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	46	20.	30.387	122.	3.7	725.523	26.936	9.21	12.975	42.1	79.74
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	45 ##	0.1	0.183	0.89	0.05	0.039	0.196	0.05	0.05	0.25	0.56
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	7 ##	50.	46.429	90.	0.	705.952	26.57	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	8	18.	17.625	30.	5.	85.125	9.226	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	45 ##	5.	14.644	160.	0.	618.416	24.868	0.	5.	20.	24.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	7 ##	5.	2.857	5.	0.	7.143	2.673	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	46 ##	5.	6.5	40.	0.	55.944	7.48	0.	5.	5.	12.7
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	46 ##	5.	7.174	50.	0.	121.836	11.038	0.	0.	5.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	46	46.5	94.739	1880.	5.	74290.908	272.564	19.4	30.75	62.5	109.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	46 ##	50.	36.413	100.	0.	494.07	22.228	0.	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	46	66.5	87.565	430.	5.	6222.962	78.886	32.1	40.	100.	159.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	46	40.	50.565	170.	5.	1275.096	35.708	18.4	30.	63.25	110.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	14 ##	0.	15.714	50.	0.	534.066	23.11	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	46 ##	5.	5.217	30.	0.	27.729	5.266	0.	3.75	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	14 ##	0.	3.929	30.	0.	66.071	8.128	0.	0.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	46	10.	14.022	50.	0.	160.244	12.659	0.	5.	20.	33.7
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	46	172.	1918.891	27100.	11.	26264653.121	5124.905	20.	50.	672.	7489.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	46	40.	153.587	3770.	5.	308091.803	555.06	5.	20.	100.25	176.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	45 ##	5.	10.	250.	0.	1352.273	36.773	0.	2.5	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	43	104.	105.279	259.	43.	1956.777	44.235	47.8	76.	126.	155.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	45 ##	0.15	0.153	0.3	0.15	0.001	0.022	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	14 ##	0.	14.286	50.	0.	549.451	23.44	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	46	0.225	1.227	19.36	0.	11.555	3.399	0.13	0.15	0.548	3.195
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	39	9.	37.846	200.	2.	3577.291	59.81	2.	4.	35.	186.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	45 ##	50.	68.889	100.	50.	601.01	24.516	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	33	11.2	10.485	14.6	5.9	4.842	2.2	7.14	8.7	11.9	13.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	29	2.	2.541	10.	0.7	3.935	1.984	1.	1.	3.	5.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	35	11.	39.9	477.	2.5	7336.335	85.652	4.	10.	25.	100.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	33	176.	173.394	489.	67.	6655.309	81.58	86.4	98.	215.	245.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	35	0.	0.314	1.	0.	0.222	0.471	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	33	9.2	8.555	12.	1.4	6.061	2.462	3.9	8.	10.3	10.96
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	29	7.9	7.993	11.	7.2	0.43	0.656	7.5	7.6	8.1	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	29	7.9	7.79	11.	7.2	0.473	0.688	7.5	7.6	8.1	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	29	0.013	0.016	0.063	0.	0.	0.013	0.004	0.008	0.025	0.032
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	34	7.9	7.844	10.4	7.1	0.327	0.572	7.3	7.475	8.1	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	34	7.9	7.636	10.4	7.1	0.372	0.61	7.3	7.475	8.1	8.2
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	34	0.013	0.023	0.079	0.	0.	0.021	0.006	0.008	0.034	0.05
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	35	53.	54.8	92.	15.	656.576	25.624	23.6	29.	81.	88.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	35 ##	0.05	0.076	0.5	0.05	0.011	0.106	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	35	12.	37.474	483.	0.3	7370.638	85.852	0.92	3.	33.	98.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	35 ##	0.01	0.023	0.37	0.01	0.004	0.061	0.01	0.01	0.01	0.038
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	35	0.5	0.798	8.46	0.	2.032	1.425	0.062	0.21	0.89	1.74
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	35 ##	0.05	0.081	0.55	0.	0.01	0.099	0.048	0.05	0.05	0.168
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	35	87.	76.286	130.	31.	783.151	27.985	36.	44.	95.	105.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	35	29.2	26.271	49.	8.4	121.595	11.027	10.7	14.	34.	38.46
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	35	2.4	2.586	3.9	0.9	0.534	0.731	1.64	2.1	3.2	3.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	35	1.6	2.264	11.35	0.49	4.778	2.186	0.574	1.	2.6	5.232
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	35	2.3	2.569	6.18	0.99	1.694	1.302	1.264	1.7	2.7	5.092
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	35	1.	1.331	5.	0.6	0.79	0.889	0.7	0.9	2.	2.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	35	16.	26.754	120.	8.9	865.234	29.415	11.	12.	22.	82.86
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	33 ##	0.1	0.169	1.12	0.05	0.058	0.24	0.05	0.05	0.2	0.26
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	9	20.	16.889	20.	5.	30.861	5.555	5.	13.5	20.	20.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	33 ##	5.	7.182	60.	0.	102.403	10.119	0.	5.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	8 ##	5.	17.5	110.	0.	1400.	37.417	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	35 ##	5.	5.086	30.	0.	25.257	5.026	0.	5.	5.	8.8
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	35 ##	5.	4.286	15.	0.	9.034	3.006	0.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	35	50.	54.6	210.	5.	2255.835	47.496	5.	30.	60.	113.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	35 ##	50.	42.943	100.	0.	354.291	18.823	9.2	40.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	35	50.	69.686	250.	14.	2401.928	49.009	30.6	40.	100.	144.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	35	40.	44.4	130.	3.	878.894	29.646	8.	29.	50.	90.8
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	13 ##	50.	26.923	50.	0.	673.077	25.944	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	35 ##	5.	5.314	20.	0.	26.104	5.109	0.	5.	5.	14.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	13 ##	5.	2.692	5.	0.	6.731	2.594	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	35 ##	5.	11.857	50.	0.	181.008	13.454	0.	5.	10.	38.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	35	208.	538.743	3300.	5.	539589.961	734.568	32.	53.	730.	1640.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	35	50.	73.543	390.	5.	6338.079	79.612	5.	18.	100.	192.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	33 ##	5.	5.424	14.	0.	9.377	3.062	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	35	99.	100.343	207.	40.	2076.82	45.572	44.8	59.	118.	185.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	33 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	13 ##	50.	26.923	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	35	0.29	0.525	3.1	0.005	0.347	0.589	0.124	0.17	0.61	1.268
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	30	12.5	29.633	200.	2.	1999.551	44.716	3.	5.75	29.75	114.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	33 ##	50.	65.152	100.	50.	544.508	23.335	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-09/24/97	43	15.5	15.293	19.9	10.3	3.779	1.944	12.94	14.	16.4	17.48
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-09/24/97	41	1.	1.71	7.	0.	1.481	1.217	0.72	1.	2.	3.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-09/24/97	43	10.	18.605	68.	5.	305.769	17.486	5.	5.	25.	46.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-09/24/97	43	196.	185.837	331.	81.	4113.52	64.137	90.8	132.	228.	257.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-09/24/97	44	0.	0.091	1.	0.	0.085	0.291	0.	0.	0.	0.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-09/24/97	42	8.3	8.255	10.1	6.2	1.031	1.015	6.66	7.65	8.925	9.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	42	7.95	7.945	9.2	7.1	0.177	0.421	7.26	7.7	8.2	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	42	7.947	7.754	9.2	7.1	0.215	0.463	7.26	7.7	8.2	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	42	0.011	0.018	0.079	0.001	0.	0.019	0.004	0.006	0.02	0.056
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-09/24/97	43	8.	7.993	9.4	7.	0.196	0.443	7.44	7.7	8.2	8.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-09/24/97	43	8.	7.791	9.4	7.	0.238	0.488	7.44	7.7	8.2	8.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-09/24/97	43	0.01	0.016	0.1	0.	0.	0.018	0.003	0.006	0.02	0.037
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-09/24/97	43	63.	65.047	110.	19.	806.712	28.403	30.	39.	93.	100.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	43 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-09/24/97	44	6.	16.748	234.	0.9	1760.219	41.955	1.	3.	11.5	20.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-09/24/97	43 ##	0.01	0.044	0.37	0.01	0.008	0.091	0.01	0.01	0.01	0.188
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-09/24/97	43	0.47	0.677	6.43	0.	1.042	1.021	0.031	0.18	0.77	1.42
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-09/24/97	43 ##	0.05	0.084	0.45	0.	0.011	0.107	0.032	0.05	0.05	0.302
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-09/24/97	43	89.	82.93	156.	37.	957.59	30.945	42.4	51.	110.	120.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-09/24/97	44	30.05	28.118	59.1	5.	142.218	11.926	12.9	16.025	37.45	40.65
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-09/24/97	43	2.7	2.633	3.9	1.3	0.668	0.818	1.5	1.9	3.4	3.66
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-09/24/97	43	1.5	2.418	11.78	0.66	5.391	2.322	0.806	1.1	2.7	4.986
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-09/24/97	43	2.2	2.885	7.66	1.06	3.062	1.75	1.21	1.5	3.98	5.9
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-09/24/97	43	1.	1.021	2.	0.4	0.149	0.386	0.7	0.8	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-09/24/97	43	13.	22.928	130.5	0.025	720.77	26.847	9.8	11.	19.1	49.84
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-09/24/97	43 ##	0.1	0.148	0.99	0.05	0.041	0.201	0.05	0.05	0.1	0.33
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-08/12/96	9	13.	17.	50.	0.	239.75	15.484	0.	5.	25.	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-09/24/97	42 ##	5.	9.429	40.	0.	88.202	9.392	2.2	5.	10.	29.4
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-08/12/96	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-09/24/97	43 ##	5.	4.605	13.	0.	6.959	2.638	0.	5.	5.	6.8
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-09/24/97	43 ##	5.	5.	30.	0.	27.381	5.233	0.	5.	5.	8.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-09/24/97	43	30.	47.023	390.	5.	4431.499	66.57	5.	16.	50.	114.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-09/24/97	43 ##	50.	42.349	90.	0.	370.614	19.251	5.8	37.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-09/24/97	43	40.	47.07	133.	5.	528.162	22.982	22.4	33.	50.	80.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-09/24/97	42	30.5	31.262	71.	0.	288.735	16.992	5.	20.	40.	52.8
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-08/12/96	9 ##	40.	27.222	50.	0.	619.444	24.889	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-09/24/97	42 ##	5.	4.714	10.	0.	7.331	2.708	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-08/12/96	9 ##	5.	5.556	30.	0.	90.278	9.501	0.	0.	5.	30.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-09/24/97	43 ##	5.	11.86	70.	0.	247.885	15.744	0.	5.	10.	34.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-09/24/97	43	140.	195.233	780.	13.	27255.659	165.093	47.	80.	310.	440.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-09/24/97	43	56.	70.698	330.	5.	4890.502	69.932	5.	20.	100.	177.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-09/24/97	43 ##	5.	5.163	20.	0.	14.187	3.767	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-09/24/97	43	105.	100.558	231.	44.	1522.633	39.021	52.	70.	118.	134.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-09/24/97	43 ##	0.15	0.193	2.	0.15	0.08	0.282	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-09/24/97	43	0.23	0.276	1.3	0.005	0.047	0.217	0.134	0.16	0.33	0.456
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-09/24/97	39	5.	12.872	200.	0.	1022.378	31.975	2.	3.	10.	20.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-09/24/97	42 ##	50.	64.286	100.	50.	522.648	22.861	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0066

NPS Station ID: CUGA0066 | LAT/LON: 36.604531/ -83.690338 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: LITTLE YELLOW CREEK: DOWNSTREAM OF TUNNEL CREEK | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_YC5A
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1150 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON LITTLE YELLOW CREEK A SHORT DISTANCE DOWNSTREAM FROM THE CONFLUENCE OF TUNNEL CREEK WITH LITTLE YELLOW CREEK. IT MONITORS THE MAXIMUM IMPACT OF TUNNEL CONSTRUCTION ON LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KENTUCKY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURINGA RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	179	14.6	13.936	23.4	2.7	25.062	5.006	7.	9.7	18.4	20.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	153	2.	6.649	74.	0.	133.269	11.544	0.34	0.7	7.	19.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	179	15.	41.919	1355.	2.5	13668.672	116.913	5.	10.	31.	66.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	179	123.	136.542	410.	9.	5652.575	75.184	44.	77.	193.	235.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	179	0.	0.156	1.	0.	0.133	0.364	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	178	8.55	8.494	12.9	1.2	3.525	1.878	6.09	7.6	9.7	10.62
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	151	7.4	7.441	9.	6.6	0.241	0.491	6.8	7.	7.8	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	151	7.4	7.215	9.	6.6	0.292	0.541	6.8	7.	7.8	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	151	0.04	0.061	0.251	0.001	0.003	0.058	0.01	0.016	0.1	0.158
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	179	7.5	7.474	9.3	6.3	0.285	0.534	6.7	7.1	7.8	8.1
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	179	7.5	7.154	9.3	6.3	0.388	0.623	6.7	7.1	7.8	8.1
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	179	0.032	0.07	0.501	0.001	0.01	0.102	0.008	0.016	0.079	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	179	34.	36.905	110.	3.	727.558	26.973	8.	13.	49.	83.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	179 ##	0.05	0.067	2.	0.05	0.024	0.154	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	131	18.	19.084	67.	0.	229.124	15.137	4.	6.	26.	38.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	179	5.	15.977	503.	0.	2041.062	45.178	1.	2.	10.	37.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	86 ##	0.01	0.689	16.	0.	3.965	1.991	0.	0.01	0.6	1.43
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	179 ##	0.01	0.027	0.54	0.01	0.005	0.069	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	179	0.26	0.441	8.	0.	0.55	0.741	0.025	0.08	0.53	0.97

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	179 ##	0.05	0.077	1.91	0.	0.026	0.161	0.01	0.05	0.05	0.12
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	29	2.1	3.003	12.4	0.	9.955	3.155	0.	0.7	4.25	9.
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	179	46.	53.061	208.	12.	1073.811	32.769	17.	24.	74.	100.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	179	14.3	17.054	79.1	0.005	154.787	12.441	3.6	6.1	25.3	35.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	179	2.4	2.461	5.	0.02	0.554	0.744	1.7	1.9	2.9	3.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	179	1.1	1.978	15.48	0.05	4.963	2.228	0.6	0.75	2.1	5.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	179	1.5	2.159	8.32	0.62	2.461	1.569	0.84	1.1	2.63	5.02
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	179	0.9	0.949	3.	0.3	0.235	0.485	0.6	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	179	11.	19.136	112.	0.	356.771	18.888	8.2	9.5	19.	43.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	179 ##	0.1	0.116	0.77	0.005	0.015	0.122	0.05	0.05	0.1	0.3
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	47.419	250.	0.	3424.785	58.522	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	20.	20.895	60.	0.	137.07	11.708	5.	13.75	27.	31.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	179 ##	5.	8.897	190.	0.	276.642	16.633	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	35 ##	5.	6.	60.	0.	98.235	9.911	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	179 ##	5.	6.196	50.	0.	59.9	7.739	0.	5.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	98 ##	5.	6.352	130.	0.	225.218	15.007	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	179 ##	5.	6.363	210.	0.	274.401	16.565	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	179	93.	111.402	511.	0.	6701.646	81.864	30.	60.	140.	210.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	179 ##	50.	38.62	140.	0.	437.338	20.913	0.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	179	50.	64.603	300.	20.	1648.567	40.603	30.	40.	80.	110.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	179	40.	46.313	190.	3.	838.542	28.958	20.	30.	55.	90.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	0.	16.667	50.	0.	530.189	23.026	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	179 ##	5.	4.55	50.	0.	33.096	5.753	0.	0.	5.	5.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39 ##	5.	23.385	100.	0.	932.822	30.542	0.	0.	50.	80.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	53 ##	0.	2.547	20.	0.	15.022	3.876	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	179 ##	5.	13.827	230.	0.	479.032	21.887	0.	5.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	179	130.	340.827	6420.	5.	524288.234	724.078	40.	78.	270.	690.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	179	40.	66.76	920.	5.	10741.004	103.639	5.	19.	70.	150.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	5.789	50.	0.	246.657	15.705	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	5.	19.211	110.	0.	688.549	26.24	0.	0.	40.	51.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	99	3020.	3806.535	43390.	1530.	20211763.884	4495.75	2100.	2310.	4100.	4700.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	179 ##	5.	36.874	5000.	0.	142889.929	378.008	0.	5.	5.	7.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	173	58.	67.335	297.	18.	1836.689	42.857	23.	31.	99.	119.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	179 ##	0.15	0.151	0.25	0.15	0.	0.011	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	22.547	100.	0.	694.829	26.36	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	179	0.29	0.366	2.05	0.	0.086	0.294	0.17	0.21	0.41	0.66
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	161	6.	19.012	425.	0.	1964.3	44.32	3.	4.	13.	42.4
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	178 ##	50.	70.618	800.	10.	3616.	60.133	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0066

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	178	4	0.02	63	2	0.03	43	0	0.00	31	2	0.06	41	0	0.00
00403	PH, LAB	Fresh Chronic	9.	151	1	0.01	51	0	0.00	35	0	0.00	25	0	0.00	40	1	0.03
		Other-Lo Lim.	6.5	151	0	0.00	51	0	0.00	35	0	0.00	25	0	0.00	40	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	179	2	0.01	63	0	0.00	43	0	0.00	32	0	0.00	41	2	0.05
		Other-Lo Lim.	6.5	179	9	0.05	63	0	0.00	43	4	0.09	32	4	0.13	41	1	0.02
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	250.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	0	0.00	10	0	0.00	7	0	0.00	6	0	0.00	8	0	0.00
		Drinking Water	50.	11 &	0	0.00	5	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	15 &	6	0.40	7	4	0.57	3	0	0.00	1	0	0.00	4	2	0.50
		Drinking Water	5.	15 &	6	0.40	7	4	0.57	3	0	0.00	1	0	0.00	4	2	0.50

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0066

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	178 &	7	0.04	62	3	0.05	43	2	0.05	32	2	0.06	41	0	0.00
		Drinking Water	1300.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	179	1	0.01	63	1	0.02	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	15.	61 &	28	0.46	21	12	0.57	16	7	0.44	11	6	0.55	13	3	0.23
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	100.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	179	1	0.01	63	1	0.02	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	5000.	179	0	0.00	63	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	0	0.00	11	0	0.00	9	0	0.00	7	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	0	0.00	11	0	0.00	9	0	0.00	7	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	161	12	0.07	61	4	0.07	36	5	0.14	29	2	0.07	35	1	0.03

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	17	16.9	14.976	21.	6.3	22.617	4.756	7.98	9.85	18.8	19.64
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	17	0.8	7.294	74.	0.	354.389	18.825	0.	0.55	1.5	40.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	17	36.	48.	194.	24.	1552.375	39.4	27.2	29.	47.	93.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	17	97.	90.941	130.	39.	576.559	24.012	44.6	83.5	103.5	111.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	17	8.4	9.053	11.5	7.5	1.589	1.261	7.9	8.25	10.2	11.42
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	17	7.3	7.147	7.4	6.3	0.094	0.306	6.62	7.1	7.35	7.4
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	17	7.3	7.007	7.4	6.3	0.115	0.339	6.62	7.1	7.35	7.4
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	17	0.05	0.099	0.501	0.04	0.013	0.115	0.04	0.045	0.079	0.26
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	17	37.	31.176	39.	5.	127.154	11.276	7.4	30.	38.	38.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17 ##	0.05	0.082	0.6	0.05	0.018	0.133	0.05	0.05	0.05	0.16
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	22.	17.588	23.	0.	66.882	8.178	2.4	12.5	23.	23.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	17	8.	7.824	24.	1.	33.779	5.812	1.	2.5	10.5	16.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	17 ##	0.01	0.009	0.01	0.	0.	0.003	0.	0.01	0.01	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	17 ##	0.	0.506	8.	0.	3.732	1.932	0.	0.	0.1	1.68
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	17	0.03	0.066	0.22	0.	0.006	0.076	0.	0.	0.115	0.212
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	17	41.	38.353	63.	15.	145.118	12.046	15.	36.	44.	49.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	17	11.9	10.876	18.1	2.8	16.426	4.053	2.8	10.4	13.05	14.34
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	17	2.6	2.559	4.1	1.7	0.281	0.53	1.7	2.4	2.7	3.14
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	17	0.84	0.824	1.02	0.52	0.019	0.138	0.584	0.74	0.93	1.004
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	17	1.39	1.433	2.65	1.11	0.114	0.338	1.15	1.295	1.455	1.818
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	17	0.7	0.976	3.	0.5	0.599	0.774	0.5	0.6	0.9	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	17	8.4	9.388	21.8	0.	18.641	4.318	5.84	7.8	10.8	16.28
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	17 ##	0.1	0.134	0.43	0.1	0.009	0.096	0.1	0.1	0.1	0.358
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	17 ##	0.	2.353	10.	0.	19.118	4.372	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	17 ##	0.	1.176	10.	0.	11.029	3.321	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	17 ##	0.	1.765	20.	0.	27.941	5.286	0.	0.	0.	12.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	17 ##	0.	3.824	20.	0.	36.029	6.002	0.	0.	10.	12.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	17	120.	150.588	360.	80.	5505.882	74.202	88.	105.	175.	304.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	17 ##	0.	12.941	70.	0.	409.559	20.238	0.	0.	20.	54.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	17	60.	65.294	90.	40.	201.471	14.194	48.	55.	75.	90.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	17	50.	47.059	70.	30.	122.059	11.048	30.	40.	50.	70.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	17 ##	0.	1.765	10.	0.	15.441	3.93	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	17 ##	0.	4.706	20.	0.	38.971	6.243	0.	0.	10.	12.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	17	120.	161.176	690.	60.	20173.529	142.034	76.	105.	155.	330.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	17	50.	54.118	150.	20.	1188.235	34.471	20.	30.	70.	118.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	17	3070.	2949.412	3620.	2260.	160343.382	400.429	2300.	2575.	3305.	3404.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	17 ##	0.	4.706	20.	0.	63.971	7.998	0.	0.	10.	20.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	17	48.	45.118	71.	21.	147.235	12.134	21.8	44.	50.	55.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	17	0.32	0.344	0.55	0.21	0.009	0.093	0.234	0.275	0.41	0.502
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	17	8.	9.235	35.	0.	67.441	8.212	0.	3.	12.	20.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	31	13.4	13.7	22.6	5.6	27.212	5.217	7.06	7.8	18.4	21.
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	31	1.	5.081	37.	0.	64.743	8.046	0.	0.	8.	15.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	31	66.	158.935	1355.	13.	62099.462	249.198	23.8	39.	180.	352.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	31	56.	100.516	360.	36.	6469.125	80.431	39.2	44.	137.	221.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	31	0.	0.194	1.	0.	0.161	0.402	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	31	9.5	9.529	12.5	6.1	2.45	1.565	7.7	8.5	11.1	11.82
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	21	7.5	7.557	8.9	6.8	0.275	0.524	6.9	7.1	7.9	8.16

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	21	7.5	7.317	8.9	6.8	0.335	0.579	6.9	7.1	7.9	8.16
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	21	0.032	0.048	0.158	0.001	0.002	0.047	0.007	0.013	0.079	0.126
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	31	6.9	7.042	8.7	6.3	0.315	0.561	6.3	6.6	7.5	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	31	6.9	6.784	8.7	6.3	0.384	0.62	6.3	6.6	7.5	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	31	0.126	0.165	0.501	0.002	0.025	0.159	0.02	0.032	0.251	0.501
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	31	14.	21.581	55.	4.	275.052	16.585	4.2	8.	37.	47.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	31 ##	0.05	0.066	0.4	0.05	0.005	0.068	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	31	9.	13.129	34.	2.	105.516	10.272	2.2	5.	23.	29.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	31	6.	28.903	228.	1.	2264.824	47.59	2.	3.	37.	83.8
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	31 ##	0.01	1.19	16.	0.	10.124	3.182	0.01	0.01	0.5	5.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	31 ##	0.01	0.027	0.14	0.01	0.002	0.039	0.01	0.01	0.01	0.108
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	31	0.1	0.211	1.35	0.	0.102	0.319	0.	0.04	0.22	0.796
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	31	0.08	0.211	1.91	0.	0.127	0.356	0.	0.02	0.28	0.488
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	31	24.	40.355	208.	13.	1479.037	38.458	14.	17.	62.	78.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	31	6.1	12.223	79.1	0.005	226.036	15.034	2.4	3.8	19.5	25.76
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	31	1.9	2.01	3.1	1.4	0.192	0.438	1.6	1.7	2.3	2.82
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	31	0.83	2.738	15.48	0.45	13.021	3.608	0.502	0.56	4.2	8.828
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	31	1.27	2.372	8.32	0.8	4.186	2.046	0.852	0.94	3.44	5.782
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	31	0.8	1.055	3.	0.3	0.549	0.741	0.5	0.6	1.	2.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	31	10.	20.223	84.2	7.	386.278	19.654	8.22	9.5	22.6	59.04
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	31 ##	0.1	0.169	0.75	0.1	0.031	0.176	0.1	0.1	0.1	0.496
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	31	10.	17.419	190.	0.	1304.785	36.122	0.	0.	20.	38.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	31 ##	5.	10.323	50.	0.	211.559	14.545	0.	0.	15.	38.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	31 ##	0.	11.129	130.	0.	599.516	24.485	0.	0.	10.	30.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	31 ##	0.	10.968	210.	0.	1420.699	37.692	0.	0.	10.	19.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	31	100.	109.032	230.	0.	3355.699	57.928	22.	80.	140.	202.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	31	20.	27.419	140.	0.	918.118	30.3	0.	10.	40.	76.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	31	50.	74.839	230.	30.	2852.473	53.409	30.	40.	100.	146.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	31	30.	50.323	190.	20.	1289.892	35.915	30.	30.	60.	90.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	31 ##	0.	5.806	50.	0.	171.828	13.108	0.	0.	10.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	31	10.	20.323	230.	0.	1678.226	40.966	0.	5.	20.	38.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	31	370.	1025.806	6420.	60.	2052745.161	1432.74	92.	170.	1710.	3260.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	31	100.	181.452	920.	15.	39095.323	197.725	42.	60.	290.	456.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	31	2400.	2750.645	5900.	1530.	935119.57	967.016	1902.	2100.	3200.	4180.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	31 ##	0.	28.387	820.	0.	21600.645	146.972	0.	0.	0.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	31	32.	60.	297.	20.	3425.2	58.525	21.	24.	80.	131.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	31	0.37	0.551	2.05	0.17	0.258	0.508	0.19	0.25	0.66	1.508
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	31	16.	38.194	200.	3.	2790.961	52.83	4.	6.	49.	128.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	31 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	28	14.55	14.35	22.4	2.7	35.509	5.959	5.54	8.6	19.7	21.19
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	20	4.	6.585	23.	0.7	44.645	6.682	1.	1.25	10.25	20.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	28	20.	22.429	76.	8.	200.698	14.167	10.	15.	28.5	35.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	28	103.5	125.964	319.	35.	7449.073	86.308	41.9	53.25	157.5	277.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	28	7.8	8.289	12.9	4.2	3.882	1.97	5.76	7.125	9.925	10.62
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	28	7.2	7.193	7.7	6.6	0.11	0.332	6.7	6.9	7.5	7.61
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	28	7.2	7.075	7.7	6.6	0.125	0.353	6.7	6.9	7.5	7.61
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	28	0.063	0.084	0.251	0.02	0.004	0.063	0.025	0.032	0.126	0.2
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	28	7.5	7.457	8.2	6.5	0.225	0.474	6.6	7.2	7.8	8.02
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	28	7.5	7.189	8.2	6.5	0.299	0.547	6.6	7.2	7.8	8.02

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Annual Analysis for 1992 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	28	0.032	0.065	0.316	0.006	0.007	0.084	0.01	0.016	0.063	0.251
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	28	17.	24.714	49.	6.	265.397	16.291	6.	10.25	41.	49.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	10.	14.741	30.	4.	98.969	9.948	4.	6.	25.	30.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	28	3.	6.086	52.	0.	100.697	10.035	0.	0.85	7.5	14.1
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	23	0.6	0.645	3.	0.	0.545	0.738	0.	0.	1.	1.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	28 ##	0.01	0.1	0.54	0.01	0.023	0.153	0.01	0.01	0.2	0.401
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	28	0.245	0.418	1.91	0.025	0.227	0.477	0.059	0.065	0.575	1.224
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	28 ##	0.025	0.035	0.11	0.	0.001	0.03	0.	0.025	0.05	0.088
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	28	37.	47.179	127.	13.	1106.374	33.262	15.9	20.75	65.25	114.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	28	12.45	16.011	48.3	2.2	175.605	13.252	3.28	5.05	21.65	42.08
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	28	1.95	2.036	3.6	1.3	0.196	0.442	1.59	1.725	2.3	2.52
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	28	2.53	3.329	7.94	0.64	6.164	2.483	0.72	1.22	5.11	7.36
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	28	2.24	2.68	7.09	0.84	3.044	1.745	0.982	1.29	3.15	5.75
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	28	0.8	0.957	2.	0.3	0.217	0.465	0.6	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	28	16.75	29.518	112.	7.5	830.177	28.813	9.6	11.95	30.85	77.93
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	28 ##	0.1	0.146	0.77	0.005	0.026	0.162	0.05	0.05	0.1	0.32
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	28 ##	5.	5.411	20.	0.	21.686	4.657	0.	0.625	9.25	10.2
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	28 ##	5.	5.036	20.	0.	23.295	4.826	0.	0.25	5.	10.5
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	28 ##	5.	4.911	50.	0.	83.334	9.129	0.	0.125	5.	5.1
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	28 ##	5.	4.786	50.	0.	86.101	9.279	0.	0.	5.	5.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	28	96.5	111.321	280.	40.	3365.337	58.012	55.7	74.	140.	198.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	28 ##	25.	24.75	80.	0.	367.602	19.173	0.	11.	28.75	52.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	28	70.	68.75	187.	20.	1337.972	36.578	30.	40.	81.5	120.6
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	28	51.	58.964	181.	20.	1174.776	34.275	28.1	30.25	73.	92.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	28 ##	5.	3.196	12.	0.	8.747	2.958	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	28 ##	5.	7.25	37.	0.	61.972	7.872	0.	2.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	28	160.	225.071	700.	5.	28712.365	169.447	58.5	120.	297.5	452.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	28	50.	53.607	170.	5.	1482.988	38.51	5.	36.5	67.5	107.6
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	28	3330.	5487.036	43390.	2000.	66684166.036	8166.037	2156.3	2322.5	4345.	8570.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	28 ##	5.	4.661	10.	0.	8.816	2.969	0.	4.25	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	22	48.	66.864	213.	19.	2995.076	54.727	23.3	27.75	90.	176.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	28 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	28	0.29	0.32	1.21	0.	0.043	0.209	0.178	0.213	0.358	0.476
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	28	7.	12.179	95.	3.	311.485	17.649	3.	4.25	12.75	22.3
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	26	13.65	13.365	21.7	6.5	23.806	4.879	7.35	8.65	17.425	20.35
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	21	3.	9.681	44.	0.3	189.386	13.762	0.52	0.7	13.5	41.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	26	10.	11.058	30.	2.5	28.087	5.3	5.	10.	11.25	16.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	26	156.5	154.654	286.	9.	5010.395	70.784	57.8	102.	225.5	235.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	26	0.	0.077	1.	0.	0.074	0.272	0.	0.	0.	0.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	25	8.4	8.464	10.5	6.2	1.475	1.214	7.02	7.4	9.45	10.32
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	26	7.35	7.465	9.	6.6	0.334	0.578	6.84	7.1	7.65	8.56
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	26	7.347	7.22	9.	6.6	0.397	0.63	6.84	7.1	7.65	8.56
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	26	0.045	0.06	0.251	0.001	0.003	0.059	0.003	0.023	0.079	0.148
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	26	7.5	7.696	9.3	6.9	0.362	0.602	7.	7.3	7.95	8.86
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	26	7.5	7.441	9.3	6.9	0.43	0.656	7.	7.3	7.95	8.86
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	26	0.032	0.036	0.126	0.001	0.001	0.033	0.001	0.011	0.05	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	26	24.	31.846	78.	5.	413.255	20.329	10.7	15.75	49.5	62.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	26	14.	19.038	48.	2.	164.998	12.845	5.1	9.	30.25	38.

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Annual Analysis for 1993 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	26	5.	29.923	503.	1.	10127.674	100.636	1.7	2.75	9.	56.9
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	14	0.35	0.529	2.	0.	0.364	0.603	0.	0.	1.	1.65
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	26 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	26	0.515	0.768	3.3	0.025	0.598	0.773	0.12	0.395	0.883	1.923
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	26	64.	60.346	120.	16.	834.315	28.885	19.8	39.5	83.	101.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	26	21.9	20.	43.8	3.3	109.8	10.479	4.99	12.4	27.825	32.57
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	26	2.05	2.488	5.	1.5	0.952	0.976	1.6	1.875	3.1	4.49
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	26	2.65	3.038	9.8	0.6	5.015	2.239	0.763	1.2	4.525	5.95
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	26	3.5	3.573	7.	1.	3.632	1.906	1.14	1.75	5.275	5.9
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	26	0.9	0.977	2.	0.5	0.166	0.407	0.6	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	26	31.	34.265	100.	8.9	468.407	21.643	11.	16.5	48.5	62.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	26 ##	0.05	0.138	0.4	0.05	0.015	0.121	0.05	0.05	0.225	0.33
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	26 ##	5.	13.462	50.	5.	137.538	11.728	5.	5.	20.	30.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	26 ##	5.	7.885	40.	5.	68.346	8.267	5.	5.	5.	16.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	22 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	26 ##	5.	6.538	20.	5.	17.538	4.188	5.	5.	5.	13.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	26	70.	81.538	260.	20.	2837.538	53.269	30.	37.5	110.	156.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	26 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	26	70.	72.308	300.	20.	2890.462	53.763	30.	40.	90.	116.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	26	55.	56.538	120.	20.	679.538	26.068	20.	37.5	80.	90.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	26	10.	15.192	40.	5.	116.962	10.815	5.	5.	22.5	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	26	160.	191.154	700.	40.	18922.615	137.559	47.	102.5	242.5	345.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	26	40.	60.385	200.	5.	3377.846	58.119	8.5	20.	82.5	180.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	23	3700.	3817.391	5900.	2100.	1069683.794	1034.255	2560.	2800.	4500.	5460.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	26 ##	5.	197.115	5000.	5.	959616.346	979.6	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	26	87.	84.577	176.	22.	1557.134	39.461	29.1	55.75	116.5	128.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	26 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	26	0.27	0.337	1.5	0.12	0.068	0.26	0.157	0.22	0.4	0.494
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	22	4.	24.318	425.	2.	8022.799	89.57	2.3	3.	7.	16.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	25 ##	50.	80.	800.	50.	22500.	150.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	30	13.4	13.37	20.7	5.	23.233	4.82	5.56	10.	18.05	19.49
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	24	2.	4.896	22.	0.3	43.748	6.614	0.4	0.525	5.5	18.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	30	10.	10.583	25.	2.5	48.139	6.938	2.5	5.	15.	20.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	30	125.	132.733	236.	10.	4214.133	64.916	44.4	84.25	195.	218.7
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	30	7.45	7.093	11.5	1.2	5.684	2.384	4.41	5.375	8.875	9.88
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	29	7.6	7.452	8.4	6.6	0.267	0.517	6.7	6.9	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	29	7.6	7.175	8.4	6.6	0.346	0.588	6.7	6.9	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	29	0.025	0.067	0.251	0.004	0.005	0.072	0.01	0.013	0.126	0.2
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	30	7.6	7.53	8.2	6.4	0.173	0.416	7.	7.175	7.8	7.99
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	30	7.6	7.297	8.2	6.4	0.23	0.479	7.	7.175	7.8	7.99
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	30	0.025	0.051	0.398	0.006	0.006	0.075	0.01	0.016	0.067	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	30	40.	49.433	110.	3.	1271.151	35.653	7.2	13.	88.	99.9
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30 ##	0.05	0.115	2.	0.05	0.127	0.356	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	24.	30.033	67.	2.	469.275	21.663	5.	8.25	53.25	60.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	30	4.	12.967	85.	1.	423.62	20.582	2.	3.	12.	39.9
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-05/16/94	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	30	0.185	0.209	0.53	0.025	0.021	0.144	0.025	0.08	0.32	0.445

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Annual Analysis for 1994 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	30 ##	0.05	0.052	0.1	0.05	0.	0.009	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	30	59.5	60.467	110.	12.	1219.154	34.916	15.1	21.75	99.25	110.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	30	17.25	19.23	39.2	2.4	165.131	12.85	3.53	5.375	33.925	36.89
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	30	2.85	2.727	4.	0.02	0.869	0.932	1.61	1.975	3.6	3.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	30	1.	1.058	1.7	0.05	0.174	0.417	0.564	0.7	1.4	1.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	30	1.8	1.766	3.6	0.7	0.594	0.771	0.764	1.075	2.225	2.79
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	30	0.85	0.77	1.	0.4	0.048	0.218	0.41	0.575	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	30	11.	11.473	19.	7.8	7.406	2.721	8.31	9.6	13.	14.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	30 ##	0.05	0.072	0.2	0.05	0.002	0.041	0.05	0.05	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	30 ##	5.	7.833	30.	5.	33.937	5.826	5.	5.	10.	19.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	30 ##	5.	5.833	30.	5.	20.833	4.564	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	30	80.	108.667	310.	50.	4018.851	63.394	60.	70.	122.5	206.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	30	40.	48.333	140.	20.	655.747	25.608	30.	30.	50.	80.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	30	30.	33.	130.	5.	433.793	20.828	20.	30.	32.5	49.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	30 ##	5.	12.667	60.	5.	206.437	14.368	5.	5.	12.5	29.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	30	95.	189.333	1700.	5.	103315.057	321.427	20.	30.	252.5	404.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	30	10.	26.333	120.	5.	915.402	30.256	5.	5.	50.	79.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	30	58.	67.	131.	18.	1371.724	37.037	22.1	26.5	109.	118.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	30 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	30	0.24	0.317	0.8	0.02	0.04	0.199	0.161	0.178	0.433	0.702
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	24	5.	18.583	150.	2.	1176.167	34.295	2.	3.25	16.75	68.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	25	14.2	13.752	23.4	4.6	24.493	4.949	6.46	9.8	17.4	20.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	19	1.	3.195	20.	0.3	24.735	4.973	0.3	0.7	4.	12.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	25	5.	10.9	30.	2.5	96.292	9.813	2.5	5.	17.5	30.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	25	162.	161.2	274.	65.	4000.833	63.252	78.	96.5	212.5	250.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	25	9.1	8.564	11.6	2.9	4.035	2.009	4.58	8.05	9.85	10.38
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	25	7.5	7.448	8.4	6.8	0.217	0.466	6.86	7.	7.8	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	25	7.5	7.24	8.4	6.8	0.262	0.512	6.86	7.	7.8	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	25	0.032	0.057	0.158	0.004	0.003	0.051	0.009	0.016	0.1	0.139
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	25	7.7	7.64	8.3	6.6	0.207	0.455	6.76	7.5	7.9	8.14
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	25	7.7	7.361	8.3	6.6	0.288	0.537	6.76	7.5	7.9	8.14
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	25	0.02	0.044	0.251	0.005	0.004	0.064	0.007	0.013	0.032	0.175
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	25	47.	47.44	99.	8.	758.257	27.536	10.8	26.	67.5	89.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	25	5.	8.472	71.	0.8	195.72	13.99	1.6	2.	8.5	19.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	25	0.35	0.415	1.1	0.025	0.095	0.308	0.025	0.165	0.685	0.834
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	25	56.	57.56	110.	17.	834.09	28.881	20.2	29.5	81.	98.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	25	17.3	18.608	40.1	3.6	122.592	11.072	4.46	8.	27.6	34.06
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	25	2.9	2.764	3.8	1.9	0.336	0.579	1.96	2.15	3.3	3.44
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	25	1.	0.993	1.6	0.56	0.109	0.33	0.588	0.66	1.2	1.54
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	25	1.4	1.391	2.4	0.62	0.282	0.531	0.708	0.89	1.75	2.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	25	1.	0.876	1.	0.5	0.025	0.159	0.66	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	25	10.	13.04	57.	5.2	98.933	9.946	7.22	9.	13.	20.2

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Annual Analysis for 1995 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	25 ##	0.05	0.062	0.3	0.05	0.003	0.051	0.05	0.05	0.05	0.07
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	25 ##	5.	6.08	20.	5.	11.243	3.353	5.	5.	5.	10.8
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	25 ##	5.	5.32	13.	5.	2.56	1.6	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	25	100.	133.08	511.	5.	17477.077	132.201	22.6	59.	141.	384.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	25	52.	65.68	201.	20.	1653.643	40.665	29.2	36.5	81.5	125.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	25	36.	40.96	123.	5.	877.707	29.626	11.	20.	53.	100.2
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	25 ##	5.	9.24	55.	5.	123.19	11.099	5.	5.	5.	22.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	25	76.	270.96	3010.	28.	379922.623	616.379	32.6	49.5	178.5	862.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	25	24.	33.12	175.	5.	1433.777	37.865	5.	5.	42.	84.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	25	68.	66.92	149.	21.	1131.41	33.636	24.6	37.5	90.5	112.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	25 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	25	0.25	0.334	0.93	0.15	0.037	0.192	0.172	0.195	0.46	0.602
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	19	5.	6.316	20.	1.	18.228	4.269	2.	4.	9.	10.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	21	15.	14.5	22.7	6.9	20.489	4.526	7.4	10.4	18.25	20.08
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	20	4.5	11.105	51.	0.5	291.852	17.084	0.64	1.25	7.	49.9
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	21	10.	11.19	35.	5.	52.262	7.229	5.	5.	15.	20.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	21	186.	189.143	410.	107.	4252.929	65.214	110.6	146.	219.	247.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	21	0.	0.143	1.	0.	0.129	0.359	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	21	8.6	8.695	11.1	7.	1.137	1.067	7.12	8.	9.1	10.68
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	21	7.6	7.571	8.2	6.9	0.189	0.435	6.92	7.1	7.95	8.18
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	21	7.6	7.371	8.2	6.9	0.231	0.481	6.92	7.1	7.95	8.18
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	21	0.025	0.043	0.126	0.006	0.002	0.041	0.007	0.011	0.079	0.121
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	21	7.9	7.843	8.5	7.2	0.105	0.323	7.24	7.65	8.	8.26
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	21	7.9	7.721	8.5	7.2	0.12	0.347	7.24	7.65	8.	8.26
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	21	0.013	0.019	0.063	0.003	0.	0.017	0.006	0.01	0.023	0.058
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	21	45.	54.286	100.	13.	924.014	30.398	15.2	28.	84.	99.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	21	7.	13.267	60.	0.8	291.109	17.062	1.04	2.	15.	51.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	21 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	21	0.5	0.68	1.7	0.31	0.167	0.409	0.314	0.395	0.845	1.52
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	21	55.	63.905	120.	23.	972.39	31.183	23.8	37.5	85.	118.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	21	18.2	20.952	41.3	5.8	134.257	11.587	6.06	10.95	29.	40.22
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	21	2.6	2.776	4.	2.	0.309	0.556	2.12	2.4	3.	3.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	21	1.	1.151	2.8	0.53	0.404	0.636	0.56	0.75	1.35	2.5
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	21	1.2	1.45	4.3	0.63	0.688	0.83	0.672	0.87	1.8	2.54
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	21	1.	1.014	2.	0.7	0.056	0.237	0.9	0.95	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	21	10.	10.729	15.	7.9	3.067	1.751	8.82	9.4	12.	13.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	21 ##	0.05	0.076	0.3	0.05	0.005	0.068	0.05	0.05	0.05	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	21 ##	5.	5.667	19.	5.	9.333	3.055	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	21 ##	5.	5.238	10.	5.	1.19	1.091	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	21 ##	5.	7.143	50.	5.	96.429	9.82	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	21	58.	97.381	432.	5.	12016.848	109.621	5.	8.	150.5	258.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	21	46.	57.429	159.	29.	1104.757	33.238	30.4	37.5	59.5	122.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	21	36.	36.619	113.	3.	506.548	22.507	10.4	26.	41.	63.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	21	17.	22.143	82.	5.	440.029	20.977	5.	5.	36.	49.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	21	87.	125.714	309.	47.	8243.414	90.793	52.8	61.	156.5	304.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	21	27.	33.857	134.	5.	715.829	26.755	15.2	19.	37.5	58.4
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	21	80.	73.619	126.	29.	1015.548	31.868	31.4	44.5	102.5	120.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	21	0.3	0.324	0.88	0.005	0.064	0.253	0.005	0.195	0.41	0.816
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	19	6.	14.316	78.	3.	366.561	19.146	3.	4.	18.	44.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1997 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	1	16.6	16.6	16.6	16.6	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	1	247.	247.	247.	247.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	1	38.4	38.4	38.4	38.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	1	132.	132.	132.	132.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	1	31.	31.	31.	31.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	1	26.	26.	26.	26.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	1	91.	91.	91.	91.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	1	102.	102.	102.	102.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	1	123.	123.	123.	123.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	1	6.	6.	6.	6.	0.	0.	**	**	**	**
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	63	18.5	18.11	23.4	10.7	8.116	2.849	14.18	16.	19.7	21.88
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	57	0.8	2.809	51.	0.	85.753	9.26	0.38	0.55	1.	2.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	63	15.	40.587	487.	2.5	6710.811	81.92	5.	10.	34.	64.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	63	185.	181.905	410.	67.	5413.926	73.579	96.4	115.	235.	274.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	63	0.	0.095	1.	0.	0.088	0.296	0.	0.	0.	0.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	63	8.	7.538	9.4	2.9	1.859	1.363	5.62	7.	8.4	8.96
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	51	7.6	7.565	8.9	6.8	0.163	0.404	7.	7.3	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	51	7.6	7.399	8.9	6.8	0.191	0.437	7.	7.3	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	51	0.025	0.04	0.158	0.001	0.001	0.036	0.01	0.013	0.05	0.1
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	63	7.5	7.519	8.7	6.7	0.162	0.403	7.	7.3	7.8	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	63	7.5	7.345	8.7	6.7	0.193	0.439	7.	7.3	7.8	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	63	0.032	0.045	0.2	0.002	0.002	0.044	0.01	0.016	0.05	0.1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	63	42.	51.508	100.	12.	683.964	26.153	24.4	35.	70.	98.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	63 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	63	6.	20.114	503.	0.1	4132.197	64.282	2.	4.	11.	48.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	63 ##	0.01	0.044	0.54	0.01	0.01	0.099	0.01	0.01	0.01	0.158
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	63	0.35	0.512	3.3	0.	0.327	0.572	0.	0.1	0.78	1.2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	63 ##	0.05	0.108	1.91	0.	0.063	0.25	0.025	0.04	0.05	0.25
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	63	66.	71.27	208.	21.	1184.845	34.422	33.2	43.	97.	112.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	63	20.9	23.96	79.1	5.1	184.84	13.596	9.26	12.7	32.6	40.28
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	63	2.6	2.768	4.1	1.3	0.421	0.649	2.	2.3	3.4	3.66
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	63	1.6	2.999	9.8	0.55	6.942	2.635	0.742	0.99	4.9	7.26
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	63	2.3	2.763	7.	0.62	3.077	1.754	0.884	1.38	3.7	5.62
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	63	1.	1.014	3.	0.3	0.227	0.476	0.6	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	63	13.	24.587	112.	5.2	615.025	24.8	7.8	9.5	26.8	64.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	63 ##	0.1	0.155	0.75	0.005	0.025	0.157	0.05	0.05	0.2	0.376
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	25.	25.083	50.	10.	148.265	12.176	10.	15.	30.	47.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	63 ##	5.	12.063	190.	0.	619.06	24.881	0.	5.	10.	26.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	5.	5.417	10.	0.	15.72	3.965	0.	1.25	10.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	63 ##	5.	6.873	50.	0.	74.08	8.607	0.	5.	5.	11.8
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	63 ##	5.	5.952	50.	0.	56.336	7.506	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	63	90.	121.333	511.	0.	10691.774	103.401	34.	60.	140.	264.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	63 ##	50.	40.238	140.	0.	517.281	22.744	10.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	63	70.	73.778	150.	30.	888.563	29.809	30.4	50.	90.	124.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	63	50.	51.889	120.	5.	776.004	27.857	20.	30.	70.	90.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	0.	8.056	50.	0.	259.232	16.101	0.	0.	6.25	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	63 ##	5.	5.429	50.	0.	44.152	6.645	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	17 ##	0.	1.765	10.	0.	9.191	3.032	0.	0.	5.	6.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	63	10.	20.778	230.	0.	1104.95	33.241	0.	5.	25.	53.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	63	150.	376.841	3560.	5.	504649.974	710.387	38.8	60.	290.	898.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	63	48.	90.381	920.	5.	23667.82	153.843	5.	16.	80.	238.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	63 ##	5.	5.	20.	0.	17.742	4.212	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	60	97.5	92.2	297.	25.	2420.705	49.201	41.1	49.25	117.75	146.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	63 ##	0.15	0.154	0.25	0.15	0.	0.019	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	15.625	50.	0.	572.917	23.936	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	63	0.31	0.41	2.05	0.14	0.111	0.333	0.174	0.23	0.43	0.784
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	61	7.	15.18	95.	0.	427.184	20.668	3.	4.	13.	45.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	63 ##	50.	64.603	100.	10.	641.372	25.325	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	43	8.7	9.288	14.8	5.	6.731	2.594	5.88	7.3	11.3	12.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	33	4.	8.555	74.	0.	204.621	14.305	0.	0.65	12.	24.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	43	15.	71.547	1355.	2.5	44640.974	211.284	5.	10.	38.	185.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	43	104.	121.372	268.	35.	5072.001	71.218	42.6	54.	181.	231.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	43	0.	0.186	1.	0.	0.155	0.394	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	43	9.9	9.809	12.9	5.3	2.452	1.566	7.6	9.2	10.8	11.5
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	35	7.1	7.257	8.7	6.6	0.275	0.525	6.7	6.8	7.7	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	35	7.1	7.036	8.7	6.6	0.326	0.571	6.7	6.8	7.7	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	35	0.079	0.092	0.251	0.002	0.006	0.074	0.01	0.02	0.158	0.2
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	43	7.4	7.328	8.8	6.3	0.302	0.55	6.54	6.9	7.7	7.96
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	43	7.4	7.017	8.8	6.3	0.401	0.633	6.54	6.9	7.7	7.96
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	43	0.04	0.096	0.501	0.002	0.015	0.123	0.011	0.02	0.126	0.29
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	43	29.	32.512	110.	5.	733.303	27.08	6.4	11.	47.	72.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	43 ##	0.05	0.063	0.6	0.05	0.007	0.084	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	43	5.	19.781	228.	0.8	1709.148	41.342	1.	2.	16.	75.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	43 ##	0.01	0.025	0.4	0.01	0.004	0.063	0.01	0.01	0.01	0.022
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	43	0.24	0.512	8.	0.	1.474	1.214	0.025	0.08	0.51	0.88
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	43 ##	0.05	0.069	0.66	0.	0.012	0.107	0.	0.025	0.05	0.13
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	43	40.	48.535	110.	13.	1029.874	32.092	15.	18.	78.	98.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	43	12.	15.053	36.9	2.2	131.68	11.475	2.92	4.	25.8	33.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	43	2.1	2.512	5.	1.4	0.863	0.929	1.6	1.8	3.	3.96
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	43	1.	1.819	15.48	0.49	6.817	2.611	0.576	0.72	1.47	4.462
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	43	1.7	2.309	8.32	0.99	3.199	1.789	1.	1.13	2.7	5.46
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	43	0.9	1.014	3.	0.3	0.402	0.634	0.54	0.7	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	43	12.	19.3	84.2	0.	346.5	18.614	7.74	9.3	22.	55.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	43 ##	0.1	0.109	0.54	0.05	0.009	0.096	0.05	0.05	0.1	0.26
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	38.571	50.	0.	339.286	18.42	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	20.	20.125	30.	5.	51.554	7.18	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	43 ##	5.	9.721	80.	0.	186.682	13.663	0.	5.	10.	26.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	2.857	5.	0.	7.143	2.673	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	43 ##	5.	6.977	50.	0.	79.928	8.94	0.	5.	5.	18.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	43 ##	5.	5.349	50.	0.	64.756	8.047	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	43	140.	136.093	360.	20.	5645.086	75.134	43.2	80.	160.	270.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	43 ##	50.	37.093	80.	0.	472.896	21.746	0.	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	43	60.	78.698	230.	20.	2620.454	51.19	40.	40.	100.	168.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	43	50.	61.023	190.	20.	1479.833	38.469	30.	40.	70.	127.2
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	43 ##	5.	3.837	20.	0.	12.901	3.592	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	0.	1.923	10.	0.	10.577	3.252	0.	0.	5.	8.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	43 ##	5.	9.581	30.	0.	65.63	8.101	0.	5.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	43	122.	472.953	6420.	5.	1164150.855	1078.958	40.	60.	330.	1370.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	43	36.	58.605	340.	5.	5505.769	74.201	5.	10.	60.	162.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	43 ##	5.	3.605	10.	0.	7.53	2.744	0.	0.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	40	54.	61.7	160.	19.	1586.113	39.826	21.1	26.	85.25	129.7
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	43 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	43	0.33	0.426	2.03	0.	0.116	0.341	0.18	0.22	0.49	0.898
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	36	6.5	27.583	200.	2.	2907.221	53.919	2.	4.	16.75	142.3
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	43 ##	50.	68.605	100.	50.	598.007	24.454	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	32	9.1	8.803	15.9	2.7	7.846	2.801	5.53	6.625	10.35	12.89
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	25	6.	12.44	49.	0.	201.34	14.189	0.	4.	16.5	44.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	32	12.5	34.281	180.	2.5	2269.273	47.637	2.5	6.25	31.	135.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	32	78.	87.438	193.	9.	2895.093	53.806	37.2	42.	131.5	176.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	32	0.	0.313	1.	0.	0.222	0.471	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	31	9.7	9.135	12.5	1.2	6.917	2.63	4.56	9.1	10.5	11.86
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	25	7.2	7.332	8.1	6.7	0.211	0.459	6.8	6.9	7.85	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	25	7.2	7.146	8.1	6.7	0.247	0.497	6.8	6.9	7.85	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	25	0.063	0.072	0.2	0.008	0.003	0.056	0.009	0.014	0.126	0.158
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	32	7.5	7.344	8.1	6.3	0.274	0.524	6.43	7.1	7.775	8.
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	32	7.5	7.013	8.1	6.3	0.387	0.622	6.43	7.1	7.775	8.
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	32	0.032	0.097	0.501	0.008	0.019	0.14	0.01	0.017	0.079	0.374
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	32	12.5	20.406	66.	3.	357.604	18.91	4.	7.25	33.	58.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	32 ##	0.05	0.127	2.	0.05	0.121	0.348	0.05	0.05	0.05	0.155
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	32	6.5	14.763	150.	0.4	720.011	26.833	2.	2.25	17.75	35.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	32 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	32	0.195	0.408	2.91	0.025	0.325	0.57	0.06	0.083	0.53	0.747
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	32 ##	0.05	0.044	0.08	0.	0.	0.019	0.003	0.05	0.05	0.06
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	32	25.	35.375	79.	12.	481.597	21.945	14.	17.	53.75	72.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	32	6.65	10.681	26.3	2.3	69.877	8.359	2.46	3.65	17.575	25.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	32	1.9	2.05	3.1	1.5	0.177	0.421	1.63	1.7	2.35	2.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	32	0.81	1.037	2.5	0.45	0.341	0.584	0.516	0.585	1.323	2.223
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	32	1.15	1.322	3.3	0.75	0.385	0.62	0.763	0.84	1.675	2.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	32	0.85	0.878	3.	0.4	0.178	0.422	0.6	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	32	11.	15.525	59.	8.6	156.654	12.516	9.32	9.9	14.675	36.73
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	32 ##	0.1	0.086	0.3	0.05	0.003	0.051	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	17.111	20.	5.	31.361	5.6	5.	14.5	20.	20.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	32 ##	5.	5.781	20.	0.	25.983	5.097	0.	1.25	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	4.375	5.	0.	3.125	1.768	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	32 ##	5.	6.094	40.	0.	68.926	8.302	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	32 ##	5.	10.625	210.	0.	1338.306	36.583	0.	0.	5.	8.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	32	80.	84.406	170.	5.	1583.023	39.787	12.5	65.5	107.5	140.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	32 ##	50.	40.	50.	0.	316.129	17.78	3.	32.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	32	40.	51.969	300.	20.	2623.193	51.217	28.3	30.	50.	70.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	32	30.	30.906	70.	3.	180.152	13.422	20.	25.5	33.	47.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	32 ##	5.	3.281	5.	0.	5.822	2.413	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	2.5	2.5	5.	0.	6.731	2.594	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	32 ##	5.	7.563	20.	0.	25.286	5.029	0.	5.	10.	14.9
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	32	179.	358.25	3010.	30.	328630.903	573.263	62.	122.5	337.5	679.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	32	45.	55.781	200.	5.	2497.015	49.97	5.	20.25	75.	148.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	32 ##	5.	160.313	5000.	0.	779948.286	883.147	0.	1.25	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	32	32.5	46.219	104.	18.	757.918	27.53	21.	23.	70.75	95.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	32 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	32	0.26	0.303	1.5	0.005	0.07	0.264	0.059	0.18	0.378	0.571
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	29	7.	28.966	425.	2.	6031.677	77.664	4.	4.5	26.	45.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	32 ##	50.	67.188	100.	50.	582.157	24.128	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/24/97	41	16.7	16.405	22.6	10.4	7.82	2.796	12.72	14.4	18.3	20.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/24/97	38	4.	6.945	37.	0.	61.423	7.837	0.89	2.	8.5	20.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/24/97	41	10.	18.854	76.	5.	253.728	15.929	5.	9.	26.	44.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/24/97	41	116.	121.073	229.	39.	3530.42	59.417	46.4	61.	178.	204.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/24/97	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/24/97	41	8.2	8.098	9.8	5.1	1.176	1.084	6.3	7.5	8.7	9.52

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/24/97	40	7.4	7.513	9.	6.6	0.284	0.533	6.91	7.1	7.8	8.38
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/24/97	40	7.4	7.266	9.	6.6	0.346	0.588	6.91	7.1	7.8	8.38
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/24/97	40	0.04	0.054	0.251	0.001	0.003	0.055	0.004	0.016	0.079	0.123
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/24/97	41	7.8	7.661	9.3	6.3	0.411	0.641	6.7	7.2	8.1	8.2
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/24/97	41	7.8	7.22	9.3	6.3	0.61	0.781	6.7	7.2	8.1	8.2
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/24/97	41	0.016	0.06	0.501	0.001	0.01	0.1	0.006	0.008	0.063	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/24/97	41	27.	31.951	100.	5.	530.848	23.04	8.2	13.	40.5	69.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/24/97	41	3.	6.576	71.	0.	190.912	13.817	0.8	1.5	5.	9.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/24/97	41 ##	0.01	0.016	0.24	0.01	0.001	0.036	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/24/97	41	0.22	0.281	1.6	0.	0.098	0.313	0.004	0.05	0.435	0.486
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/24/97	41 ##	0.05	0.064	0.28	0.	0.003	0.051	0.024	0.05	0.05	0.118
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/24/97	41	38.	43.634	120.	14.	601.788	24.531	18.	23.5	60.	79.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/24/97	41	12.	13.512	41.3	0.005	85.108	9.225	4.02	6.1	20.	26.88
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/24/97	41	2.1	2.257	4.	0.02	0.441	0.664	1.62	1.9	2.85	3.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/24/97	41	1.	1.309	4.57	0.05	1.069	1.034	0.6	0.66	1.35	2.99
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/24/97	41	1.32	1.726	5.9	0.63	1.173	1.083	0.844	1.07	1.99	2.832
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/24/97	41	0.8	0.834	2.	0.4	0.105	0.325	0.5	0.6	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/24/97	41	10.7	13.407	43.	8.1	58.21	7.63	8.24	9.25	13.	25.16
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/24/97	41 ##	0.05	0.085	0.77	0.05	0.013	0.112	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	19.778	60.	0.	309.194	17.584	0.	7.5	25.	60.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/24/97	41 ##	5.	5.598	20.	0.	19.915	4.463	0.	5.	5.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	11.25	60.	0.	398.214	19.955	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/24/97	41 ##	5.	4.415	15.	0.	9.749	3.122	0.	2.5	5.	9.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/24/97	41 ##	5.	4.732	15.	0.	9.951	3.155	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/24/97	41	80.	91.317	312.	0.	4288.672	65.488	12.2	57.	115.5	207.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/24/97	41 ##	50.	36.659	50.	0.	390.73	19.767	1.	14.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/24/97	41	40.	45.585	110.	20.	329.849	18.162	30.	30.	55.	64.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/24/97	41	30.	34.341	90.	5.	216.88	14.727	20.	28.	40.	51.6
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	5.	22.778	50.	0.	669.444	25.874	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/24/97	41 ##	5.	4.939	50.	0.	57.577	7.588	0.	1.25	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	5.	20.	0.	43.75	6.614	0.	0.	7.5	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/24/97	41 ##	5.	12.488	60.	0.	201.806	14.206	0.	5.	20.	38.6
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/24/97	41	110.	133.317	430.	20.	8638.572	92.944	50.	78.	170.	288.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/24/97	41	40.	47.585	180.	5.	1972.549	44.413	5.	17.	59.	103.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/24/97	41 ##	5.	24.402	820.	0.	16225.79	127.38	0.	5.	5.	8.6
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/24/97	41	51.	52.927	119.	21.	664.72	25.782	23.2	30.5	73.	89.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/24/97	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/24/97	41	0.25	0.285	0.8	0.005	0.02	0.143	0.17	0.205	0.37	0.468
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/24/97	35	5.	8.629	92.	0.	230.299	15.176	3.	3.	8.	15.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/24/97	40 ##	50.	85.	800.	50.	14000.	118.322	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0067

NPS Station ID: CUGA0067 LAT/LON: 36.604309/ -83.691142 Agency: 11NPSWRD Date Created: 09/20/97
Location: LITTLE YELLOW CREEK: UPSTREAM OF TUNNEL CREEK FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_YC5
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON LITTLE YELLOW CREEK A SHORT DISTANCE UPSTREAM FROM THE CONFLUENCE OF TUNNEL CREEK WITH LITTLE YELLOW CREEK. IT SERVES AS A CONTROL STATION TO MONITOR THE EFFECTS OF TUNNEL CONSTRUCTION ON LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORIC PARK P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606) 248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY M. TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	177	14.3	14.168	24.4	2.9	36.198	6.016	6.28	8.45	19.8	22.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	142	1.	5.343	99.	0.	126.137	11.231	0.01	0.3	5.25	14.7
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	178	20.	28.065	196.	2.5	937.797	30.623	5.	10.	34.25	51.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	177	61.	81.734	673.	27.	5202.185	72.126	38.	43.	98.	114.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	178	0.	0.157	1.	0.	0.133	0.365	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	177	7.6	7.553	12.8	1.8	5.899	2.429	4.28	5.65	9.6	10.9
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	150	6.9	6.879	8.	5.8	0.128	0.358	6.41	6.675	7.1	7.3
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	150	6.9	6.742	8.	5.8	0.147	0.383	6.41	6.675	7.1	7.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	150	0.126	0.181	1.585	0.01	0.029	0.171	0.05	0.079	0.212	0.39
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	177	6.9	6.946	8.2	6.	0.167	0.409	6.5	6.7	7.1	7.52
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	177	6.9	6.786	8.2	6.	0.193	0.439	6.5	6.7	7.1	7.52
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	177	0.126	0.164	1.	0.006	0.022	0.147	0.03	0.079	0.2	0.316
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	178	12.	20.364	110.	0.	346.175	18.606	4.9	6.	33.25	38.1
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	178 ##	0.05	0.096	2.	0.05	0.071	0.267	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	131	10.	12.233	41.	0.	83.07	9.114	3.	4.	21.	23.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	178	3.	12.356	662.	0.	3559.987	59.666	0.	1.	6.	18.2
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-10/07/93	72 ##	0.01	0.858	42.	0.	27.45	5.239	0.	0.	0.01	0.213
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	178 ##	0.01	0.031	0.95	0.01	0.013	0.116	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	178	0.1	0.654	63.7	0.	23.081	4.804	0.	0.025	0.323	0.652

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	178 ##	0.05	0.057	0.36	0.	0.003	0.056	0.01	0.05	0.05	0.101
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/11/90-08/12/96	29	2.1	3.914	23.2	0.	26.036	5.103	0.	1.	4.75	12.5
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	178	21.	29.281	100.	12.	302.508	17.393	14.	15.	41.	49.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	178	4.9	8.474	99.6	2.	96.63	9.83	2.5	3.	11.4	14.13
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	178	2.1	2.386	4.1	1.	0.438	0.662	1.7	1.8	3.	3.31
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	178	0.725	0.789	2.1	0.2	0.078	0.279	0.52	0.6	0.93	1.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	178	1.1	1.268	3.6	0.54	0.351	0.593	0.669	0.847	1.555	2.11
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	178	0.8	0.886	13.	0.05	0.972	0.986	0.5	0.6	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	178	9.15	9.569	22.	0.	6.817	2.611	7.48	8.2	10.	12.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	178 ##	0.05	0.084	0.5	0.005	0.004	0.063	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	31 ##	50.	58.387	390.	0.	7212.312	84.925	0.	0.	50.	210.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	38	20.	24.868	80.	0.	232.225	15.239	5.	16.75	30.5	41.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	176 ##	5.	23.094	2800.	0.	44352.387	210.6	0.	5.	10.	15.8
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	35 ##	5.	804.286	28000.	0.	22392957.563	4732.12	0.	0.	5.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	178 ##	5.	5.149	80.	0.	49.759	7.054	0.	4.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	98 ##	5.	24.265	2000.	0.	40677.171	201.686	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	178 ##	5.	4.91	50.	0.	28.184	5.309	0.	3.75	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	178	184.	191.191	546.	0.	11418.89	106.859	70.	110.	260.	326.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	178 ##	50.	37.576	121.	0.	447.159	21.146	1.95	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	178	50.	71.197	530.	20.	3449.052	58.729	30.	39.75	90.	130.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	178	40.	53.629	210.	2.	1213.907	34.841	20.	30.	70.	110.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	54 ##	0.	16.204	50.	0.	536.731	23.167	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	177 ##	5.	4.212	20.	0.	10.689	3.269	0.	0.	5.	5.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	39 ##	5.	18.615	80.	0.	568.19	23.837	0.	0.	40.	50.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	53 ##	0.	3.113	50.	0.	55.025	7.418	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	178	10.	13.171	80.	0.	222.848	14.928	0.	5.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	178	70.	129.073	1200.	5.	29500.226	171.756	10.	40.	142.	296.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	177	29.	36.186	180.	5.	1195.062	34.57	5.	10.	50.	80.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	38 ##	0.	5.263	50.	0.	241.821	15.551	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	38 ##	0.	12.895	50.	0.	313.016	17.692	0.	0.	22.5	50.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	99	2400.	2660.657	20000.	10.	3359764.105	1832.966	2000.	2150.	2900.	3200.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	178 ##	5.	4.284	20.	0.	10.988	3.315	0.	1.375	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	172	27.5	39.465	588.	17.	2142.8	46.29	19.	21.25	48.	58.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	178 ##	0.15	0.152	0.4	0.05	0.001	0.023	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	53 ##	0.	22.736	100.	0.	688.044	26.231	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	178	0.35	0.366	1.4	0.005	0.038	0.195	0.179	0.23	0.46	0.59
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	161	3.	8.155	200.	0.	319.982	17.888	1.2	2.	7.	16.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	175 ##	50.	66.686	100.	10.	600.447	24.504	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0067

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	177	15	0.08	62	12	0.19	43	0	0.00	32	2	0.06	40	1	0.03
00403	PH, LAB	Fresh Chronic	9.	150	0	0.00	50	0	0.00	35	0	0.00	25	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	150	27	0.18	50	2	0.04	35	7	0.20	25	13	0.52	40	5	0.13
00406	PH, FIELD	Fresh Chronic	9.	177	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	40	0	0.00
		Other-Lo Lim.	6.5	177	24	0.14	62	6	0.10	43	7	0.16	32	8	0.25	40	3	0.08
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	178	1	0.01	62	1	0.02	43	0	0.00	32	0	0.00	41	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	250.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	31	1	0.03	10	0	0.00	7	1	0.14	6	0	0.00	8	0	0.00
		Drinking Water	50.	12 &	1	0.08	5	0	0.00	4	1	0.25	1	0	0.00	2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	38	0	0.00	12	0	0.00	8	0	0.00	9	0	0.00	9	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	15 &	5	0.33	7	3	0.43	3	1	0.33	2	1	0.50	3	0	0.00
		Drinking Water	5.	15 &	5	0.33	7	3	0.43	3	1	0.33	2	1	0.50	3	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0067

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	175 &	1	0.01	60	1	0.02	43	0	0.00	31	0	0.00	41	0	0.00
		Drinking Water	1300.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	178	3	0.02	62	1	0.02	43	2	0.05	32	0	0.00	41	0	0.00
		Drinking Water	15.	62 &	28	0.45	20	8	0.40	18	9	0.50	12	7	0.58	12	4	0.33
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	177	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	40	0	0.00
		Drinking Water	100.	177	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	40	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
		Drinking Water	5000.	178	0	0.00	62	0	0.00	43	0	0.00	32	0	0.00	41	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	29 &	1	0.03	11	1	0.09	9	0	0.00	7	0	0.00	2	0	0.00
		Drinking Water	2.	29 &	1	0.03	11	1	0.09	9	0	0.00	7	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	161	2	0.01	60	0	0.00	36	1	0.03	29	1	0.03	36	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	17	17.3	15.982	22.2	6.4	34.599	5.882	7.2	9.4	21.25	21.96
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	17	0.3	3.035	40.	0.	93.437	9.666	0.	0.05	0.65	13.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	17	37.	48.118	188.	27.	1368.985	37.	27.8	36.5	44.5	89.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	17	95.	85.824	112.	40.	520.529	22.815	43.2	70.	102.5	108.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	17	0.	0.118	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	17	7.1	7.641	11.6	5.3	4.173	2.043	5.46	5.9	8.85	11.36
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	17	6.8	6.776	7.1	6.2	0.037	0.192	6.52	6.75	6.85	7.02
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	17	6.8	6.727	7.1	6.2	0.04	0.199	6.52	6.75	6.85	7.02
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	17	0.158	0.188	0.631	0.079	0.015	0.122	0.096	0.142	0.179	0.327
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	17	34.	27.882	39.	5.	116.86	10.81	7.4	22.	35.	39.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	17 ##	0.05	0.106	1.	0.05	0.053	0.23	0.05	0.05	0.05	0.24
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	17	19.	15.824	24.	0.	58.404	7.642	2.4	9.5	21.	24.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	17	2.	42.059	662.	0.	25550.434	159.845	0.	0.5	4.5	150.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	17 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	17 ##	0.	0.041	0.1	0.	0.003	0.051	0.	0.	0.1	0.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	17	0.01	0.055	0.32	0.	0.007	0.082	0.	0.	0.105	0.152
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	17	40.	35.588	51.	14.	119.882	10.949	14.	30.5	42.	47.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	17	10.7	9.288	14.1	2.5	12.164	3.488	2.58	7.75	11.4	13.22
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	17	3.	2.818	3.6	1.6	0.333	0.577	1.68	2.6	3.1	3.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	17	0.86	0.855	1.34	0.52	0.041	0.201	0.568	0.73	0.97	1.14
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	17	1.52	1.529	2.37	0.86	0.125	0.354	1.02	1.305	1.72	2.018
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	17	0.9	0.953	2.	0.5	0.091	0.302	0.66	0.8	1.	1.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	17	8.9	9.953	17.	7.6	5.884	2.426	7.76	8.15	11.4	13.48
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	17 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	17 ##	0.	3.529	10.	0.	24.265	4.926	0.	0.	10.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	17 ##	0.	1.176	10.	0.	11.029	3.321	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	17 ##	0.	2.353	10.	0.	19.118	4.372	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	17 ##	0.	5.588	30.	0.	87.132	9.334	0.	0.	10.	26.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	17	220.	242.941	400.	150.	4022.059	63.42	158.	200.	295.	328.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	17	10.	20.588	100.	0.	1030.882	32.107	0.	0.	30.	100.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	17	80.	85.294	160.	30.	1226.471	35.021	46.	60.	120.	136.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	17	70.	75.294	130.	30.	801.471	28.31	38.	50.	100.	114.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	17 ##	0.	1.765	10.	0.	15.441	3.93	0.	0.	0.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	17 ##	0.	4.118	10.	0.	25.735	5.073	0.	0.	10.	10.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	17	70.	117.059	720.	30.	25809.559	160.654	38.	55.	110.	312.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	17	40.	45.882	160.	20.	1150.735	33.922	20.	30.	50.	96.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	17	2760.	2675.882	3120.	2200.	80788.235	284.233	2224.	2450.	2945.	3008.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	17 ##	0.	2.353	20.	0.	31.618	5.623	0.	0.	0.	12.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	17	47.	42.471	56.	21.	121.64	11.029	21.	36.5	49.	54.4
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	17 ##	0.15	0.165	0.25	0.15	0.001	0.034	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	17	0.37	0.404	0.57	0.27	0.008	0.088	0.294	0.35	0.48	0.538
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	17	2.	4.824	35.	0.	67.279	8.202	0.	1.5	4.5	15.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	17 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	30	13.2	13.8	24.2	5.6	32.768	5.724	6.91	7.725	19.575	21.59
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	31	0.5	8.019	99.	0.	361.843	19.022	0.	0.	10.	15.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	31	50.	62.258	196.	11.	2341.665	48.391	15.	30.	90.	154.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	30	47.5	61.	112.	35.	644.828	25.393	35.3	40.75	87.75	100.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	31	0.	0.194	1.	0.	0.161	0.402	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	30	8.35	8.49	12.4	3.7	6.761	2.6	4.35	6.4	10.825	11.77
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	21	7.2	7.086	7.5	6.6	0.065	0.256	6.72	6.8	7.3	7.38
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	21	7.2	7.012	7.5	6.6	0.071	0.267	6.72	6.8	7.3	7.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	21	0.063	0.097	0.251	0.032	0.004	0.061	0.042	0.05	0.158	0.191
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	30	6.8	6.81	7.5	6.2	0.085	0.292	6.5	6.6	7.	7.19
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	30	6.8	6.724	7.5	6.2	0.093	0.304	6.5	6.6	7.	7.19
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	30	0.158	0.189	0.631	0.032	0.015	0.123	0.065	0.1	0.251	0.316
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	31	9.	16.258	45.	0.	211.465	14.542	3.	5.	31.	41.2
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31 ##	0.05	0.285	2.	0.05	0.347	0.589	0.05	0.05	0.05	1.72
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	31	6.	10.548	27.	1.	77.389	8.797	2.	4.	19.	25.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	31	2.	18.842	430.	0.	5879.001	76.675	0.	0.	7.	19.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	31 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	31	0.05	0.292	7.65	0.	1.867	1.366	0.	0.	0.07	0.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	31	0.08	0.104	0.36	0.	0.011	0.104	0.01	0.025	0.15	0.308
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	31	18.	24.516	49.	13.	167.791	12.953	13.	15.	39.	47.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	31	3.	5.91	13.9	2.	18.36	4.285	2.12	2.7	10.5	13.24
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	31	1.9	2.203	3.4	1.4	0.376	0.613	1.52	1.7	2.8	3.16
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	31	0.63	0.688	1.15	0.46	0.035	0.188	0.502	0.53	0.8	0.948
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	31	1.07	1.325	2.82	0.75	0.379	0.616	0.802	0.85	1.53	2.498
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	31	0.8	1.006	3.	0.5	0.522	0.722	0.5	0.6	1.	2.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	31	9.1	9.068	13.5	0.	5.356	2.314	7.2	8.1	9.8	12.42
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	31 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31	10.	98.226	2800.	0.	251504.247	501.502	0.	0.	10.	28.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	31 ##	0.	3.871	20.	0.	41.183	6.417	0.	0.	5.	18.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	31 ##	0.	4.355	20.	0.	44.57	6.676	0.	0.	10.	19.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	31 ##	0.	3.226	20.	0.	34.247	5.852	0.	0.	10.	14.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	31	190.	194.839	400.	90.	5519.14	74.291	110.	130.	250.	290.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	31	10.	17.903	80.	0.	331.29	18.201	0.	5.	20.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	31	50.	64.516	230.	30.	1738.925	41.7	30.	40.	80.	110.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	31	40.	56.774	210.	20.	1509.247	38.849	30.	30.	70.	100.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	31 ##	0.	2.258	10.	0.	14.731	3.838	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	31 ##	10.	6.935	20.	0.	49.462	7.033	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	31	130.	208.387	760.	30.	37853.978	194.561	50.	60.	270.	534.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	31	60.	73.226	180.	20.	1649.247	40.611	30.	40.	90.	146.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	31	2150.	2248.065	3500.	10.	368169.462	606.77	1826.	2000.	2500.	2980.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	31 ##	0.	2.419	10.	0.	18.118	4.257	0.	0.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	31	25.	31.484	59.	19.	173.391	13.168	19.2	22.	42.	54.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	31 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	31	0.32	0.341	0.82	0.17	0.019	0.136	0.19	0.25	0.39	0.486
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	30	6.	12.8	52.	1.	215.959	14.696	2.	2.75	16.25	38.8
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	31 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	28	14.45	14.393	22.8	3.1	38.663	6.218	5.63	8.425	20.35	22.17
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	25	2.	4.848	19.	0.3	32.915	5.737	0.4	0.6	8.5	16.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	28	20.	26.607	70.	10.	179.581	13.401	14.5	17.25	34.	45.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	28	57.5	86.857	673.	36.	13762.053	117.312	39.8	43.5	90.75	106.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	28	0.	0.143	1.	0.	0.127	0.356	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	28	7.75	7.829	12.8	4.5	4.854	2.203	4.97	6.025	9.675	10.48
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	28	6.9	6.9	7.4	6.2	0.049	0.221	6.69	6.8	7.	7.12
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	28	6.9	6.837	7.4	6.2	0.053	0.23	6.69	6.8	7.	7.12
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	28	0.126	0.146	0.631	0.04	0.011	0.106	0.077	0.1	0.158	0.205
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	28	7.1	7.157	8.	6.3	0.212	0.461	6.49	6.9	7.475	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	28	7.1	6.939	8.	6.3	0.261	0.511	6.49	6.9	7.475	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	28	0.079	0.115	0.501	0.01	0.015	0.123	0.013	0.034	0.126	0.324
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	28	13.5	17.786	39.	2.	142.323	11.93	5.	8.	27.5	37.1

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Annual Analysis for 1992 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	28 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	27	9.	11.259	24.	3.	51.661	7.188	3.8	5.	18.	23.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	28	1.	2.448	21.	0.	16.074	4.009	0.	0.1	3.75	4.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	28 ##	0.01	0.043	0.61	0.01	0.014	0.12	0.01	0.01	0.01	0.131
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	28	0.05	2.386	63.7	0.	144.412	12.017	0.	0.014	0.205	0.432
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	28 ##	0.025	0.034	0.13	0.	0.001	0.034	0.	0.021	0.048	0.111
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	28	23.5	26.607	48.	13.	135.358	11.634	13.9	16.25	38.5	44.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	28	5.95	6.725	14.4	2.2	15.05	3.879	2.58	3.15	10.275	12.33
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	28	2.1	2.289	3.6	1.	0.42	0.648	1.59	1.8	2.9	3.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	28	0.8	0.803	1.14	0.2	0.038	0.196	0.601	0.692	0.938	1.055
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	28	1.17	1.348	2.9	0.84	0.298	0.546	0.869	0.97	1.505	2.625
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	28	0.6	0.637	1.	0.05	0.038	0.195	0.48	0.525	0.7	0.91
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	28	9.3	9.55	17.9	6.5	5.152	2.27	7.47	8.325	9.775	12.21
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	28 ##	0.1	0.097	0.5	0.005	0.009	0.094	0.05	0.05	0.1	0.12
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	28 ##	5.	5.589	20.	0.	19.39	4.403	0.	3.5	9.5	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	28 ##	5.	3.982	10.	0.	9.527	3.087	0.	0.125	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	28 ##	5.	3.321	6.	0.	5.726	2.393	0.	0.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	28 ##	5.	3.893	13.	0.	12.247	3.5	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	28	184.	174.75	280.	0.	5451.75	73.836	91.	124.75	240.	270.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	28 ##	25.	25.482	121.	0.	585.805	24.203	0.	12.5	28.75	52.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	28	50.	71.357	200.	30.	2410.312	49.095	30.	30.	125.25	142.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	28	45.5	57.536	140.	5.	1406.776	37.507	26.3	30.	85.	121.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	28 ##	5.	3.589	13.	0.	12.427	3.525	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	28 ##	6.5	14.071	80.	0.	318.291	17.841	0.	5.	20.	39.2
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	28	60.	90.25	380.	5.	7897.676	88.869	5.	30.5	117.5	227.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	28	29.	26.5	60.	5.	394.63	19.865	5.	5.	40.	60.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	28	2305.	3093.75	20000.	1850.	11129623.38	3336.109	2063.	2210.	2800.	3071.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	28 ##	5.	4.911	20.	0.	24.482	4.948	0.	1.125	5.	11.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	22	28.5	59.682	588.	20.	14163.561	119.011	21.	21.75	47.75	67.9
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	28 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	28	0.3	0.312	0.59	0.005	0.015	0.124	0.17	0.233	0.418	0.474
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	28	3.5	5.536	47.	0.	73.369	8.566	1.	2.	6.	8.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	28 ##	50.	68.571	100.	10.	871.958	29.529	46.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	26	13.75	13.381	23.8	4.9	37.034	6.086	6.55	7.45	18.625	22.64
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	20	0.7	5.427	31.	0.05	67.671	8.226	0.091	0.2	10.5	19.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	26	15.	16.731	30.	5.	65.885	8.117	5.	10.	21.25	30.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	26	69.5	75.308	186.	27.	1681.902	41.011	34.4	38.75	104.5	123.1
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	26	0.	0.077	1.	0.	0.074	0.272	0.	0.	0.	0.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	26	7.85	7.458	10.9	3.9	5.411	2.326	3.9	5.3	9.75	10.23
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	26	6.85	6.8	7.2	5.8	0.099	0.315	6.3	6.675	7.	7.13
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	26	6.847	6.647	7.2	5.8	0.124	0.352	6.3	6.675	7.	7.13
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	26	0.142	0.226	1.585	0.063	0.09	0.3	0.075	0.1	0.212	0.501
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	26	7.15	7.154	7.9	6.3	0.138	0.371	6.7	6.9	7.425	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	26	7.147	7.002	7.9	6.3	0.162	0.402	6.7	6.9	7.425	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	26	0.071	0.099	0.501	0.013	0.01	0.099	0.02	0.038	0.126	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	26	19.5	20.846	40.	3.	223.815	14.96	4.7	6.75	37.25	38.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	26	15.5	13.885	33.	2.	94.746	9.734	3.	4.	23.	24.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	26	3.5	8.919	123.	0.1	555.97	23.579	0.9	2.	6.25	13.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	26 ##	0.01	0.097	0.95	0.01	0.066	0.258	0.01	0.01	0.01	0.589
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	26	0.38	0.615	3.9	0.025	0.678	0.823	0.025	0.14	0.738	1.651

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Annual Analysis for 1993 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	26 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	26	27.5	31.038	57.	13.	281.398	16.775	14.	15.	48.	54.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	26	6.85	8.142	16.5	2.3	29.971	5.475	2.5	2.875	13.65	15.85
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	26	2.55	2.585	4.1	1.6	0.521	0.721	1.9	1.9	3.225	3.56
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	26	0.8	0.823	1.3	0.5	0.039	0.197	0.6	0.7	1.	1.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	26	1.2	1.329	2.6	0.7	0.272	0.521	0.7	0.9	1.625	2.19
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	26	0.7	0.762	1.	0.5	0.026	0.163	0.57	0.6	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	26	9.	9.569	22.	5.6	9.705	3.115	6.49	8.15	10.25	12.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	26 ##	0.05	0.098	0.5	0.05	0.01	0.098	0.05	0.05	0.1	0.2
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	26	10.	10.192	30.	5.	42.962	6.555	5.	5.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	26 ##	5.	7.115	30.	5.	38.346	6.192	5.	5.	5.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-11/15/93	22 ##	5.	95.909	2000.	5.	180868.182	425.286	5.	5.	5.	8.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	26 ##	5.	5.385	10.	5.	1.846	1.359	5.	5.	5.	6.5
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	26	190.	195.	360.	60.	8538.	92.401	87.	105.	282.5	333.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	26 ##	50.	48.846	50.	20.	34.615	5.883	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	26	50.	90.769	530.	20.	13375.385	115.652	27.	30.	92.5	299.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	26	50.	52.692	110.	20.	780.462	27.937	20.	30.	65.	100.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	26 ##	5.	5.769	20.	5.	9.385	3.063	5.	5.	5.	6.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	26	10.	15.769	50.	5.	145.385	12.058	5.	5.	20.	33.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	26	55.	76.731	540.	5.	11053.885	105.137	5.	20.	85.	153.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	25 ##	5.	17.8	60.	5.	275.167	16.588	5.	5.	25.	44.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-11/15/93	23	2500.	2678.261	3500.	1800.	267233.202	516.946	2040.	2300.	3200.	3380.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	26 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	26	34.5	36.885	64.	18.	248.746	15.772	20.4	21.75	52.	58.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	26 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	26	0.335	0.388	1.4	0.12	0.075	0.274	0.147	0.198	0.46	0.785
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	22	2.	11.909	200.	1.	1771.515	42.089	1.	2.	4.25	10.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	23 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1994 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	30	13.35	13.663	22.3	2.9	34.094	5.839	5.03	9.4	18.85	21.93
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	24	2.	3.514	18.	0.01	26.126	5.111	0.01	0.15	4.	14.5
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	30	10.	12.833	25.	5.	39.109	6.254	5.	10.	15.	25.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	30	49.5	75.233	218.	35.	2278.806	47.737	36.	39.75	104.75	155.9
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	30	0.	0.267	1.	0.	0.202	0.45	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	30	5.85	6.397	11.4	2.	6.007	2.451	3.62	4.8	8.5	10.3
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	29	6.9	6.845	7.8	6.3	0.135	0.368	6.3	6.55	7.	7.4
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	29	6.9	6.714	7.8	6.3	0.153	0.391	6.3	6.55	7.	7.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	29	0.126	0.193	0.501	0.016	0.022	0.149	0.04	0.1	0.284	0.501
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	30	6.75	6.837	8.	6.	0.189	0.434	6.4	6.6	7.	7.66
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	30	6.747	6.676	8.	6.	0.215	0.464	6.4	6.6	7.	7.66
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	30	0.179	0.211	1.	0.01	0.036	0.189	0.023	0.1	0.251	0.398
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	30	9.5	18.593	68.	0.8	321.182	17.922	3.	4.75	32.5	42.5
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-12/19/94	30	5.5	11.383	41.	0.5	117.443	10.837	2.	3.	20.25	25.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	30	5.	9.497	45.	0.9	111.835	10.575	2.	3.	11.25	27.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	30 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	30	0.2	0.238	1.3	0.025	0.069	0.263	0.025	0.025	0.325	0.539
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	30 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	30	20.	29.1	79.	12.	358.162	18.925	12.	14.	43.5	52.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	30	4.55	7.663	26.	2.1	40.974	6.401	2.3	2.675	12.175	14.72
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	30	2.05	2.41	4.1	1.5	0.611	0.781	1.6	1.775	3.2	3.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	30	0.6	0.72	1.6	0.47	0.062	0.249	0.5	0.55	0.8	1.09

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Annual Analysis for 1994 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	30	0.9	1.281	3.6	0.68	0.499	0.706	0.76	0.8	1.675	2.38
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	30	0.7	1.113	13.	0.4	5.09	2.256	0.4	0.5	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	30	9.55	10.48	22.	7.	10.68	3.268	7.8	8.75	10.25	15.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	30 ##	0.05	0.067	0.2	0.05	0.001	0.033	0.05	0.05	0.1	0.1
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	28 ##	7.5	9.286	30.	5.	38.36	6.194	5.	5.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	30 ##	5.	7.833	80.	5.	187.385	13.689	5.	5.	5.	9.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	30 ##	5.	5.167	10.	5.	0.833	0.913	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	30	125.	167.333	350.	70.	7068.506	84.074	81.	97.5	225.	300.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	30	45.	60.	160.	20.	1262.069	35.526	30.	37.5	82.5	110.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	30	35.	46.333	150.	10.	1161.954	34.087	20.	27.5	50.	108.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	29 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	30	10.	15.5	70.	5.	207.5	14.405	5.	5.	20.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	30	135.	212.333	1200.	5.	76085.747	275.836	10.	47.5	232.5	759.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	30	15.	34.167	130.	5.	1363.937	36.932	5.	5.	65.	98.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	30 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	30	24.5	35.3	88.	17.	385.666	19.638	18.	19.75	49.	58.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	30 ##	0.15	0.158	0.4	0.15	0.002	0.046	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	30	0.37	0.386	0.85	0.15	0.026	0.162	0.201	0.25	0.51	0.589
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	24	6.	9.292	35.	1.	92.216	9.603	2.	2.	11.75	27.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	30 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1995 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	25	15.4	13.684	23.3	2.9	34.399	5.865	5.56	8.3	18.35	21.36
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	13	1.	3.385	16.	0.4	21.508	4.638	0.44	0.55	4.	13.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	25	10.	14.8	35.	2.5	137.979	11.746	4.	5.	25.	35.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	25	59.	87.48	241.	36.	3528.51	59.401	40.	49.5	101.5	221.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	25	0.	0.12	1.	0.	0.11	0.332	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	25	7.7	7.668	11.6	1.8	7.141	2.672	2.92	6.6	10.05	10.98
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	25	6.8	6.992	8.	6.4	0.222	0.471	6.5	6.65	7.35	7.74
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	25	6.8	6.811	8.	6.4	0.256	0.506	6.5	6.65	7.35	7.74
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	25	0.158	0.155	0.398	0.01	0.013	0.115	0.018	0.047	0.225	0.316
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	25	6.9	6.996	8.2	6.4	0.177	0.421	6.56	6.7	7.2	7.7
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	25	6.9	6.854	8.2	6.4	0.198	0.445	6.56	6.7	7.2	7.7
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	25	0.126	0.14	0.398	0.006	0.009	0.097	0.02	0.065	0.2	0.277
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	25	18.	28.92	96.	4.	816.243	28.57	5.	8.	36.	94.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	25	4.	6.512	28.	0.8	64.52	8.032	1.	2.	5.	25.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	25 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	25	0.22	0.261	1.4	0.025	0.108	0.329	0.025	0.025	0.345	0.766
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	25 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	25	28.	36.76	100.	13.	661.273	25.715	14.6	16.	48.	81.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	25	7.4	10.868	35.6	2.3	93.41	9.665	2.9	3.5	13.75	28.04
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	25	2.3	2.372	3.7	1.6	0.319	0.565	1.7	1.9	2.6	3.34
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	25	0.64	0.792	1.4	0.44	0.084	0.29	0.562	0.6	0.98	1.34
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	25	0.95	1.118	2.2	0.54	0.231	0.481	0.612	0.795	1.6	1.88
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	25	0.9	0.816	1.	0.3	0.043	0.208	0.4	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	25	8.5	9.208	14.	4.9	6.24	2.498	5.96	7.5	11.	13.4
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	25 ##	0.05	0.066	0.4	0.05	0.005	0.07	0.05	0.05	0.05	0.07
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	25 ##	5.	6.56	20.	5.	13.007	3.606	5.	5.	5.	12.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	25 ##	5.	5.2	10.	5.	1.	1.	5.	5.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	25	140.	194.2	503.	24.	21959.333	148.187	37.8	62.	325.	427.6

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Annual Analysis for 1995 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	25	41.	66.24	189.	20.	2170.69	46.591	20.	32.5	107.	139.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	25	35.	41.96	158.	5.	1209.29	34.775	8.	20.	47.	102.6
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	25 ##	5.	5.8	20.	5.	9.75	3.122	5.	5.	5.	7.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	25 ##	5.	11.64	66.	5.	204.657	14.306	5.	5.	11.	32.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	25	57.	87.84	543.	5.	12875.89	113.472	5.	25.5	105.	220.8
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	25	17.	26.04	126.	5.	884.54	29.741	5.	5.	34.5	74.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	25 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	25	36.	43.24	113.	17.	842.69	29.029	18.	20.5	57.	102.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	25 ##	0.15	0.146	0.15	0.05	0.	0.02	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	25	0.36	0.379	0.8	0.12	0.044	0.209	0.166	0.19	0.565	0.708
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	20	4.	4.65	13.	1.	7.924	2.815	2.	3.	7.	7.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	25 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1996 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	21	16.9	15.195	24.4	4.9	48.484	6.963	5.62	8.8	21.75	24.06
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	12	3.5	8.367	37.	0.4	176.506	13.286	0.43	0.675	5.75	36.7
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	21	15.	14.881	35.	2.5	70.298	8.384	5.	10.	20.	29.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	21	64.	111.619	453.	42.	14416.248	120.068	44.8	51.5	96.5	403.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	21	0.	0.143	1.	0.	0.129	0.359	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	21	7.8	7.405	11.4	4.	4.685	2.165	4.26	5.3	9.1	10.28
00403	PH, LAB, STANDARD UNITS SU	04/11/91-09/23/96	21	6.6	6.652	7.8	6.3	0.117	0.341	6.32	6.4	6.75	7.08
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-09/23/96	21	6.6	6.567	7.8	6.3	0.124	0.353	6.32	6.4	6.75	7.08
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-09/23/96	21	0.251	0.271	0.501	0.016	0.018	0.134	0.084	0.179	0.398	0.481
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	21	6.9	6.833	8.	6.	0.166	0.408	6.4	6.55	7.1	7.18
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	21	6.9	6.672	8.	6.	0.194	0.44	6.4	6.55	7.1	7.18
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	21	0.126	0.213	1.	0.01	0.045	0.212	0.066	0.079	0.284	0.398
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	21	9.	15.524	110.	4.	531.262	23.049	5.	5.	13.	31.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	21	2.	7.248	70.	0.6	240.529	15.509	0.74	1.	4.	22.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	21 ##	0.01	0.037	0.31	0.01	0.007	0.086	0.01	0.01	0.01	0.226
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	21	0.48	0.486	2.	0.025	0.222	0.471	0.025	0.038	0.635	1.118
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	21 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	21	18.	23.952	92.	14.	299.448	17.305	14.2	15.5	22.5	39.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	21	4.1	12.652	99.6	2.7	546.956	23.387	2.92	3.15	7.15	49.72
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	21	2.	2.171	3.4	1.7	0.234	0.484	1.8	1.85	2.25	3.22
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	21	0.7	0.922	2.1	0.41	0.267	0.516	0.5	0.56	1.1	2.04
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	21	0.62	0.947	3.5	0.54	0.485	0.696	0.54	0.57	1.2	1.74
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	21	0.9	0.9	1.	0.7	0.009	0.095	0.72	0.85	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	21	8.8	9.152	16.	6.7	3.425	1.851	7.9	8.3	9.3	11.48
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	21 ##	0.05	0.057	0.2	0.05	0.001	0.033	0.05	0.05	0.05	0.05
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	21 ##	5.	5.429	14.	5.	3.857	1.964	5.	5.	5.	5.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	21 ##	5.	5.476	10.	5.	2.262	1.504	5.	5.	5.	9.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	21 ##	5.	7.143	50.	5.	96.429	9.82	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	21	148.	191.619	546.	5.	31368.348	177.111	5.	5.	336.	482.6
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	21	51.	67.095	168.	30.	1553.99	39.421	38.	43.5	73.	147.2
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	21	44.	51.714	131.	2.	1136.614	33.714	22.6	29.5	59.	122.2
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	21	24.	23.786	73.	5.	450.314	21.221	5.	5.	36.	64.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	21	52.	68.429	179.	30.	1463.457	38.255	33.	40.5	92.5	122.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	21	22.	23.429	56.	5.	153.957	12.408	10.4	14.	30.5	43.8
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	21 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	21	23.	32.286	122.	19.	547.814	23.405	20.	21.	35.5	58.8
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	21 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	21	0.29	0.37	1.01	0.005	0.088	0.297	0.005	0.175	0.55	0.9
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	20	3.	5.7	19.	2.	35.168	5.93	2.	2.	5.75	16.9
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	21 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	62	20.35	19.279	24.4	8.4	12.713	3.566	13.74	17.125	21.95	23.17
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	50	0.4	2.1	37.	0.	51.074	7.147	0.041	0.2	1.	2.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	62	24.	24.492	65.	2.5	180.283	13.427	6.5	14.75	34.25	40.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	62	96.	123.694	673.	45.	10456.741	102.258	73.5	86.	106.	227.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	62	0.	0.097	1.	0.	0.089	0.298	0.	0.	0.	0.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	62	5.6	5.553	8.1	1.8	2.154	1.468	3.9	4.45	6.8	7.57
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	62	6.8	6.937	8.2	6.	0.175	0.419	6.53	6.7	7.1	7.67
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	62	6.8	6.783	8.2	6.	0.2	0.447	6.53	6.7	7.1	7.67
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	62	0.158	0.165	1.	0.006	0.021	0.144	0.022	0.079	0.2	0.297
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	62	33.	33.113	110.	0.	336.594	18.346	14.	25.	37.	41.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	62 ##	0.05	0.081	2.	0.05	0.061	0.248	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	62	3.	21.962	662.	0.	9827.94	99.136	0.	0.975	6.	11.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	62 ##	0.01	0.029	0.61	0.01	0.008	0.088	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	62	0.105	1.391	63.7	0.	65.695	8.105	0.	0.025	0.42	0.74
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	62 ##	0.05	0.062	0.36	0.	0.004	0.063	0.022	0.025	0.05	0.11
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	62	40.	40.887	92.	15.	192.2	13.864	24.6	33.	45.5	50.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	62	11.35	13.806	99.6	3.1	177.542	13.324	6.74	9.15	13.425	21.12
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	62	3.	2.865	3.7	1.5	0.203	0.451	2.23	2.6	3.2	3.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	62	0.9	0.926	2.1	0.2	0.106	0.326	0.6	0.748	1.	1.298
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	62	1.485	1.504	2.9	0.54	0.259	0.509	0.739	1.138	1.733	2.319
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	62	0.9	0.801	1.	0.05	0.041	0.202	0.53	0.6	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	62	8.65	9.315	18.	0.	9.635	3.104	6.43	7.8	10.325	14.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	62 ##	0.1	0.101	0.5	0.005	0.009	0.096	0.05	0.05	0.1	0.2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	10 ##	25.	25.	50.	0.	694.444	26.352	0.	0.	50.	50.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	12	30.	33.083	50.	13.	134.083	11.579	13.9	28.5	40.	50.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	62 ##	5.	52.339	2800.	0.	125823.539	354.716	0.	5.	10.	17.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	12 ##	5.	5.417	20.	0.	33.902	5.823	0.	0.	8.75	17.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	62 ##	5.	5.484	80.	0.	100.582	10.029	0.	3.75	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	62 ##	5.	5.935	50.	0.	59.176	7.693	0.	3.75	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	62	245.	243.839	546.	5.	11939.842	109.27	90.	200.	300.	388.4
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	62 ##	50.	35.887	100.	0.	438.954	20.951	1.5	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	62	85.	96.887	530.	35.	4663.446	68.289	40.	57.75	123.25	148.9
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	62	68.5	72.145	140.	5.	1238.257	35.189	28.6	40.	100.	122.1
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	18 ##	0.	6.667	50.	0.	252.941	15.904	0.	0.	5.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	62 ##	5.	4.645	20.	0.	12.397	3.521	0.	5.	5.	10.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	17 ##	0.	2.353	20.	0.	25.368	5.037	0.	0.	5.	8.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	62	10.	15.935	73.	0.	301.93	17.376	0.	5.	20.	43.5
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	62	50.	60.887	290.	5.	3768.167	61.385	5.	20.	70.	128.2
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	62	14.5	20.645	70.	5.	316.462	17.789	5.	5.	30.	50.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	62 ##	5.	4.274	20.	0.	10.53	3.245	0.	3.75	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	59	47.	58.271	588.	22.	5238.96	72.381	30.	40.	54.	70.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	62 ##	0.15	0.154	0.25	0.15	0.	0.019	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	16 ##	0.	16.25	50.	0.	558.333	23.629	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	62	0.38	0.441	1.01	0.16	0.031	0.177	0.253	0.33	0.53	0.657
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	60	3.	4.133	17.	0.	13.541	3.68	1.	2.	5.	8.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	62 ##	50.	64.839	100.	10.	648.334	25.462	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	43	8.1	8.563	14.4	2.9	6.787	2.605	5.28	6.9	10.9	12.36
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	33	2.	6.002	40.	0.	70.35	8.387	0.	0.15	10.5	14.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	43	25.	34.884	188.	5.	1400.058	37.417	10.	15.	37.	85.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	43	49.	66.953	128.	36.	992.76	31.508	38.8	41.	102.	112.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	43	0.	0.186	1.	0.	0.155	0.394	0.	0.	0.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	43	9.4	9.163	12.8	4.8	4.175	2.043	5.62	8.	10.5	11.46
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	43	6.9	6.912	8.	6.2	0.147	0.384	6.4	6.7	7.1	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	43	6.9	6.776	8.	6.2	0.166	0.408	6.4	6.7	7.1	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	43	0.126	0.168	0.631	0.01	0.018	0.133	0.032	0.079	0.2	0.398
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	43	9.	16.953	45.	5.	192.141	13.861	5.	6.	32.	38.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	43 ##	0.05	0.072	1.	0.05	0.021	0.145	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	43	3.	6.009	45.	0.	83.502	9.138	0.8	1.	4.	19.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	43 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	43	0.05	0.148	1.77	0.	0.093	0.305	0.	0.025	0.16	0.378
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	43 ##	0.05	0.058	0.32	0.	0.004	0.065	0.	0.03	0.05	0.114
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	43	17.	26.419	55.	13.	248.963	15.779	13.4	14.	45.	52.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	43	3.4	6.595	16.2	2.2	25.425	5.042	2.4	2.8	12.3	14.06
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	43	2.	2.314	4.1	1.	0.677	0.823	1.54	1.7	3.	3.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	43	0.7	0.754	1.3	0.44	0.05	0.223	0.52	0.6	0.95	1.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	43	1.1	1.44	3.6	0.54	0.558	0.747	0.844	0.9	1.65	2.612
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	43	0.8	0.905	3.	0.3	0.29	0.538	0.5	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	43	8.8	9.598	22.	6.9	8.261	2.874	7.18	8.	10.	13.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	43 ##	0.05	0.081	0.2	0.05	0.002	0.041	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	7 ##	50.	87.143	390.	0.	18148.81	134.718	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	8	20.	20.875	40.	5.	123.268	11.103	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	42 ##	5.	8.667	30.	0.	57.106	7.557	0.	5.	10.	20.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	7 ##	5.	4.286	10.	0.	11.905	3.45	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	43 ##	5.	5.233	20.	0.	24.945	4.994	0.	0.	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	43 ##	5.	3.721	15.	0.	9.635	3.104	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	43	200.	215.395	442.	0.	7960.769	89.223	126.4	150.	290.	342.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	43 ##	50.	40.256	121.	0.	637.1	25.241	0.	25.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	43	50.	70.535	230.	20.	2084.731	45.659	30.	40.	100.	126.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	43	49.	59.744	210.	10.	1574.147	39.676	30.	39.	70.	122.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	43 ##	5.	3.721	10.	0.	8.444	2.906	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	13 ##	0.	1.538	5.	0.	5.769	2.402	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	43	10.	10.814	80.	0.	179.774	13.408	0.	5.	11.	22.8
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	43	70.	154.674	760.	5.	38610.272	196.495	22.8	43.	160.	547.2
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	43	30.	45.093	160.	5.	1805.182	42.487	5.	20.	60.	119.6
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	43 ##	5.	3.372	10.	0.	6.811	2.61	0.	0.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	40	23.	32.675	64.	18.	261.558	16.173	19.	21.	51.75	58.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	43 ##	0.15	0.156	0.4	0.15	0.001	0.038	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	13 ##	0.	15.385	50.	0.	576.923	24.019	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	43	0.38	0.378	0.82	0.005	0.029	0.171	0.19	0.23	0.49	0.622
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	36	3.	7.417	52.	1.	123.279	11.103	1.	2.	7.5	21.7
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	43 ##	50.	68.605	100.	50.	598.007	24.454	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	32	7.65	7.922	14.9	2.9	8.021	2.832	4.9	5.7	9.15	13.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	22	2.5	6.895	31.	0.	69.962	8.364	0.	0.375	12.75	19.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	32	15.	35.063	196.	2.5	2596.56	50.956	5.	5.	31.5	141.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	32	42.5	45.906	119.	27.	257.894	16.059	35.	37.25	48.	63.1
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	32	0.	0.313	1.	0.	0.222	0.471	0.	0.	1.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	32	9.85	9.341	12.4	2.	6.284	2.507	4.93	9.1	10.9	11.62
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	32	6.9	6.941	8.	6.	0.214	0.463	6.43	6.525	7.275	7.57
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	32	6.9	6.733	8.	6.	0.259	0.509	6.43	6.525	7.275	7.57
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	32	0.126	0.185	1.	0.01	0.038	0.195	0.027	0.053	0.3	0.374
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	32	5.	6.563	53.	2.	75.286	8.677	3.	3.25	6.	8.

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Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	32 ##	0.05	0.217	2.	0.05	0.24	0.49	0.05	0.05	0.05	0.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	32	4.	11.672	123.	0.	492.441	22.191	0.9	1.	16.25	26.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	32 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	32	0.105	0.315	1.3	0.	0.145	0.38	0.008	0.031	0.47	1.14
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	32 ##	0.05	0.054	0.15	0.	0.001	0.027	0.026	0.05	0.05	0.09
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	32	15.	16.406	66.	12.	84.894	9.214	12.3	13.25	17.	17.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	32	2.85	3.472	21.9	2.	11.652	3.414	2.1	2.325	3.5	3.84
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	32	1.8	1.813	2.6	1.5	0.039	0.196	1.6	1.7	1.9	2.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	32	0.6	0.661	1.3	0.46	0.034	0.183	0.5	0.53	0.7	0.909
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	32	0.83	0.886	1.7	0.54	0.069	0.263	0.585	0.758	0.928	1.389
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	32	0.8	1.219	13.	0.4	4.811	2.193	0.5	0.7	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	32	9.6	9.956	22.	7.3	5.943	2.438	8.12	9.	9.975	11.7
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	32 ##	0.075	0.075	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	6 ##	50.	41.667	50.	0.	416.667	20.412	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	16.889	20.	5.	30.861	5.555	5.	13.5	20.	20.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	31 ##	5.	6.677	20.	0.	32.892	5.735	0.	5.	10.	18.4
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	3503.75	28000.	0.	97970005.357	9897.98	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	32 ##	5.	5.	30.	0.	35.484	5.957	0.	0.	5.	8.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	32 ##	5.	4.844	20.	0.	15.297	3.911	0.	5.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	32	100.	100.906	260.	5.	2150.41	46.373	21.5	90.	120.	144.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	32 ##	50.	38.125	50.	0.	323.79	17.994	5.	22.5	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	32	40.	47.344	320.	20.	2605.265	51.042	20.	30.	49.	60.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	32	30.	29.156	50.	2.	106.265	10.308	20.	20.	37.	42.8
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	32 ##	5.	3.906	20.	0.	15.701	3.962	0.	0.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	14 ##	2.5	5.714	50.	0.	168.681	12.988	0.	0.	5.	27.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	32	10.	10.188	50.	0.	93.706	9.68	0.	5.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	32	149.	246.719	1200.	37.	72228.209	268.753	50.	65.	357.5	722.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	32	40.	55.625	180.	5.	1979.532	44.492	5.	22.	87.5	127.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	32 ##	5.	5.156	10.	0.	8.846	2.974	0.	5.	5.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	32	21.	24.406	72.	17.	147.991	12.165	18.	19.	23.5	38.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	32 ##	0.15	0.147	0.15	0.05	0.	0.018	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	14 ##	25.	25.	50.	0.	673.077	25.944	0.	0.	50.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	32	0.21	0.286	1.4	0.005	0.063	0.251	0.146	0.173	0.335	0.44
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	29	7.	18.655	200.	1.	1392.091	37.311	2.	2.	23.	39.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	32 ##	50.	67.188	100.	50.	582.157	24.128	50.	50.	100.	100.

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Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-09/23/96	40	17.35	17.268	24.1	10.	11.75	3.428	11.93	14.425	20.05	21.94
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/12/96	37	3.	8.213	99.	0.	296.23	17.211	0.4	0.9	8.5	16.4
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-09/23/96	41	15.	20.854	70.	5.	230.178	15.172	5.	10.	27.5	48.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-09/23/96	40	52.	61.25	215.	35.	1323.628	36.382	36.1	40.25	62.	97.3
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-09/23/96	41	0.	0.098	1.	0.	0.09	0.3	0.	0.	0.	0.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-09/23/96	40	7.75	7.49	9.7	3.8	1.918	1.385	5.51	6.6	8.275	9.57
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-09/23/96	40	7.	7.	7.9	6.2	0.146	0.382	6.6	6.7	7.2	7.68
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-09/23/96	40	7.	6.853	7.9	6.2	0.168	0.41	6.6	6.7	7.2	7.68
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-09/23/96	40	0.1	0.14	0.631	0.013	0.015	0.124	0.021	0.063	0.2	0.251
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-09/23/96	41	10.	15.434	94.	0.8	316.698	17.796	5.	6.	17.5	34.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	41 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-09/23/96	41	3.	5.022	28.	0.	54.179	7.361	0.	1.	4.5	21.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-09/23/96	41 ##	0.01	0.073	0.95	0.01	0.045	0.212	0.01	0.01	0.01	0.25
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-09/23/96	41	0.17	0.335	3.9	0.	0.424	0.651	0.	0.025	0.34	0.674
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-09/23/96	41 ##	0.05	0.052	0.34	0.	0.003	0.052	0.	0.05	0.05	0.084

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Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-09/23/96	41	19.	24.78	100.	12.	347.326	18.637	14.2	15.5	24.5	36.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-09/23/96	41	4.2	6.285	35.6	2.3	48.314	6.951	2.62	3.	6.2	9.74
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-09/23/96	41	2.1	2.185	3.7	1.5	0.221	0.47	1.8	1.9	2.35	2.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-09/23/96	41	0.66	0.72	1.6	0.41	0.056	0.237	0.5	0.59	0.775	1.09
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-09/23/96	41	0.89	1.026	2.64	0.54	0.224	0.474	0.612	0.745	1.2	1.708
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-09/23/96	41	0.7	0.737	2.	0.3	0.082	0.286	0.4	0.55	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-09/23/96	41	9.4	9.622	13.	6.7	1.969	1.403	7.96	8.9	10.	11.98
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/23/96	41 ##	0.05	0.067	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-08/12/96	8 ##	50.	87.5	250.	0.	10535.714	102.644	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-08/12/96	9	20.	25.444	80.	0.	561.778	23.702	0.	9.5	35.	80.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/23/96	41 ##	5.	6.061	30.	0.	27.152	5.211	0.	5.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-08/12/96	8 ##	5.	3.125	5.	0.	6.696	2.588	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-09/23/96	41 ##	5.	4.671	20.	0.	12.67	3.56	0.	5.	5.	9.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-09/23/96	41 ##	5.	4.659	15.	0.	9.28	3.046	0.	5.	5.	9.2
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-09/23/96	41	130.	156.659	469.	5.	9625.53	98.11	46.	90.	215.	299.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-09/23/96	41 ##	50.	36.89	50.	0.	376.519	19.404	1.6	20.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-09/23/96	41	40.	51.659	290.	20.	2072.33	45.523	30.	30.	55.	104.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-09/23/96	41	30.	38.317	110.	5.	456.922	21.376	20.	27.5	48.5	66.4
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-08/12/96	9 ##	5.	22.778	50.	0.	669.444	25.874	0.	0.	50.	50.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-09/23/96	40 ##	5.	4.313	10.	0.	6.624	2.574	0.	5.	5.	5.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-08/12/96	9 ##	5.	2.778	5.	0.	6.944	2.635	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-09/23/96	41 ##	10.	13.793	70.	0.	238.937	15.458	0.	5.	17.5	38.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-09/23/96	41	80.	113.512	380.	5.	9042.756	95.093	33.4	50.	135.	265.6
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-09/23/96	40	30.	35.15	90.	5.	598.028	24.455	5.	15.5	50.	80.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/23/96	41 ##	5.	4.573	20.	0.	16.97	4.119	0.	2.25	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-09/23/96	41	24.	30.78	113.	17.	367.776	19.177	19.	21.5	32.5	47.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/23/96	41 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-08/12/96	10 ##	42.5	39.5	100.	0.	830.278	28.815	0.	18.75	50.	95.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-09/23/96	41	0.28	0.301	0.74	0.005	0.022	0.148	0.126	0.195	0.395	0.486
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-09/23/96	36	4.	7.139	47.	0.	82.294	9.072	2.	2.25	7.	16.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/23/96	38 ##	50.	67.105	100.	50.	577.881	24.039	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0068

NPS Station ID: CUGA0068 | LAT/LON: 36.603476/ -83.691642 | Agency: 11NPSWRD | Date Created: 07/12/97
Location: LITTLE YELLOW CREEK - SOUTH OF TUNNEL CREEK | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CMRC_LYC5
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1150 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON LITTLE YELLOW CREEK APPROXIMATELY 400 FEET SOUTH OF THE TUNNEL CREEK CONFLUENCE. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0068

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	23	0.	27391.304	610000.	0.	16147430830.04	127072.542	0.	0.	0.	12000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	23	0.	0.439	5.785	0.	2.161	1.47	0.	0.	0.	2.581
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			2.745								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	23	0.	63369.565	750000.	0.	43645232213.439	208914.414	0.	0.	0.	423000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	23	0.	0.678	5.875	0.	3.324	1.823	0.	0.	0.	5.057
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			4.765								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	25.	500.	0.	10965.909	104.718	0.	0.	0.	45.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	630.435	7500.	0.	4368577.075	2090.114	0.	0.	0.	4200.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0068

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	23	2	0.09	8	0	0.00	5	0	0.00	3	0	0.00	7	2	0.29

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0069

NPS Station ID: CUGA0069 LAT/LON: 36.608892/ -83.691670 Agency: 21KY Date Created: 06/10/89
Location: LITTLE YELLOW CREEK ABOVE US 25E BRIDGE FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): SUD199 /02037003
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 0 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101047 RF1 Mile Point: 0.100 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 05130101004612.60 RF3 Mile Point: 12.60 Distance from RF3: 0.04 On/Off RF3:
Description:
USGS TOPOGRAPHIC MAP NO. 1-51, MIDDLESBORO SOUTH, KY QUADRANGLE SAMPLE COLLECTED ABOVE US 25E BRIDGE IN BELL COUNTY
ON JUNE 5, 1985, STREAM ORDER 3, MILEPOINT 1.5 BIOLOGICAL/PHYSICOCHEMICAL STATION
UPPER CUMBERLAND RIVER BASIN

Parameter Inventory for Station: CUGA0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/05/85-06/05/85	1	83.	83.	83.	83.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/05/85-06/05/85	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	06/05/85-06/05/85	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	06/05/85-06/05/85	1	32100.	32100.	32100.	32100.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/05/85-06/05/85	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/05/85-06/05/85	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/05/85-06/05/85	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/05/85-06/05/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	06/05/85-06/05/85	1	510.	510.	510.	510.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/05/85-06/05/85	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	06/05/85-06/05/85	1	35.5	35.5	35.5	35.5	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/05/85-06/05/85	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	06/05/85-06/05/85	1	880.	880.	880.	880.	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/05/85-06/05/85	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/05/85-06/05/85	1	0.034	0.034	0.034	0.034	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/05/85-06/05/85	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/05/85-06/05/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	06/05/85-06/05/85	1 ##	0.245	0.245	0.245	0.245	0.	0.	**	**	**	**
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00746	SULFIDE, DISSOLVED (MG/L AS S)	06/05/85-06/05/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	06/05/85-06/05/85	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/05/85-06/05/85	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	06/05/85-06/05/85	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00937	POTASSIUM, TOTAL MG/L AS K)	06/05/85-06/05/85	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/05/85-06/05/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/05/85-06/05/85	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/05/85-06/05/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/05/85-06/05/85	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/05/85-06/05/85	1	0.68	0.68	0.68	0.68	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01007	BARIUM, TOTAL (UG/L AS BA)	06/05/85-06/05/85	1	35.	35.	35.	35.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	7.11	7.11	7.11	7.11	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/05/85-06/05/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/05/85-06/05/85	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/05/85-06/05/85	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/05/85-06/05/85	1	590.	590.	590.	590.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/05/85-06/05/85	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/05/85-06/05/85	1	469.	469.	469.	469.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/05/85-06/05/85	1	140.	140.	140.	140.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/05/85-06/05/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	7.69	7.69	7.69	7.69	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/05/85-06/05/85	1	38.	38.	38.	38.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/05/85-06/05/85	1	48.7	48.7	48.7	48.7	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/05/85-06/05/85	1	41.	41.	41.	41.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/05/85-06/05/85	1	3540.	3540.	3540.	3540.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/05/85-06/05/85	1	9200.	9200.	9200.	9200.	0.	0.	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	06/05/85-06/05/85	1	6.	6.	6.	6.	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34354	ENDOSULFAN SULFATE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34364	ENDOSULFAN, ALPHA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34369	ENDRIN ALDEHYDE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34721	2,3,4,6-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/05/85-06/05/85	1	42.	42.	42.	42.	0.	0.	**	**	**	**
70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	06/05/85-06/05/85	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	06/05/85-06/05/85	1	1.	1.	1.	1.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/05/85-06/05/85	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/05/85-06/05/85	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	06/05/85-06/05/85	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	06/05/85-06/05/85	1	4.	4.	4.	4.	0.	0.	**	**	**	**
82556	2,3,4,5-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82557	ENDRIN KEYTONE IN BOTTOM DEPOSITS SEDDRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0069

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00										1	0	0.00
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION)	Fresh Acute	0.022	1	0	0.00										1	0	0.00
		Drinking Water	0.2	1	0	0.00										1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	1	0	0.00										1	0	0.00
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	0	0.00										1	0	0.00
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	0	0.00										1	0	0.00
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0070

NPS Station ID: CUGA0070 LAT/LON: 36.606170/ -83.692392 Agency: 11NPSWRD Date Created: 09/20/97
Location: LITTLE YELLOW CREEK: 0.4 MILES FROM STATION YCA FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_YC6
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1150 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON LITTLE YELLOW CREEK APPROXIMATELY 0.5 MILES DOWNSTREAM FROM THE CONFLUENCE OF TUNNEL CREEK WITH LITTLE YELLOW. IT MONITORS THE MAXIMUM IMPACT OF TUNNEL CONSTRUCTION ON LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0070

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-08/10/92	58	13.95	14.022	22.7	3.	30.28	5.503	6.87	8.95	19.05	20.04
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-08/10/92	58	2.	6.103	46.	0.	84.361	9.185	0.	0.9	8.25	19.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-08/10/92	58	44.5	60.569	326.	10.	3167.337	56.279	23.6	31.	65.25	107.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-08/10/92	58	96.5	111.155	247.	46.	2826.975	53.169	53.	61.5	147.5	199.4
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-08/10/92	58	0.	0.052	1.	0.	0.05	0.223	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-08/10/92	58	8.6	8.84	12.8	6.	3.093	1.759	6.69	7.275	10.05	11.34
00403	PH, LAB, STANDARD UNITS SU	04/11/91-08/10/92	36	7.4	7.469	9.2	7.	0.212	0.461	7.07	7.2	7.6	7.9
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-08/10/92	36	7.4	7.336	9.2	7.	0.231	0.48	7.07	7.2	7.6	7.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-08/10/92	36	0.04	0.046	0.1	0.001	0.001	0.027	0.013	0.025	0.063	0.086
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-08/10/92	58	7.	7.052	8.9	6.3	0.219	0.468	6.5	6.8	7.2	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-08/10/92	58	7.	6.895	8.9	6.3	0.244	0.494	6.5	6.8	7.2	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-08/10/92	58	0.1	0.127	0.501	0.001	0.01	0.1	0.032	0.063	0.158	0.316
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-08/10/92	58	31.	32.103	60.	5.	331.814	18.216	10.	12.75	51.	54.3
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	58 ##	0.05	0.051	0.1	0.05	0.	0.007	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-08/10/92	57	17.	18.947	39.	0.	131.622	11.473	5.8	7.	30.5	35.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-08/10/92	58	4.	8.466	89.	0.	269.271	16.409	0.	2.	6.25	13.4
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-08/10/92	57 ##	0.01	0.645	7.	0.	2.476	1.574	0.	0.01	0.025	3.14
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-08/10/92	58 ##	0.01	0.025	0.26	0.01	0.002	0.042	0.01	0.01	0.01	0.08
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-08/10/92	58	0.095	0.344	9.7	0.	1.633	1.278	0.	0.035	0.243	0.506

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0070

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-08/10/92	58	0.045	0.121	0.91	0.	0.034	0.184	0.	0.	0.123	0.442
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-06/29/92	7 ##	0.5	1.3	6.	0.	4.847	2.202	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-08/10/92	58	40.5	45.983	149.	15.	691.982	26.306	19.	23.	61.5	76.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-08/10/92	58	11.6	13.183	33.7	2.7	65.772	8.11	4.39	5.45	18.6	24.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-08/10/92	58	2.4	2.529	4.1	1.4	0.422	0.65	1.8	2.	3.1	3.41
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-08/10/92	58	2.145	2.752	9.37	0.72	4.718	2.172	0.99	1.228	3.15	6.66
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-08/10/92	58	1.565	2.009	7.43	0.82	2.002	1.415	0.929	1.075	2.06	4.395
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-08/10/92	58	2.	1.852	4.	0.7	0.597	0.773	1.	1.	2.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-08/10/92	58	11.9	17.409	76.	0.	193.877	13.924	9.08	10.075	19.025	39.12
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-08/10/92	58 ##	0.1	0.182	0.82	0.05	0.04	0.2	0.1	0.1	0.1	0.58
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-06/29/92	9 ##	0.	63.333	250.	0.	11418.75	106.859	0.	0.	142.5	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-06/29/92	11	30.	32.727	70.	0.	401.818	20.045	4.	20.	50.	66.
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-08/10/92	58 ##	5.	10.707	80.	0.	269.93	16.43	0.	0.	12.5	30.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-06/29/92	11 ##	0.	4.545	40.	0.	147.273	12.136	0.	0.	0.	34.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-08/10/92	58 ##	1.5	7.172	90.	0.	183.935	13.562	0.	0.	10.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-08/10/92	58 ##	0.	7.121	60.	0.	142.213	11.925	0.	0.	10.	21.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-08/10/92	58 ##	0.	6.707	110.	0.	255.825	15.995	0.	0.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-08/10/92	58	190.	214.879	480.	80.	9084.003	95.31	110.	149.	262.5	373.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-08/10/92	58	21.5	27.293	90.	0.	496.527	22.283	0.	10.	42.5	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-08/10/92	58	100.	101.207	210.	30.	2095.009	45.771	49.	60.	140.	160.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-08/10/92	58	90.	89.776	190.	30.	1673.58	40.909	40.	50.	130.	141.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-06/29/92	29 ##	0.	1.897	20.	0.	22.167	4.708	0.	0.	0.	10.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-08/10/92	58 ##	0.	3.897	20.	0.	28.866	5.373	0.	0.	10.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-06/29/92	29 ##	0.	21.724	90.	0.	979.064	31.29	0.	0.	45.	80.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-06/29/92	28 ##	0.	1.071	20.	0.	17.328	4.163	0.	0.	0.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-08/10/92	58	10.	8.483	90.	0.	183.131	13.533	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-08/10/92	58	170.	323.103	2420.	60.	189888.445	435.762	90.	120.	322.5	837.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-08/10/92	58	70.	126.379	1910.	5.	73077.678	270.329	30.	46.75	95.5	181.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-06/29/92	29 ##	0.	1.034	20.	0.	16.749	4.093	0.	0.	0.	0.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-06/29/92	29 ##	0.	16.897	100.	0.	807.882	28.423	0.	0.	25.	70.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-08/10/92	58	2792.5	3197.328	20000.	1600.	5560400.189	2358.05	2100.	2400.	3300.	4010.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-08/10/92	58 ##	0.	3.991	30.	0.	43.671	6.608	0.	0.	10.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-08/10/92	56	50.5	58.161	143.	22.	1010.392	31.787	27.	31.25	68.5	108.2
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-08/10/92	58 ##	0.15	0.186	2.	0.15	0.059	0.243	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-06/29/92	28 ##	0.	6.964	100.	0.	433.962	20.832	0.	0.	0.	35.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-08/10/92	58	0.5	0.517	1.67	0.18	0.077	0.277	0.238	0.328	0.605	0.745
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-08/10/92	58	7.	17.224	200.	0.	1223.23	34.975	3.	4.75	11.5	30.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-08/10/92	58 ##	100.	96.552	100.	50.	163.339	12.78	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0070

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
00403	PH, LAB	Fresh Chronic	9.	36	1	0.03	12	1	0.08	7	0	0.00	4	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	36	0	0.00	12	0	0.00	7	0	0.00	4	0	0.00	13	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
		Other-Lo Lim.	6.5	58	6	0.10	21	0	0.00	14	3	0.21	9	2	0.22	14	1	0.07
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
		Drinking Water	250.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	9	0	0.00	3	0	0.00	2	0	0.00				4	0	0.00
		Drinking Water	50.	7 &	0	0.00	3	0	0.00	2	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	11	0	0.00	5	0	0.00	2	0	0.00				4	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	11	2	0.18	5	1	0.20	2	0	0.00				4	1	0.25
		Drinking Water	5.	11	2	0.18	5	1	0.20	2	0	0.00				4	1	0.25

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0070

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	57 &	6	0.11	20	1	0.05	14	1	0.07	9	0	0.00	14	4	0.29
		Drinking Water	1300.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	58	1	0.02	21	0	0.00	14	1	0.07	9	0	0.00	14	0	0.00
		Drinking Water	15.	52 &	32	0.62	18	12	0.67	14	9	0.64	9	6	0.67	11	5	0.45
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
		Drinking Water	100.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
		Drinking Water	5000.	58	0	0.00	21	0	0.00	14	0	0.00	9	0	0.00	14	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	24 &	0	0.00	9	0	0.00	8	0	0.00	5	0	0.00	2	0	0.00
		Drinking Water	2.	24 &	0	0.00	9	0	0.00	8	0	0.00	5	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	58	4	0.07	21	1	0.05	14	2	0.14	9	0	0.00	14	1	0.07

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0071

NPS Station ID: CUGA0071 | LAT/LON: 36.602420/ -83.692865 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: DRAINAGE DITCH - STORAGE AREA | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /CANAL/TYPA/AMBNT | STORET Station ID(s): CUGA_CPSU_KY18
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1150 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS A DRAINAGE DITCH USED TO MONITOR AN AREA USED AS A PARKING LOT AND A CONSTRUCTION MATERIAL STORAGE AREA. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996); "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965- 1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0071

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/90-03/23/93	24	10.45	11.738	20.4	4.9	25.176	5.018	5.75	7.175	15.875	19.75
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/10/90-03/23/93	24 ##	0.	0.512	5.	0.	1.628	1.276	0.	0.	0.058	3.
00080	COLOR (PLATINUM-COBALT UNITS)	12/10/90-03/23/93	24	86.	157.5	762.	21.	33209.043	182.233	31.5	50.5	195.75	471.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/10/90-03/23/93	24	157.	156.917	274.	42.	2532.341	50.322	96.	123.5	182.75	228.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	12/10/90-03/23/93	24	0.	0.25	1.	0.	0.196	0.442	0.	0.	0.75	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/10/90-03/23/93	24	8.8	9.063	11.8	6.9	1.767	1.329	7.3	8.125	10.3	11.
00403	PH, LAB, STANDARD UNITS SU	04/10/91-03/23/93	13	7.7	7.708	8.	7.5	0.024	0.155	7.54	7.6	7.8	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	04/10/91-03/23/93	13	7.7	7.685	8.	7.5	0.025	0.157	7.54	7.6	7.8	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/10/91-03/23/93	13	0.02	0.021	0.032	0.01	0.	0.006	0.01	0.016	0.025	0.029
00406	PH, FIELD, STANDARD UNITS SU	12/10/90-03/23/93	23	7.1	7.104	7.9	6.5	0.118	0.343	6.64	6.8	7.2	7.66
00406	CONVERTED PH, FIELD, STANDARD UNITS	12/10/90-03/23/93	23	7.1	6.99	7.9	6.5	0.131	0.362	6.64	6.8	7.2	7.66
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/10/90-03/23/93	23	0.079	0.102	0.316	0.013	0.006	0.075	0.022	0.063	0.158	0.231
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/10/90-03/23/93	24	73.5	82.958	155.	32.	1435.955	37.894	40.5	55.	106.25	145.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	12/10/90-03/23/93	24 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	12/10/90-03/23/93	24	45.	50.625	95.	20.	537.81	23.191	24.5	33.5	65.	88.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/10/90-03/23/93	24	7.	35.808	527.	0.	11272.673	106.173	0.7	2.25	19.75	61.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	12/10/90-06/15/92	23 ##	0.01	0.081	1.1	0.	0.065	0.254	0.	0.01	0.01	0.364
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/10/90-03/23/93	24 ##	0.01	0.015	0.13	0.01	0.001	0.024	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/10/90-03/23/93	24 ##	0.	0.101	0.89	0.	0.061	0.247	0.	0.	0.09	0.52
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/10/90-03/23/93	24	0.17	0.356	1.66	0.	0.214	0.462	0.	0.013	0.565	1.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/26/91-03/23/93	3	16.	11.5	18.5	0.	100.75	10.037	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/90-03/23/93	24	72.5	85.583	157.	42.	1098.428	33.143	52.5	62.25	111.5	149.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0071

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/90-03/23/93	24	23.35	28.463	55.8	3.	165.628	12.87	15.35	21.	37.4	52.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/90-03/23/93	24	2.	2.204	3.9	1.2	0.597	0.773	1.4	1.7	2.775	3.65
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/90-03/23/93	24	0.725	0.76	1.44	0.46	0.046	0.215	0.495	0.63	0.86	1.025
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/90-03/23/93	24	1.27	1.32	2.11	0.86	0.094	0.307	0.99	1.09	1.463	1.84
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/10/90-03/23/93	24	0.9	0.917	2.	0.6	0.071	0.266	0.7	0.725	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/10/90-03/23/93	24	10.7	10.038	18.5	0.8	22.583	4.752	1.1	7.95	12.375	17.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/90-03/23/93	24 ##	0.1	0.119	0.64	0.05	0.012	0.112	0.08	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/24/90-04/26/91	3 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/24/90-03/23/93	4	20.	22.5	30.	20.	25.	5.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/10/90-03/23/93	24	20.	37.208	150.	0.	1646.172	40.573	2.5	10.	67.5	105.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/24/90-03/23/93	4 ##	0.	1.25	5.	0.	6.25	2.5	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/10/90-03/23/93	24 ##	0.	4.542	40.	0.	75.911	8.713	0.	0.	10.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	12/10/90-03/23/93	24	7.5	16.333	80.	0.	558.58	23.634	0.	0.	27.5	65.
01040	COPPER, DISSOLVED (UG/L AS CU)	12/10/90-03/23/93	24 ##	0.	8.75	110.	0.	515.761	22.71	0.	0.	10.	22.5
01046	IRON, DISSOLVED (UG/L AS FE)	12/10/90-03/23/93	24	445.	703.25	3280.	180.	529268.196	727.508	200.	270.	952.25	1765.
01049	LEAD, DISSOLVED (UG/L AS PB)	12/10/90-03/23/93	24	26.5	32.208	90.	0.	640.52	25.308	0.	10.	50.	75.
01055	MANGANESE, TOTAL (UG/L AS MN)	12/10/90-03/23/93	24	155.	315.833	1320.	20.	136755.797	369.805	30.	80.	470.	1045.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/10/90-03/23/93	24	110.	266.458	1150.	20.	99881.389	316.04	20.	62.5	435.	861.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/10/90-03/23/93	14 ##	0.	4.286	50.	0.	180.22	13.425	0.	0.	0.	30.
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/10/90-03/23/93	24 ##	3.5	8.208	30.	0.	109.216	10.451	0.	0.	10.	30.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/10/90-03/23/93	14 ##	0.	17.857	80.	0.	925.824	30.427	0.	0.	45.	75.
01085	VANADIUM, DISSOLVED (UG/L AS V)	12/10/90-03/23/93	14 ##	0.	1.071	10.	0.	8.379	2.895	0.	0.	0.	7.5
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/10/90-03/23/93	24	10.	16.938	50.	0.	267.05	16.342	0.	0.375	30.	45.
01105	ALUMINUM, TOTAL (UG/L AS AL)	12/10/90-03/23/93	24	140.	316.667	1360.	30.	145753.623	381.777	50.	70.	347.5	1060.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/10/90-03/23/93	24	85.	127.792	460.	20.	11832.694	108.778	30.	42.5	200.	300.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	12/10/90-04/26/91	13 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	12/10/90-04/26/91	13 ##	0.	12.308	60.	0.	569.231	23.859	0.	0.	20.	60.
01140	SILICON, DISSOLVED (UG/L AS SI)	12/10/90-03/23/93	24	2800.	2940.833	5400.	1520.	753886.232	868.266	2025.	2342.5	3300.	4200.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/10/90-03/23/93	24 ##	0.	4.583	20.	0.	37.297	6.107	0.	0.	10.	13.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	12/10/90-03/23/93	24	78.5	85.208	156.	0.	1193.65	34.549	47.5	68.25	110.5	139.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	12/10/90-03/23/93	24 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	12/10/90-03/23/93	14 ##	0.	5.357	50.	0.	209.478	14.473	0.	0.	0.	37.5
74010	IRON, TOTAL (MG/L AS FE)	12/10/90-03/23/93	24	1.01	2.357	14.16	0.24	10.647	3.263	0.365	0.495	2.768	7.55
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	12/10/90-03/23/93	24	13.	33.875	200.	3.	2767.94	52.611	3.5	5.	34.75	136.5
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	12/10/90-03/23/93	24 ##	100.	97.917	100.	50.	104.167	10.206	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0071

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
00403	PH, LAB	Fresh Chronic	9.	13	0	0.00				1	0	0.00	4	0	0.00	8	0	0.00
		Other-Lo Lim.	6.5	13	0	0.00				1	0	0.00	4	0	0.00	8	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	23	0	0.00				5	0	0.00	10	0	0.00	8	0	0.00
		Other-Lo Lim.	6.5	23	1	0.04				5	0	0.00	10	1	0.10	8	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
		Drinking Water	250.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
		Drinking Water	50.	3	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	4	0	0.00				1	0	0.00	2	0	0.00	1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3 &	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
		Drinking Water	5.	3 &	0	0.00				1	0	0.00	1	0	0.00	1	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	24	2	0.08				6	0	0.00	10	0	0.00	8	2	0.25
		Drinking Water	1300.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0071

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	24	1	0.04				6	0	0.00	10	0	0.00	8	1	0.13
		Drinking Water	15.	23 &	16	0.70				6	1	0.17	9	7	0.78	8	8	1.00
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
		Drinking Water	100.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
		Drinking Water	5000.	24	0	0.00				6	0	0.00	10	0	0.00	8	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	12 &	0	0.00				5	0	0.00	6	0	0.00	1	0	0.00
		Drinking Water	2.	12 &	0	0.00				5	0	0.00	6	0	0.00	1	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	24	4	0.17				6	0	0.00	10	1	0.10	8	3	0.38

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0072

NPS Station ID: CUGA0072 | LAT/LON: 36.685004/ -83.693892 | Agency: 21KY | Date Created: 10/02/82
Location: CANNON CREEK LAKE NEAR FERNDALE | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/LAKE | STORET Station ID(s): CLN056 /CAN001 /0513010104
RMI-Indexes: | Within Park Boundary: No
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 0 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 05130101004214.50 | RF3 Mile Point: 14.50 | Distance from RF3: 0.04 | On/Off RF3:
Description:
KY TOPO MAP INDEX NO. 2-51, MIDDLESBORO NORTH,KY. QUADRANGLE ON CANNON CREEK OFF US25E APPROXIMATELY 7.6KM SOUTH OF PINEVILLE,KY..
EUPHOTIC ZONE COMPOSITE SAMPLE TAKEN AT DEEPEST LAKE SITE. SAMPLE TAKEN IMMEDIATELY UPSTREAM OF DAM IN BELL COUNTY.

Parameter Inventory for Station: CUGA0072

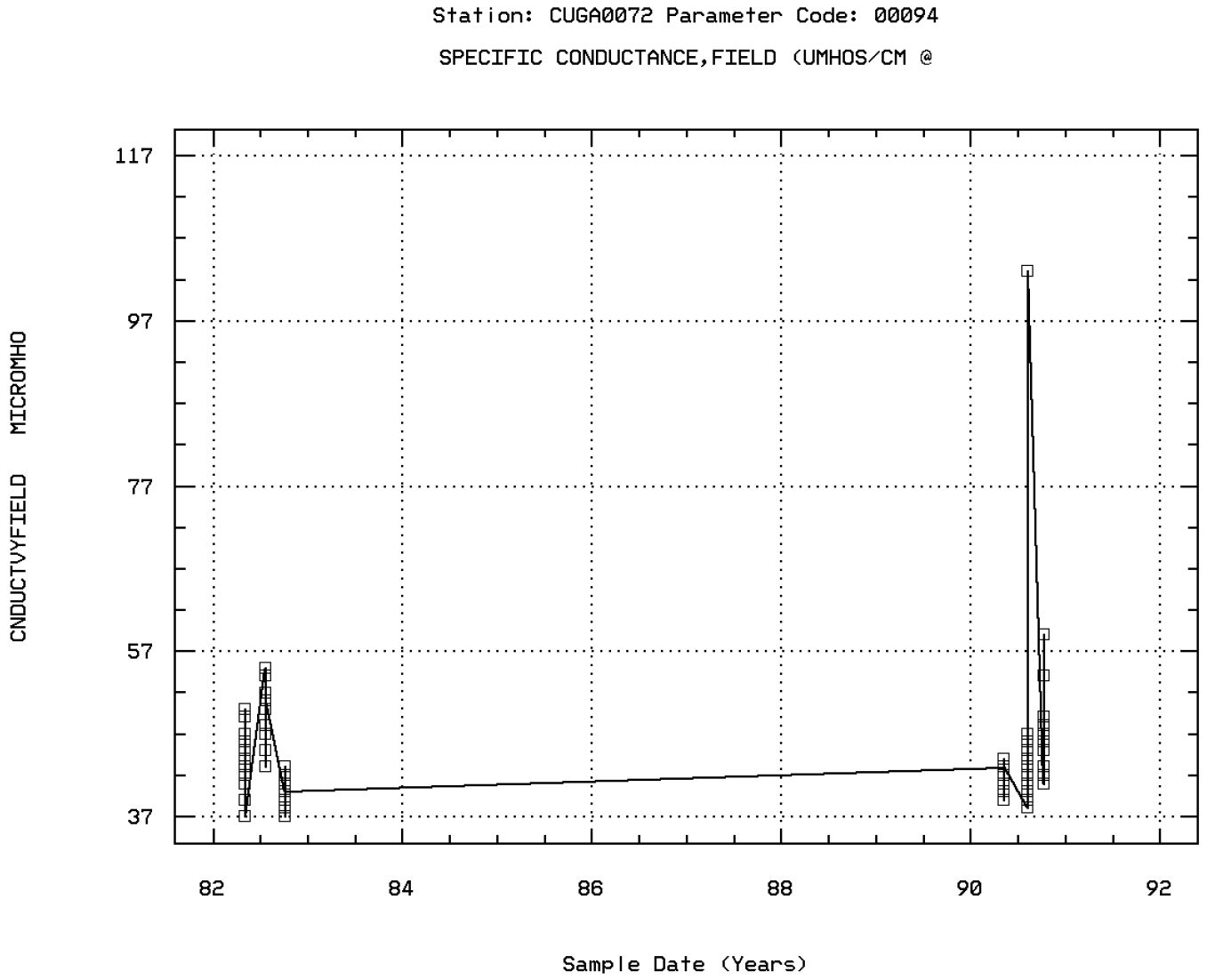
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/05/82-10/10/90	133	7.9	11.615	27.8	4.8	49.408	7.029	5.3	5.9	17.8	21.6
00078	TRANSPARENCY, SECCHI DISC (METERS)	05/05/82-10/10/90	6	4.055	4.285	6.1	3.1	1.388	1.178	**	**	**	**
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/05/82-10/10/90	133	43.	44.301	103.	37.	46.257	6.801	39.	41.	46.5	50.6
00204	DEPTH IN METERS AT WHICH 1% SURFACE LIGHT REMAINS	05/05/82-10/10/90	6	14.65	14.65	19.2	9.3	10.827	3.29	**	**	**	**
00205	DEPTH, MAXIMUM, OF LAKE OR RESERVOIR (METERS)	05/05/82-10/10/90	6	29.	28.333	30.3	22.7	7.943	2.818	**	**	**	**
00300p	OXYGEN, DISSOLVED MG/L	05/05/82-10/10/90	133	7.7	7.374	11.3	0.3	5.165	2.273	4.32	6.2	8.9	9.9
00400p	PH (STANDARD UNITS)	05/05/82-10/10/90	133	6.3	6.407	7.4	5.9	0.135	0.367	6.	6.1	6.7	6.96
00400p	CONVERTED PH (STANDARD UNITS)	05/05/82-10/10/90	133	6.3	6.279	7.4	5.9	0.151	0.389	6.	6.1	6.7	6.96
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/05/82-10/10/90	133	0.501	0.526	1.259	0.04	0.124	0.352	0.11	0.2	0.794	1.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/09/90-10/10/90	3	7.	6.667	7.	6.	0.333	0.577	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/05/82-10/10/90	6 ##	0.048	0.063	0.16	0.025	0.003	0.053	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/05/82-10/10/90	6	0.132	0.112	0.16	0.025	0.003	0.053	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/05/82-10/10/90	6	0.04	0.048	0.07	0.04	0.	0.013	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/05/82-10/10/90	6 ##	0.004	0.004	0.006	0.003	0.	0.002	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/05/82-10/10/90	5 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/05/82-10/10/90	6 ##	0.003	0.003	0.003	0.002	0.	0.	**	**	**	**
32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	05/05/82-08/08/90	5	1.3	1.36	2.2	0.8	0.273	0.522	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0072

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	133	11	0.08	86	11	0.13							47	0	0.00
00400	PH	Fresh Chronic	9.	133	0	0.00	86	0	0.00							47	0	0.00
		Other-Lo Lim.	6.5	133	91	0.68	86	53	0.62							47	38	0.81
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	4	0	0.00							2	0	0.00

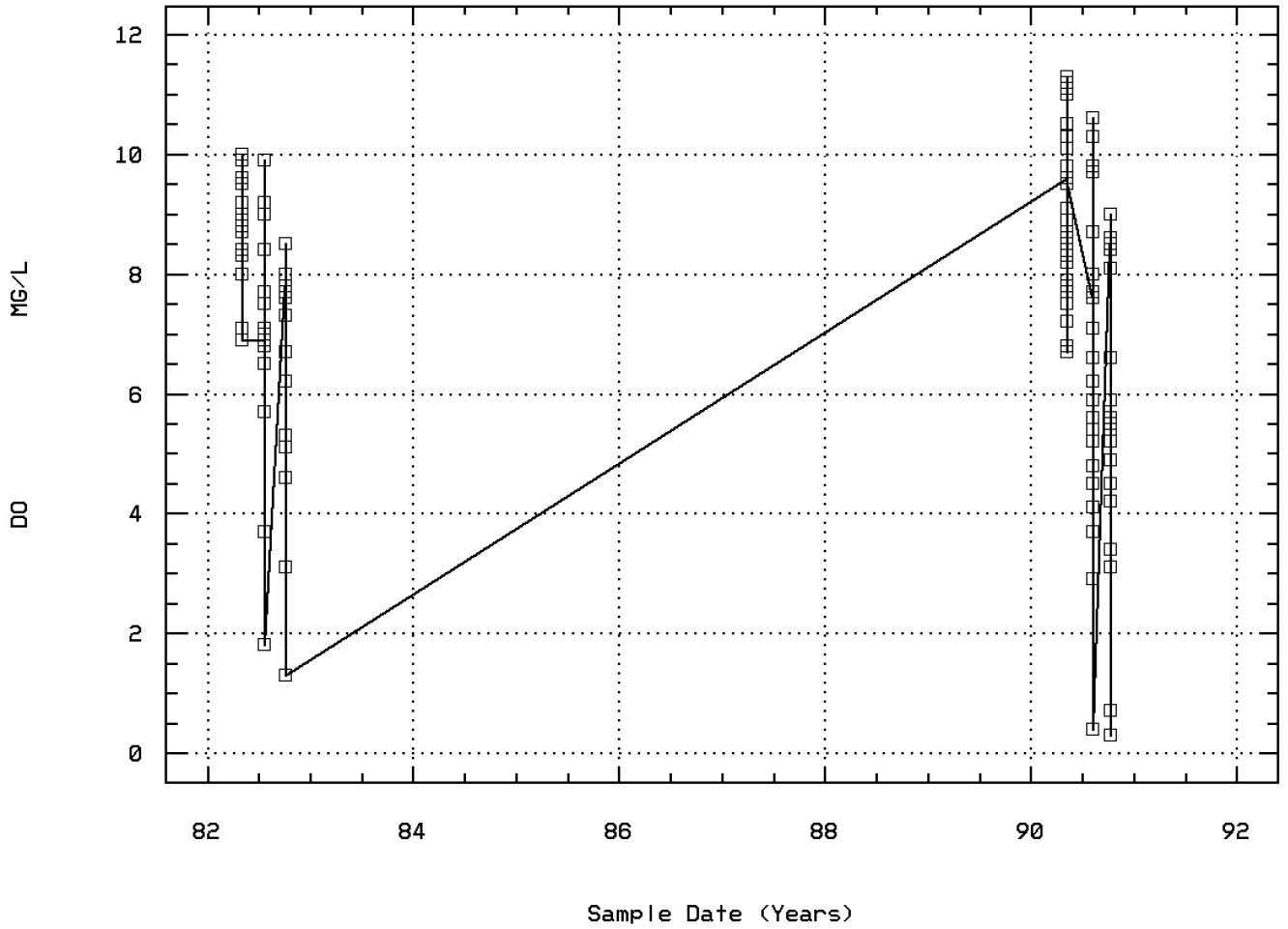
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter



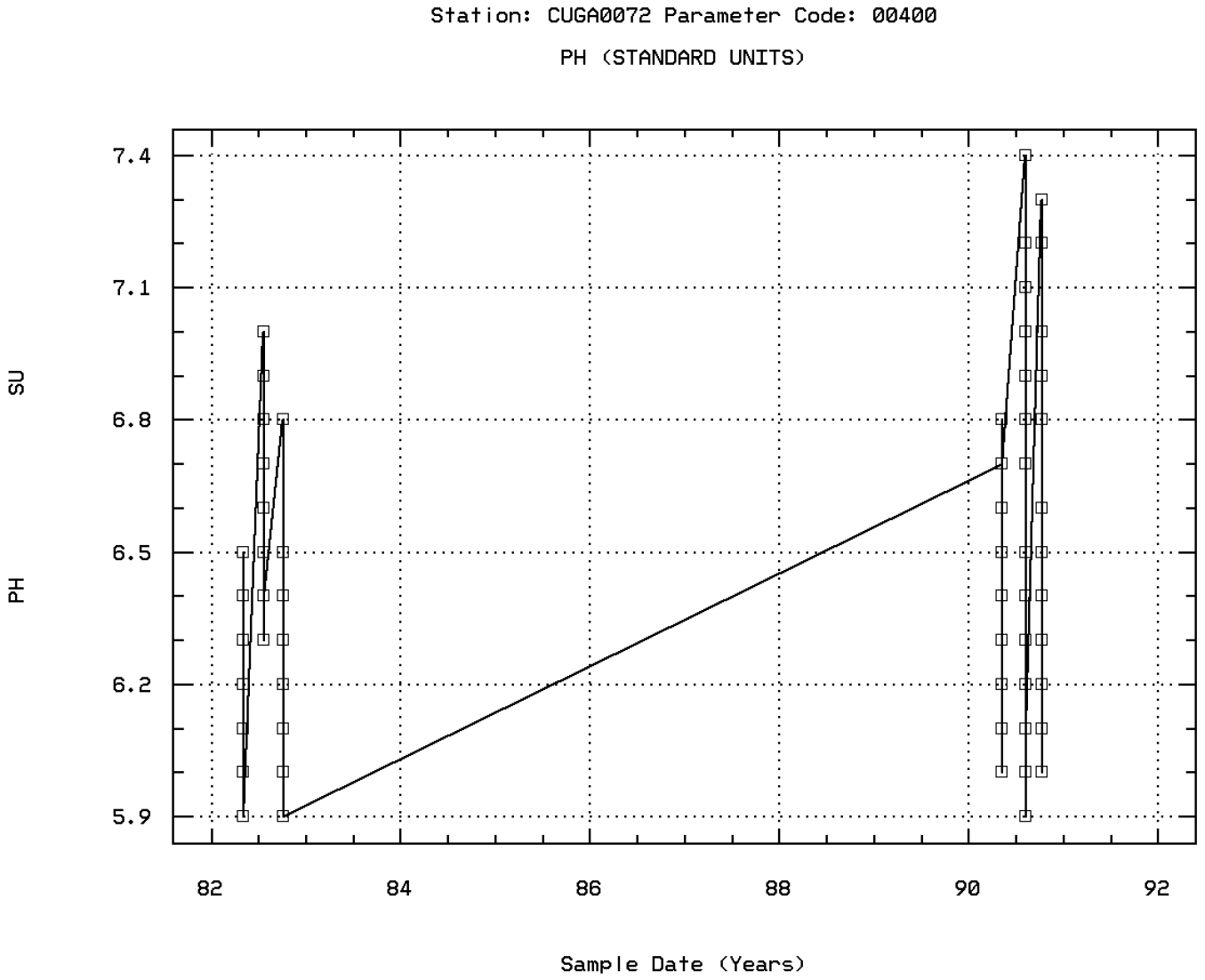
CANNON CREEK LAKE NEAR FERNDALE

Station: CUGA0072 Parameter Code: 00300

OXYGEN, DISSOLVED



CANNON CREEK LAKE NEAR FERNDALE



CANNON CREEK LAKE NEAR FERNDALE

Station Inventory for Station: CUGA0073

NPS Station ID: CUGA0073 | LAT/LON: 36.596170/ -83.698170 | Agency: 11NPSWRD | Date Created: 09/20/97
Location: LITTLE YELLOW CREEK - UPSTREAM | FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): CUGA_CPSU_YC1
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 | Depth of Water: 0 | Aquifer:
Major Basin: OHIO RIVER | Elevation: 1160 | Water Body Id:
Minor Basin: CUMBERLAND RIVER | ECO Region:
RF1 Index: 05130101 | RF1 Mile Point: 0.000 | Distance from RF1: 0.00 | On/Off RF1:
RF3 Index: 06010206022100.00 | RF3 Mile Point: 0.09 | Distance from RF3: 0.02 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON LITTLE YELLOW CREEK AT THE PARK BOUNDARY 0.6 MILES BELOW THE FERN LAKE DAM. IT SERVES AS A CONTROL STATION TO MONITOR THE EFFECTS OF TUNNEL CONSTRUCTION ON LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606)248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD; FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0073

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/90-08/10/92	59	14.6	14.531	25.	2.	37.72	6.142	6.9	8.5	20.3	22.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/19/90-08/10/92	59	0.4	4.302	44.	0.	61.023	7.812	0.	0.2	6.	16.
00080	COLOR (PLATINUM-COBALT UNITS)	06/19/90-08/10/92	59	33.	44.881	211.	4.	1591.658	39.896	17.	23.	46.	88.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/90-08/10/92	59	47.	53.763	107.	6.	343.391	18.531	38.	40.	69.	74.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/19/90-08/10/92	60	0.	0.083	1.	0.	0.078	0.279	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/19/90-08/10/92	59	8.4	8.746	12.7	5.	3.686	1.92	6.	7.7	9.9	11.8
00403	PH, LAB, STANDARD UNITS SU	04/11/91-08/10/92	37	6.9	6.992	7.6	6.4	0.065	0.254	6.7	6.8	7.2	7.32
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-08/10/92	37	6.9	6.924	7.6	6.4	0.069	0.263	6.7	6.8	7.2	7.32
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-08/10/92	37	0.126	0.119	0.398	0.025	0.005	0.069	0.048	0.063	0.158	0.2
00406	PH, FIELD, STANDARD UNITS SU	06/19/90-08/10/92	59	7.	6.98	7.8	6.1	0.163	0.403	6.5	6.7	7.3	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/19/90-08/10/92	59	7.	6.803	7.8	6.1	0.194	0.441	6.5	6.7	7.3	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-08/10/92	59	0.1	0.157	0.794	0.016	0.023	0.153	0.032	0.05	0.2	0.316
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/19/90-08/10/92	60	14.5	16.183	42.	3.	116.83	10.809	5.	6.25	26.75	31.8
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/19/90-08/10/92	60 ##	0.05	0.098	2.	0.05	0.077	0.278	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/19/90-08/10/92	59	7.	9.508	26.	0.	44.944	6.704	2.	4.	16.	20.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/19/90-08/10/92	59	1.	3.308	34.	0.	30.774	5.547	0.	0.5	4.	9.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/19/90-08/10/92	59 ##	0.01	0.269	6.	0.	1.153	1.074	0.	0.01	0.01	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/90-08/10/92	60 ##	0.01	0.017	0.22	0.01	0.001	0.036	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/19/90-08/10/92	60 ##	0.005	0.121	5.	0.	0.413	0.642	0.	0.	0.08	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0073

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/19/90-08/10/92	60	0.03	0.059	0.28	0.	0.006	0.075	0.	0.	0.087	0.19
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-06/29/92	7 ##	0.5	0.5	2.	0.	0.5	0.707	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/19/90-08/10/92	60	19.5	21.717	46.	12.	76.986	8.774	13.	14.	29.	33.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/19/90-08/10/92	60	4.75	5.268	12.9	1.9	8.8	2.967	2.11	2.525	8.05	9.34
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/90-08/10/92	60	1.85	1.945	3.1	1.2	0.154	0.392	1.6	1.625	2.1	2.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/90-08/10/92	60	0.645	0.65	1.	0.43	0.016	0.125	0.49	0.555	0.72	0.827
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/19/90-08/10/92	60	1.065	1.137	2.51	0.73	0.11	0.331	0.841	0.933	1.223	1.582
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/19/90-08/10/92	60	0.7	0.791	3.	0.05	0.269	0.518	0.5	0.5	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/19/90-08/10/92	60	7.65	7.105	13.5	2.4	5.839	2.416	3.31	5.3	8.975	9.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/19/90-08/10/92	60 ##	0.1	0.097	0.1	0.05	0.	0.011	0.1	0.1	0.1	0.1
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-06/29/92	9 ##	0.	63.333	250.	0.	11418.75	106.859	0.	0.	142.5	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-06/29/92	11	20.	26.364	50.	0.	185.455	13.618	4.	20.	40.	48.
01020	BORON, DISSOLVED (UG/L AS B)	06/19/90-08/10/92	60 ##	0.	4.308	30.	0.	47.297	6.877	0.	0.	10.	10.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-06/29/92	11 ##	0.	3.182	10.	0.	21.364	4.622	0.	0.	10.	10.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-08/10/92	60 ##	0.	4.375	40.	0.	75.522	8.69	0.	0.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/19/90-08/10/92	60 ##	0.	3.208	20.	0.	21.943	4.684	0.	0.	5.75	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-08/10/92	60 ##	0.	5.867	50.	0.	120.151	10.961	0.	0.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	06/19/90-08/10/92	60	145.	166.15	390.	90.	4779.181	69.132	100.	120.	187.75	268.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-08/10/92	60 ##	10.	16.717	90.	0.	470.579	21.693	0.	0.	28.75	49.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/19/90-08/10/92	60	40.	55.5	250.	10.	2096.356	45.786	20.	30.	70.	119.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/90-08/10/92	60	30.	42.167	220.	10.	1488.684	38.583	10.	20.	60.	99.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/19/90-06/29/92	30 ##	0.	0.167	5.	0.	0.833	0.913	0.	0.	0.	0.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/19/90-08/10/92	60 ##	0.	2.142	10.	0.	12.814	3.58	0.	0.	5.	10.
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/19/90-06/29/92	30 ##	0.	13.333	60.	0.	416.092	20.398	0.	0.	22.5	58.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/90-06/29/92	29 ##	0.	0.517	10.	0.	4.187	2.046	0.	0.	0.	0.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-08/10/92	60 ##	5.	6.575	33.	0.	64.685	8.043	0.	0.	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/19/90-08/10/92	60	65.	121.333	680.	10.	19411.751	139.326	30.	40.	137.5	269.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/90-08/10/92	60	30.	44.95	230.	5.	1415.845	37.628	10.	20.	55.25	89.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/19/90-06/29/92	30 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/19/90-06/29/92	30 ##	0.	4.667	40.	0.	94.713	9.732	0.	0.	10.	19.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/19/90-08/10/92	60	2400.	2781.75	20000.	1400.	5341237.987	2311.112	1907.	2128.75	2877.5	3200.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/19/90-08/10/92	60 ##	0.	2.483	20.	0.	26.084	5.107	0.	0.	3.5	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/19/90-08/10/92	58	25.5	27.517	53.	19.	63.447	7.965	20.	21.	33.25	40.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/19/90-08/10/92	60 ##	0.15	0.158	0.5	0.15	0.002	0.047	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-06/29/92	29 ##	0.	7.069	100.	0.	418.781	20.464	0.	0.	0.	35.
74010	IRON, TOTAL (MG/L AS FE)	06/19/90-08/10/92	60	0.23	0.283	0.79	0.13	0.018	0.135	0.161	0.19	0.35	0.478
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/19/90-08/10/92	59	3.	6.627	41.	0.	91.583	9.57	1.	2.	6.	21.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/19/90-08/10/92	60 ##	100.	96.667	100.	50.	158.192	12.577	100.	100.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0073

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	59	0	0.00	20	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
00403	PH, LAB	Fresh Chronic	9.	37	0	0.00	12	0	0.00	8	0	0.00	4	0	0.00	13	0	0.00
		Other-Lo Lim.	6.5	37	1	0.03	12	0	0.00	8	1	0.13	4	0	0.00	13	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	59	0	0.00	20	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
		Other-Lo Lim.	6.5	59	10	0.17	20	2	0.10	15	4	0.27	10	1	0.10	14	3	0.21
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
		Drinking Water	250.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	9	0	0.00	3	0	0.00	2	0	0.00				4	0	0.00
		Drinking Water	50.	7 &	0	0.00	3	0	0.00	2	0	0.00				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	11	0	0.00	5	0	0.00	2	0	0.00				4	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	10 &	3	0.30	5	1	0.20	2	1	0.50				3	1	0.33
		Drinking Water	5.	10 &	3	0.30	5	1	0.20	2	1	0.50				3	1	0.33

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0073

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	57 &	5	0.09	20	0	0.00	15	3	0.20	8	0	0.00	14	2	0.14
		Drinking Water	1300.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	60	2	0.03	21	0	0.00	15	2	0.13	10	0	0.00	14	0	0.00
		Drinking Water	15.	56 &	19	0.34	18	7	0.39	14	7	0.50	10	3	0.30	14	2	0.14
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
		Drinking Water	100.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
		Drinking Water	5000.	60	0	0.00	21	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	25 &	1	0.04	9	0	0.00	8	1	0.13	6	0	0.00	2	0	0.00
		Drinking Water	2.	25 &	1	0.04	9	0	0.00	8	1	0.13	6	0	0.00	2	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	59	0	0.00	20	0	0.00	15	0	0.00	10	0	0.00	14	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0074

NPS Station ID: CUGA0074 LAT/LON: 36.596031/ -83.698392 Agency: 11NPSWRD Date Created: 07/12/97
Location: LITTLE YELLOW CREEK AT PARK BOUNDARY FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CMRC_LYC1
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1160 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON LITTLE YELLOW CREEK AT THE PARK BOUNDARY APPROXIMATELY 0.6 MILES BELOW THE FERN LAKE DAM. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0074

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	24	0.	4583.333	100000.	0.	417210144.928	20425.723	0.	0.	0.	5000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	24	0.	0.375	5.	0.	1.636	1.279	0.	0.	0.	2.
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			2.371								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	133333.333	2400000.	0.	259710144927.536	509617.646	0.	0.	0.	400000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	24	0.	0.512	6.38	0.	3.012	1.735	0.	0.	0.	2.952
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			3.249								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	25.	600.	0.	15000.	122.474	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	8.333	200.	0.	1666.667	40.825	0.	0.	0.	0.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	24	0.	5433.333	100000.	0.	430802318.841	20755.778	0.	0.	0.	15200.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			1.								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	24	0.	6250.	150000.	0.	937500000.	30618.622	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	24	0.	0.216	5.176	0.	1.116	1.057	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.643								

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EPA Water Quality Criteria Analysis for Station: CUGA0074

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	24	2	0.08	8	0	0.00	6	0	0.00	3	0	0.00	7	2	0.29

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0075

NPS Station ID: CUGA0075 LAT/LON: 36.645142/ -83.701115 Agency: 21KY Date Created: 06/03/89
Location: YELLOW CREEK BETWEEN US 25E AND L AND N RAILROAD FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): SUD200 /02037004
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 0 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101046 RF1 Mile Point: 13.500 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 051301010046l1.12 RF3 Mile Point: 11.12 Distance from RF3: 0.00 On/Off RF3:
Description:
KY TOPOGRAPHIC MAP INDEX NO. 2-51, MIDDLESBORO NORTH, KY QUADRANGLE COLLECTED AT YELLOW CREEK, MILEPOINT 13.5
PHYSICOCHEMICAL/BIOLOGICAL STATION IN BELL COUNTY

Parameter Inventory for Station: CUGA0075

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/05/85-06/05/85	1	696.	696.	696.	696.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/05/85-06/05/85	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	06/05/85-06/05/85	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
00339	COD, BOTTOM DEPOSITS, DRY WEIGHT MG/KG	06/05/85-06/05/85	1	42900.	42900.	42900.	42900.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/05/85-06/05/85	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/05/85-06/05/85	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/05/85-06/05/85	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	1	117.	117.	117.	117.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/05/85-06/05/85	1	55.	55.	55.	55.	0.	0.	**	**	**	**
00557	OIL & GREASE,SED,DRY WT,FREON EXTR-GRAV METH,MG/KG	06/05/85-06/05/85	1	675.	675.	675.	675.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/05/85-06/05/85	1	2.29	2.29	2.29	2.29	0.	0.	**	**	**	**
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	06/05/85-06/05/85	1	20.4	20.4	20.4	20.4	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/05/85-06/05/85	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00627	NITROGEN KJELDAHL TOTAL BOTTOM DEP DRY WT MG/KG	06/05/85-06/05/85	1	681.	681.	681.	681.	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/05/85-06/05/85	1	0.41	0.41	0.41	0.41	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/05/85-06/05/85	1	0.42	0.42	0.42	0.42	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/05/85-06/05/85	1	0.184	0.184	0.184	0.184	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/05/85-06/05/85	1	14.6	14.6	14.6	14.6	0.	0.	**	**	**	**
00721	CYANIDE IN BOTTOM DEPOSITS (MG/KG AS CN DRY WGT)	06/05/85-06/05/85	1 ##	0.245	0.245	0.245	0.245	0.	0.	**	**	**	**
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00746	SULFIDE, DISSOLVED (MG/L AS S)	06/05/85-06/05/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/05/85-06/05/85	1	232.	232.	232.	232.	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	06/05/85-06/05/85	1	56.9	56.9	56.9	56.9	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	06/05/85-06/05/85	1	20.7	20.7	20.7	20.7	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	06/05/85-06/05/85	1	39.5	39.5	39.5	39.5	0.	0.	**	**	**	**
00937	POTASSIUM, TOTAL MG/L AS K)	06/05/85-06/05/85	1	4.04	4.04	4.04	4.04	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/05/85-06/05/85	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/05/85-06/05/85	1	162.	162.	162.	162.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/05/85-06/05/85	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/05/85-06/05/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/05/85-06/05/85	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/05/85-06/05/85	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0075

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01027	CADMIUM, TOTAL (UG/L AS CD)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	18.7	18.7	18.7	18.7	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/05/85-06/05/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/05/85-06/05/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/05/85-06/05/85	1	17.	17.	17.	17.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/05/85-06/05/85	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/05/85-06/05/85	1	20.9	20.9	20.9	20.9	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/05/85-06/05/85	1	335.	335.	335.	335.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/05/85-06/05/85	1	360.	360.	360.	360.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/05/85-06/05/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/05/85-06/05/85	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/05/85-06/05/85	1	44.	44.	44.	44.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/05/85-06/05/85	1	75.7	75.7	75.7	75.7	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/05/85-06/05/85	1	27.	27.	27.	27.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/05/85-06/05/85	1	3070.	3070.	3070.	3070.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/05/85-06/05/85	1	12600.	12600.	12600.	12600.	0.	0.	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	06/05/85-06/05/85	1	17.	17.	17.	17.	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34354	ENDOSULFAN SULFATE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34364	ENDOSULFAN, ALPHA DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34369	ENDRIN ALDEHYDE DRY WGTBOTUG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34721	2,3,4,6-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39064	CHLORDANE-CIS ISOMER BOTTOM DEPOS (UG/KG DRY SOL	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39067	CHLORDANE-TRANS ISOMER,BOTTOM DEPOS(UG/KG DRY SL	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39073	CHLORDANE-NONACHLOR,TRANS ISO,BOTTOM DEP UG/KG	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	06/05/85-06/05/85	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39311	P,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39359	DDT SUM ANALOGS IN SEDIMENT UG/KG DRY WEIGHT	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39701	HEXACHLOROBENZENE IN BOT DEPOS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39783	LINDANE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	06/05/85-06/05/85	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/05/85-06/05/85	1	454.	454.	454.	454.	0.	0.	**	**	**	**
70322	SOLIDS, VOLATILE, PERCENT OF TOTAL SOLIDS	06/05/85-06/05/85	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	06/05/85-06/05/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/05/85-06/05/85	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/05/85-06/05/85	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
80153	CARBON, ORGANIC, IN SEDIMENT (% AS C)	06/05/85-06/05/85	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	06/05/85-06/05/85	1	55.	55.	55.	55.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0075

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82556	2,3,4,5-TETRACHLOROPHENOL IN BOT DEP DRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82557	ENDRIN KEYTONE IN BOTTOM DEPOSITS SEDDRYWGTMG/KG	06/05/85-06/05/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0075

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00										1	0	0.00
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION)	Fresh Acute	0.022	1	0	0.00										1	0	0.00
		Drinking Water	0.2	1	0	0.00										1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	1	0	0.00										1	0	0.00
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	0	0.00										1	0	0.00
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	0	0.00										1	0	0.00
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	1	1	1.00										1	1	1.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0076

NPS Station ID: CUGA0076
LAT/LON: 36.607504/ -83.701754
Agency: 11NPSWRD
Date Created: 07/12/97
Location: LITTLE YELLOW CREEK AT US 25 EAST
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): CUGA_CMRC_LYC10
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 1130
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON LITTLE YELLOW CREEK AT THE INTERSECTION OF US 25 EAST AND THE PARK'S WESTERN BOUNDARY. THIS STATION IS ONE OF TWELVE SAMPLED AS PART OF CUMBERLAND GAP (CUGA) NATIONAL HISTORIC PARK'S WATER QUALITY MONITORING PROGRAM. RESULTS ARE REPORTED IN "COLIFORMS OF DAVIS BRANCH; GAP CREEK; STATION CREEK; SUGAR RUN AND LITTLE YELLOW CREEK"; 10/12/91; BY JOHN COPELAND; RONALD CALDWELL AND GARY CORNELIUS. FOR MORE INFORMATION CONTACT JIMMY JOHNSON-RESOURCE MANAGEMENT SPECIALIST AT CUGA NATIONAL HISTORIC PARK; P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. PH (606) 248-7850
DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0076

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31648	E. COLI - MTEC-MF N0/100ML	12/14/89-11/19/90	23	0.	43913.043	1000000.	0.	43443083003.953	208430.043	0.	0.	0.	6000.
31648	LOG E. COLI - MTEC-MF N0/1	12/14/89-11/19/90	23	0.	0.435	6.	0.	2.166	1.472	0.	0.	0.	2.4
31648	GM E. COLI - MTEC-MF N0/10	GEOMETRIC MEAN =			2.721								
31760	KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	23	0.	252173.913	2400000.	0.	472608695652.174	687465.414	0.	0.	0.	1780000.
31760	LOG KLEBSIELLA SPECIES CONFIRMED PER 100ML	12/14/89-11/19/90	23	0.	0.818	6.38	0.	4.667	2.16	0.	0.	0.	6.239
31760	GM KLEBSIELLA SPECIES CONFIRMED PER 100ML	GEOMETRIC MEAN =			6.578								
50772	SERRATIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50773	YERSINIA, WATER, MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50774	FLAVOBACTERIUM,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50775	ACINETOBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	52.174	1200.	0.	62608.696	250.217	0.	0.	0.	0.
50776	CITROBACTER,WATER,MEMBRANE FILTRATION #/ML	12/14/89-11/19/90	23	0.	1608.696	24000.	0.	31158102.767	5581.944	0.	0.	0.	7800.
71220	PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100ML	12/14/89-11/19/90	23	0.	6956.522	150000.	0.	976679841.897	31251.877	0.	0.	0.	6000.
71220	LOG PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/10	12/14/89-11/19/90	23	0.	0.399	5.176	0.	1.779	1.334	0.	0.	0.	2.4
71220	GM PSEUDOMONAS AERUGINOSA,MF IN WATER,MPA MED,/100	GEOMETRIC MEAN =			2.506								
78944	ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/100ML	12/14/89-11/19/90	23	0.	6521.739	150000.	0.	978260869.565	31277.162	0.	0.	0.	0.
78944	LOG ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/1	12/14/89-11/19/90	23	0.	0.225	5.176	0.	1.165	1.079	0.	0.	0.	0.
78944	GM ENTEROBACTER CLOACAE, WATER, WHOLE, MF, COL/10	GEOMETRIC MEAN =			1.679								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0076

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	23	2	0.09	8	0	0.00	5	0	0.00	3	1	0.33	7	1	0.14

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0077

NPS Station ID: CUGA0077 LAT/LON: 36.607504/ -83.701754 Agency: 11NPSWRD Date Created: 09/20/97
Location: LITTLE YELLOW CREEK: AT PARK BOUNDARY FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): CUGA_CPSU_YC12
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: OHIO RIVER Elevation: 1130 Water Body Id:
Minor Basin: CUMBERLAND RIVER ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 06010206022100.00 RF3 Mile Point: 0.09 Distance from RF3: 0.02 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KENTUCKY-TENNESSEE- VIRGINIA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS ON LITTLE YELLOW CREEK APPROXIMATELY ONE MILE DOWNSTREAM FROM THE CONFLUENCE OF TUNNEL CREEK WITH LITTLE YELLOW CREEK. IT MONITORS THE IMPACT OF TUNNEL CONSTRUCTION AND SURFACE RUNOFF ON LITTLE YELLOW CREEK. DATA FOR THIS SITE ORIGINATE FROM THE UNIVERSITY OF TENNESSEE COOPERATIVE PARK STUDIES UNIT ANNUAL REPORTS (1991-1996): "CUMBERLAND GAP (CUGA) NATIONAL HISTORICAL PARK STREAM MONITORING PROGRAM: ASSESSMENT OF CHEMICAL AND BIOLOGICAL CONDITIONS." FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT CUGA NATIONAL HISTORICAL PARK: P.O. BOX 1848 MIDDLESBORO; KY 40965-1848. TEL (606) 248-7850. STORET PARAMETER CODE 00134 IS USED TO INDICATE WATER SAMPLES OBTAINED DURING A RAIN EVENT OR DRY WEATHER. THE NUMBERS ONE AND ZERO ARE USED RESPECTIVELY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY TALTY OF NPS-WRD FORT COLLINS CO 80525. TEL (970)225-3516.

Parameter Inventory for Station: CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	92	14.65	15.154	28.9	3.5	42.734	6.537	7.3	9.1	21.175	24.24
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	86	2.	8.864	88.	0.	206.159	14.358	0.	1.	11.	25.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	92	37.5	58.685	426.	5.	5878.636	76.672	10.6	20.	63.5	107.9
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	92	113.5	138.5	481.	7.	7511.835	86.671	61.	72.	174.5	236.9
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	92	0.	0.12	1.	0.	0.106	0.326	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	92	8.4	8.652	12.8	5.6	2.723	1.65	6.5	7.35	9.8	10.97
00403	PH, LAB, STANDARD UNITS SU	04/11/91-03/03/97	68	7.3	7.232	8.1	2.	0.512	0.716	6.9	7.1	7.5	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/91-03/03/97	68	7.3	3.832	8.1	2.	12.245	3.499	6.9	7.1	7.5	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/91-03/03/97	68	0.05	147.122	10000.	0.008	1470569.303	1212.67	0.016	0.032	0.079	0.126
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	92	7.1	7.105	8.	6.1	0.112	0.335	6.7	6.9	7.3	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	92	7.1	6.974	8.	6.1	0.13	0.36	6.7	6.9	7.3	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	92	0.079	0.106	0.794	0.01	0.011	0.104	0.032	0.05	0.126	0.2
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	92	33.5	35.066	76.	0.05	428.177	20.692	12.	14.	55.75	62.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	92 ##	0.05	8.13	736.	0.05	5886.425	76.723	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	89	20.	20.978	44.	0.	148.113	12.17	7.	9.	33.5	37.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	92	6.	14.374	230.	0.	875.731	29.593	1.	3.	12.	28.7
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	06/18/90-06/14/93	64 ##	0.01	1.006	19.	0.	8.885	2.981	0.	0.	0.01	4.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	92 ##	0.01	0.027	0.75	0.01	0.007	0.084	0.01	0.01	0.01	0.04
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	92	0.145	0.321	1.54	0.	0.113	0.336	0.02	0.073	0.523	0.841

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	92 ##	0.05	0.117	0.98	0.	0.033	0.181	0.	0.025	0.112	0.404
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/25/90-03/23/93	11	2.5	2.918	7.7	0.	9.138	3.023	0.	0.	6.	7.5
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	03/03/97-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	92	46.5	54.033	200.	15.	1064.23	32.623	22.	27.	71.75	94.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	92	13.4	16.901	76.	3.	153.046	12.371	5.23	6.9	22.075	33.04
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	92	2.45	2.708	4.7	1.5	0.544	0.738	1.9	2.1	3.275	3.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	92	2.345	3.204	12.22	0.01	6.78	2.604	1.019	1.36	4.1	7.033
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	92	1.815	2.467	7.2	0.88	2.9	1.703	1.	1.205	3.38	5.41
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	92	2.	2.124	5.	0.7	0.856	0.925	1.	2.	3.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	92	15.3	23.946	190.	8.6	710.756	26.66	10.26	11.125	25.6	42.25
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	91 ##	0.1	0.147	0.77	0.05	0.028	0.166	0.05	0.05	0.1	0.308
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/18/90-12/17/92	15 ##	35.	56.667	250.	0.	6834.524	82.671	0.	0.	50.	250.
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/18/90-03/23/93	19	30.	31.842	80.	0.	331.14	18.197	5.	20.	40.	60.
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/03/97-03/03/97	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	91	10.	12.291	90.	0.	239.05	15.461	0.	5.	15.	28.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/18/90-03/23/93	18 ##	0.	2.778	20.	0.	24.183	4.918	0.	0.	5.	6.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	92 ##	5.	4.071	20.	0.	25.097	5.01	0.	0.	5.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	90 ##	5.	7.228	80.	0.	145.085	12.045	0.	0.	5.25	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	92 ##	5.	3.902	25.	0.	25.716	5.071	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	92	184.5	211.283	570.	30.	12539.238	111.979	81.8	130.	257.5	387.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	92 ##	25.	31.076	130.	0.	565.434	23.779	0.	10.25	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	92	104.	104.75	250.	20.	2284.497	47.796	50.	60.	140.	168.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	92	80.	87.826	180.	10.	1614.629	40.182	40.	50.	120.	140.
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	06/18/90-03/23/93	36 ##	0.	5.278	50.	0.	148.492	12.186	0.	0.	5.	20.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	92 ##	5.	4.342	30.	0.	26.774	5.174	0.	0.	5.	10.
01077	SILVER, TOTAL (UG/L AS AG)	03/03/97-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	06/18/90-03/23/93	36 ##	5.	52.75	800.	0.	18099.107	134.533	0.	0.	76.75	110.
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/90-03/23/93	35 ##	0.	1.571	20.	0.	15.84	3.98	0.	0.	0.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	92 ##	5.	8.446	50.	0.	104.338	10.215	0.	0.	10.	20.
01097	ANTIMONY, TOTAL (UG/L AS SB)	03/03/97-03/03/97	1 ##	150.	150.	150.	150.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	92	160.	286.707	2250.	10.	144448.517	380.064	63.	101.	257.5	738.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	92	50.	67.511	300.	5.	4177.769	64.636	5.	20.	88.75	160.
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	06/18/90-12/17/92	35 ##	0.	6.571	50.	0.	258.487	16.078	0.	0.	0.	50.
01130	LITHIUM, DISSOLVED (UG/L AS LI)	06/18/90-12/17/92	35 ##	0.	26.286	110.	0.	1212.269	34.818	0.	0.	50.	94.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	91	2800.	3195.011	20000.	1610.	3837451.233	1958.941	2300.	2470.	3300.	4460.
01147	SELENIUM, TOTAL (UG/L AS SE)	03/03/97-03/03/97	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	91 ##	5.	38.659	3010.	0.	99291.427	315.105	0.	0.	9.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	86	57.	72.477	308.	25.	2430.511	49.3	30.7	37.	91.5	130.6
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	91 ##	0.15	0.153	0.25	0.15	0.	0.016	0.15	0.15	0.15	0.15
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/18/90-03/23/93	35 ##	0.	13.286	100.	0.	582.269	24.13	0.	0.	25.	50.
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	92	0.565	0.599	2.07	0.16	0.119	0.345	0.263	0.343	0.72	0.957
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	92	7.	18.337	200.	0.	1137.918	33.733	3.	5.	13.75	39.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	90 ##	100.	81.222	100.	10.	633.321	25.166	50.	50.	100.	100.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0077

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
00403	PH, LAB	Fresh Chronic	9.	68	0	0.00	24	0	0.00	15	0	0.00	10	0	0.00	19	0	0.00
		Other-Lo Lim.	6.5	68	2	0.03	24	1	0.04	15	0	0.00	10	1	0.10	19	0	0.00
00406	PH, FIELD	Fresh Chronic	9.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
		Other-Lo Lim.	6.5	92	5	0.05	34	0	0.00	23	3	0.13	15	1	0.07	20	1	0.05
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
		Drinking Water	250.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0077

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	91	0	0.00	34	0	0.00	23	0	0.00	14	0	0.00	20	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	15	0	0.00	7	0	0.00	4	0	0.00				4	0	0.00
		Drinking Water	50.	9 &	1	0.11	4	0	0.00	3	1	0.33				2	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	19	0	0.00	9	0	0.00	4	0	0.00	2	0	0.00	4	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
		Drinking Water	4.	0 &	0	0.00												
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12 &	1	0.08	6	1	0.17	3	0	0.00				3	0	0.00
		Drinking Water	5.	12 &	1	0.08	6	1	0.17	3	0	0.00				3	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	90 &	1	0.01	33	0	0.00	23	1	0.04	14	0	0.00	20	0	0.00
		Drinking Water	1300.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	92	2	0.02	34	1	0.03	23	1	0.04	15	0	0.00	20	0	0.00
		Drinking Water	15.	58 &	33	0.57	19	16	0.84	16	8	0.50	9	5	0.56	14	4	0.29
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
		Drinking Water	100.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
		Drinking Water	5000.	92	0	0.00	34	0	0.00	23	0	0.00	15	0	0.00	20	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	0 &	0	0.00												
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	26 &	1	0.04	10	0	0.00	9	0	0.00	5	0	0.00	2	1	0.50
		Drinking Water	2.	26 &	1	0.04	10	0	0.00	9	0	0.00	5	0	0.00	2	1	0.50
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	92	7	0.08	34	1	0.03	23	4	0.17	15	1	0.07	20	1	0.05

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1990 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	16	18.55	16.469	25.2	7.7	36.328	6.027	7.84	9.825	21.4	22.96
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	16	1.	10.713	88.	0.	593.258	24.357	0.	0.85	7.5	63.5
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	16	63.5	73.438	197.	38.	1896.796	43.552	39.4	48.5	71.5	171.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	16	152.5	158.	481.	62.	8765.467	93.624	62.7	122.5	164.5	266.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	16	0.	0.125	1.	0.	0.117	0.342	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	16	8.55	8.756	11.	6.5	2.483	1.576	6.71	7.125	10.15	11.
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	16	7.2	7.088	7.3	6.5	0.049	0.222	6.64	7.	7.2	7.3
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	16	7.2	7.021	7.3	6.5	0.054	0.232	6.64	7.	7.2	7.3
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	16	0.063	0.095	0.316	0.05	0.005	0.07	0.05	0.063	0.1	0.235
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	16	56.	47.813	63.	10.	302.963	17.406	12.1	45.75	58.75	61.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	16 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	16	33.5	26.688	37.	0.	157.696	12.558	4.2	15.75	35.	36.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	16	6.	8.125	28.	1.	53.85	7.338	1.	2.5	10.	21.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	16 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	16	0.1	0.056	0.1	0.	0.003	0.051	0.	0.	0.1	0.1
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	16	0.045	0.098	0.41	0.	0.017	0.13	0.	0.	0.14	0.396
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	16	62.5	56.5	76.	21.	304.133	17.439	22.4	52.75	68.	73.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	16	18.55	16.319	22.	4.8	33.638	5.8	5.15	13.85	20.525	21.79
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	16	3.7	3.519	4.7	1.9	0.576	0.759	2.04	3.4	3.975	4.35
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	16	2.78	2.526	3.61	1.01	0.522	0.723	1.094	2.25	2.96	3.309
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	16	1.815	1.849	3.32	1.06	0.275	0.524	1.172	1.595	2.008	2.718
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	16	3.	3.063	5.	1.	1.396	1.181	1.	2.25	4.	5.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	16	11.95	12.756	17.6	10.1	6.721	2.593	10.31	10.625	15.15	17.25
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	16 ##	0.1	0.129	0.36	0.1	0.007	0.081	0.1	0.1	0.1	0.325
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	16	10.	8.75	20.	0.	51.667	7.188	0.	0.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	16 ##	0.	1.25	10.	0.	11.667	3.416	0.	0.	0.	10.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	16 ##	0.	3.125	10.	0.	22.917	4.787	0.	0.	10.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	16 ##	0.	3.75	25.	0.	55.	7.416	0.	0.	7.5	18.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	16	375.	370.	570.	170.	11226.667	105.956	219.	292.5	447.5	521.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	16	20.	23.75	110.	0.	838.333	28.954	0.	2.5	30.	82.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	16	130.	127.5	180.	50.	1180.	34.351	64.	112.5	150.	173.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	16	120.	108.75	150.	10.	1611.667	40.146	31.	95.	140.	150.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	16 ##	0.	3.125	10.	0.	22.917	4.787	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	16 ##	0.	4.375	20.	0.	39.583	6.292	0.	0.	10.	13.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	16	140.	185.	640.	90.	22373.333	149.577	90.	110.	167.5	514.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	16	50.	77.5	290.	30.	5046.667	71.04	30.	32.5	85.	220.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	16	3025.	2925.625	3770.	2320.	140906.25	375.375	2327.	2627.5	3140.	3392.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	16	10.	13.125	90.	0.	462.917	21.515	0.	0.	10.	41.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	16	74.5	67.188	87.	30.	317.896	17.83	30.7	65.75	76.5	82.1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	16 ##	0.15	0.166	0.25	0.15	0.001	0.035	0.15	0.15	0.15	0.25
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	16	0.72	0.742	1.04	0.44	0.027	0.163	0.524	0.645	0.88	0.991
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	16	8.	10.875	44.	0.	140.517	11.854	0.	3.25	13.75	35.6
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	16 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1991 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	29	13.4	14.317	25.	3.6	39.182	6.26	6.7	7.65	20.05	22.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	29	1.	7.266	46.	0.	118.272	10.875	0.	0.85	12.	23.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	29	59.	93.	426.	12.	10381.571	101.89	23.	35.	100.	247.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	29	98.	133.276	349.	51.	6459.207	80.369	59.	69.5	198.5	250.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	29	0.	0.138	1.	0.	0.123	0.351	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	29	8.7	9.09	12.8	6.3	3.003	1.733	6.7	8.	10.65	11.5
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	29	6.9	6.966	7.6	6.5	0.084	0.289	6.6	6.8	7.2	7.4
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	29	6.9	6.881	7.6	6.5	0.091	0.302	6.6	6.8	7.2	7.4

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Annual Analysis for 1991 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	29	0.126	0.131	0.316	0.025	0.006	0.079	0.04	0.063	0.158	0.251
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	29	27.	33.103	76.	7.	468.382	21.642	12.	13.5	54.5	65.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	29 ##	0.05	0.29	7.	0.05	1.666	1.291	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	29	16.	19.138	44.	4.	149.123	12.212	7.	8.5	30.	38.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	29	4.	15.362	106.	0.	693.48	26.334	2.	2.	14.5	61.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	29 ##	0.01	0.023	0.12	0.01	0.001	0.033	0.01	0.01	0.01	0.11
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	29	0.1	0.239	0.91	0.	0.076	0.276	0.02	0.055	0.345	0.82
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	29	0.14	0.236	0.98	0.	0.073	0.27	0.	0.01	0.495	0.62
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	29	38.	51.379	122.	17.	1015.672	31.87	21.	24.5	84.5	99.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	29	11.3	15.848	43.8	3.5	140.294	11.845	4.7	5.9	27.05	33.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	29	2.3	2.597	4.3	1.5	0.475	0.689	1.9	2.05	3.1	3.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	29	1.46	3.41	12.22	0.66	11.205	3.347	0.82	1.19	5.75	9.72
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	29	1.36	2.439	7.	0.88	3.857	1.964	0.91	1.06	4.035	6.25
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	29	2.	2.062	4.	0.8	0.512	0.715	1.	2.	2.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	29	11.4	24.897	135.	8.6	713.866	26.718	9.8	10.4	28.55	57.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	29 ##	0.1	0.243	0.77	0.1	0.062	0.25	0.1	0.1	0.37	0.73
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	29	10.	21.379	90.	0.	562.315	23.713	0.	0.	35.	60.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	29 ##	0.	6.034	20.	0.	59.606	7.72	0.	0.	10.	20.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	29 ##	5.	13.103	80.	0.	356.096	18.871	0.	0.	20.	40.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	29 ##	0.	3.448	20.	0.	35.899	5.992	0.	0.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	29	170.	186.897	440.	60.	9243.596	96.144	80.	115.	230.	370.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	29	30.	30.	130.	0.	855.357	29.246	0.	5.	50.	60.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	29	90.	100.69	200.	50.	1935.222	43.991	50.	60.	130.	170.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	29	80.	84.828	160.	30.	1304.433	36.117	40.	55.	120.	130.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	29 ##	0.	4.655	30.	0.	46.305	6.805	0.	0.	10.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	29 ##	10.	8.448	30.	0.	78.756	8.874	0.	0.	17.5	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	29	200.	377.241	1840.	60.	194977.833	441.563	90.	145.	465.	1240.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	29	80.	111.724	300.	40.	4886.207	69.901	50.	60.	155.	230.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	29	2400.	2596.897	5000.	1610.	452115.025	672.395	2070.	2200.	2800.	3400.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	29 ##	0.	105.172	3010.	0.	312133.005	558.689	0.	0.	0.	10.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	29	45.	71.276	229.	25.	2560.635	50.603	29.	32.	111.5	137.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	29 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	29	0.41	0.524	1.46	0.23	0.088	0.296	0.25	0.305	0.63	0.93
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	29	9.	23.621	200.	2.	1718.387	41.453	4.	5.	21.	97.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	29 ##	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.

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Annual Analysis for 1992 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	27	15.	14.811	25.6	3.5	45.049	6.712	5.76	8.3	21.2	23.86
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	24	5.	7.417	29.	0.	62.862	7.929	1.	1.25	11.	22.
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	27	31.	44.519	399.	10.	5217.798	72.234	14.	20.	40.	53.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	27	106.	129.926	244.	58.	3655.148	60.458	65.	77.	172.	231.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	27	0.	0.111	1.	0.	0.103	0.32	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	27	8.4	8.511	12.7	6.2	2.836	1.684	6.44	7.	9.8	10.66
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	27	7.2	7.163	7.8	6.4	0.109	0.331	6.78	6.9	7.5	7.52
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	27	7.2	7.04	7.8	6.4	0.125	0.354	6.78	6.9	7.5	7.52
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	27	0.063	0.091	0.398	0.016	0.006	0.079	0.03	0.032	0.126	0.167
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	27	27.	33.817	69.	0.05	410.181	20.253	12.	16.	52.	63.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	27 ##	0.05	27.307	736.	0.05	20060.089	141.634	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	25	16.	20.96	42.	7.	142.54	11.939	7.6	10.5	31.5	38.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	27	6.	11.463	65.	0.	278.053	16.675	0.	3.	12.	41.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	27 ##	0.01	0.027	0.23	0.01	0.003	0.054	0.01	0.01	0.01	0.07
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	27	0.31	0.363	1.33	0.06	0.101	0.318	0.068	0.1	0.5	0.804
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	27 ##	0.025	0.049	0.256	0.	0.003	0.055	0.	0.025	0.05	0.116

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Annual Analysis for 1992 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	27	42.	50.037	95.	21.	593.806	24.368	22.8	29.	65.	91.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	27	12.3	15.626	33.7	5.	82.054	9.058	5.64	7.7	21.7	30.14
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	27	2.4	2.578	4.4	1.9	0.375	0.612	1.9	2.2	2.8	3.62
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	27	2.7	3.355	10.	0.98	5.157	2.271	1.128	1.7	4.8	6.572
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	27	2.06	2.42	5.94	0.99	1.657	1.287	1.058	1.3	3.4	4.07
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	27	2.	1.804	4.	0.7	0.563	0.751	1.	1.	2.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	27	16.2	19.393	44.2	10.	70.641	8.405	11.84	13.3	25.8	33.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	27 ##	0.1	0.094	0.3	0.05	0.004	0.064	0.05	0.05	0.1	0.14
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	27 ##	5.	6.981	20.	0.	28.702	5.357	0.	5.	10.	16.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	27 ##	5.	2.944	5.	0.	5.737	2.395	0.	0.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	27 ##	5.	4.278	30.	0.	32.506	5.701	0.	0.	5.	6.2
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	27 ##	5.	3.481	20.	0.	16.875	4.108	0.	0.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	27	180.	182.667	340.	70.	4072.077	63.813	79.8	143.	210.	275.2
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	27 ##	25.	22.556	70.	0.	189.026	13.749	0.	11.	25.	32.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	27	108.	106.185	200.	40.	2185.849	46.753	48.	70.	140.	172.8
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	27	80.	86.667	180.	40.	1375.615	37.089	40.	60.	108.	144.2
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	27 ##	5.	3.13	12.	0.	8.915	2.986	0.	0.	5.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	27 ##	5.	7.111	45.	0.	108.333	10.408	0.	0.	10.	22.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	27	160.	322.704	2250.	40.	212266.909	460.724	64.	140.	250.	880.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	27	37.	37.259	148.	5.	1181.892	34.379	5.	5.	50.	78.8
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	27	2900.	3815.778	20000.	2400.	11094975.179	3330.912	2400.	2600.	4030.	4968.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	27 ##	5.	6.037	20.	0.	22.037	4.694	0.	5.	9.	12.8
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	21	53.	63.905	150.	31.	1228.59	35.051	32.2	37.5	73.5	129.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	27 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	27	0.49	0.657	2.07	0.26	0.192	0.439	0.296	0.39	0.85	1.318
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	27	7.	17.852	101.	2.	604.516	24.587	4.4	6.	13.	70.2
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	27 ##	50.	70.741	100.	10.	768.661	27.725	50.	50.	100.	100.

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Annual Analysis for 1993 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	19	16.4	15.979	28.9	7.4	55.638	7.459	7.4	8.3	24.3	26.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/90-09/21/93	17	3.	11.894	45.	0.6	220.754	14.858	0.6	0.7	20.5	40.2
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	19	15.	15.526	35.	5.	49.708	7.05	10.	10.	20.	25.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	19	92.	147.105	470.	7.	14298.877	119.578	53.	69.	216.	369.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	19	0.	0.053	1.	0.	0.053	0.229	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	19	8.	8.042	10.4	5.6	2.13	1.46	6.2	6.5	9.3	9.8
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	19	7.3	7.305	8.	6.8	0.103	0.321	6.9	7.1	7.4	7.9
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	19	7.3	7.207	8.	6.8	0.113	0.336	6.9	7.1	7.4	7.9
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	19	0.05	0.062	0.158	0.01	0.002	0.041	0.013	0.04	0.079	0.126
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	19	21.	30.421	60.	8.	380.48	19.506	10.	13.	51.	58.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	19 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00440	BICARBONATE ION (MG/L AS HCO3)	06/18/90-09/21/93	19	13.	19.	37.	6.	132.111	11.494	7.	8.	31.	35.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	19	7.	19.232	230.	0.4	2643.663	51.417	2.	3.	10.	29.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	19 ##	0.01	0.049	0.75	0.01	0.029	0.17	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	19	0.56	0.608	1.54	0.025	0.14	0.374	0.025	0.39	0.85	1.21
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	19 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	19	46.	63.737	200.	19.	2464.427	49.643	21.	32.	92.	160.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	19	14.3	21.542	76.	5.2	370.945	19.26	5.3	9.3	31.5	57.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	19	2.3	2.426	3.3	1.5	0.233	0.483	1.9	2.1	2.8	3.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	19	2.	3.327	12.	0.01	8.308	2.882	1.	1.3	4.4	7.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	19	1.7	3.158	7.2	0.9	5.113	2.261	1.	1.2	5.2	7.1
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	19	2.	1.947	3.	1.	0.497	0.705	1.	1.	2.	3.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	19	22.	39.158	190.	11.	1975.14	44.443	14.	17.	36.	120.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/90-09/21/93	19 ##	0.05	0.092	0.3	0.05	0.008	0.087	0.05	0.05	0.05	0.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01020	BORON, DISSOLVED (UG/L AS B)	06/18/90-09/21/93	19 ##	5.	8.947	20.	5.	37.719	6.142	5.	5.	10.	20.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	19 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01035	COBALT, DISSOLVED (UG/L AS CO)	06/18/90-09/21/93	18 ##	5.	5.833	20.	5.	12.5	3.536	5.	5.	5.	6.5
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	19 ##	5.	5.263	10.	5.	1.316	1.147	5.	5.	5.	5.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	19	170.	162.105	350.	30.	5773.099	75.981	60.	120.	200.	250.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	19 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	19	90.	93.684	250.	20.	3469.006	58.898	20.	50.	120.	170.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	19	80.	80.	170.	20.	2077.778	45.583	20.	50.	110.	160.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	19 ##	5.	6.579	20.	5.	22.368	4.73	5.	5.	5.	20.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	19	10.	11.579	40.	5.	91.813	9.582	5.	5.	10.	30.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	19	120.	192.632	1000.	10.	66176.023	257.247	40.	50.	180.	780.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	19	20.	33.684	160.	5.	1771.784	42.093	5.	5.	40.	100.
01140	SILICON, DISSOLVED (UG/L AS SI)	06/18/90-09/21/93	19	3100.	3452.632	5400.	2300.	1051520.468	1025.437	2500.	2500.	4300.	5400.
01150	TITANIUM, DISSOLVED (UG/L AS TI)	06/18/90-09/21/93	19 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	19	65.	90.737	308.	33.	5274.094	72.623	33.	44.	121.	222.
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	06/18/90-09/21/93	19 ##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	19	0.58	0.532	1.7	0.16	0.118	0.344	0.17	0.28	0.67	0.72
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	19	6.	16.526	200.	2.	1980.819	44.506	3.	5.	8.	14.
82298	BROMIDE DISSOLVED AS BR IN WATER UG/L	06/18/90-09/21/93	18 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.

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Annual Analysis for 1997 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	1	72.	72.	72.	72.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	1	86.	86.	86.	86.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	1	104.	104.	104.	104.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	1	85.	85.	85.	85.	0.	0.	**	**	**	**
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	1	25.	25.	25.	25.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	1	32.	32.	32.	32.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	34	21.4	20.606	28.9	9.6	20.165	4.491	12.85	18.35	24.15	25.3
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	34	40.	46.647	161.	10.	1191.205	34.514	10.	18.75	66.75	94.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	34	187.	204.647	481.	7.	8181.811	90.453	142.	154.25	227.5	324.
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	34	0.	0.088	1.	0.	0.083	0.288	0.	0.	0.	0.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	34	7.15	7.456	10.	5.6	1.095	1.047	6.25	6.675	8.15	9.
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	34	7.2	7.203	8.	6.8	0.054	0.233	6.95	7.	7.325	7.45
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	34	7.2	7.15	8.	6.8	0.057	0.239	6.95	7.	7.325	7.45
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	34	0.063	0.071	0.158	0.01	0.001	0.034	0.036	0.048	0.1	0.113
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	34	57.5	53.737	76.	0.05	186.947	13.673	38.	48.	62.	64.
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	34 ##	0.05	21.9	736.	0.05	15922.374	126.184	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	34	7.5	11.091	59.	0.1	125.955	11.223	2.	4.	14.75	24.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	34 ##	0.01	0.026	0.23	0.01	0.002	0.048	0.01	0.01	0.01	0.045
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	34	0.315	0.355	1.1	0.	0.093	0.305	0.025	0.1	0.553	0.835
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	34 ##	0.05	0.161	0.98	0.	0.061	0.247	0.005	0.025	0.143	0.57
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	34	76.	82.029	200.	47.	886.757	29.778	56.	63.75	92.5	105.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	34	24.25	27.091	76.	13.4	149.016	12.207	16.7	20.1	31.85	37.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	34	3.3	3.321	4.7	2.3	0.334	0.578	2.65	2.8	3.725	4.15
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	34	4.45	5.064	12.	2.19	6.665	2.582	2.48	2.94	6.618	9.86
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	34	3.36	3.608	7.2	1.56	2.935	1.713	1.76	2.003	4.675	6.355
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	34	3.	2.706	5.	1.	0.699	0.836	2.	2.	3.	4.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	34	25.4	34.432	190.	10.4	1238.088	35.186	10.65	13.875	36.425	63.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	34 ##	5.	4.853	20.	0.	32.553	5.706	0.	0.	5.	15.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	34 ##	5.	4.412	25.	0.	28.431	5.332	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	34	200.	246.088	570.	60.	20850.568	144.397	80.	127.5	372.5	460.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	34 ##	30.	35.294	130.	0.	534.759	23.125	15.	25.	50.	55.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	34	140.	137.029	200.	70.	926.211	30.434	100.	117.75	160.	175.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	34	120.	116.118	180.	10.	1267.622	35.604	75.	100.	140.	160.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	34 ##	5.	6.088	30.	0.	39.659	6.298	0.	0.	10.	11.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	34	10.	9.265	30.	0.	68.382	8.269	0.	3.75	10.	20.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	34	170.	294.353	2250.	60.	147510.902	384.071	89.	117.5	325.	515.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	34	40.	69.118	290.	5.	5377.986	73.335	5.	8.75	100.	190.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	31	109.	110.484	308.	55.	2604.058	51.03	66.2	75.	124.	159.6
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	34	0.675	0.752	2.07	0.34	0.085	0.291	0.49	0.6	0.893	0.965
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	34	9.	13.618	71.	0.	185.637	13.625	4.	6.	16.	31.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	23	8.3	9.113	13.3	5.2	6.302	2.51	6.02	7.3	11.6	12.96
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	23	40.	88.87	426.	15.	14239.573	119.33	15.	20.	88.	345.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	23	77.	116.217	349.	58.	5892.36	76.762	60.2	68.	154.	248.2
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	23	0.	0.217	1.	0.	0.178	0.422	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	23	9.8	9.726	12.7	6.5	2.166	1.472	7.26	8.7	10.8	11.36
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	23	6.9	7.	7.8	6.4	0.155	0.394	6.5	6.7	7.2	7.66
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	23	6.9	6.857	7.8	6.4	0.177	0.421	6.5	6.7	7.2	7.66
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	23	0.126	0.139	0.398	0.016	0.011	0.105	0.022	0.063	0.2	0.316
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	23	17.	25.826	69.	10.	321.696	17.936	10.8	13.	38.	55.6
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	23 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	23	4.	17.67	106.	0.	878.693	29.643	0.64	2.	12.	80.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	23 ##	0.01	0.023	0.12	0.01	0.001	0.036	0.01	0.01	0.01	0.11
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	23	0.2	0.337	1.54	0.	0.144	0.38	0.	0.07	0.45	0.89
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	23	0.05	0.104	0.62	0.	0.028	0.167	0.	0.01	0.11	0.462
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	23	27.	41.87	122.	20.	858.755	29.305	21.4	23.	62.	97.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	23	6.9	12.335	43.8	4.5	116.758	10.805	4.88	5.4	17.9	32.88
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	23	2.1	2.457	4.2	1.5	0.614	0.784	1.84	1.9	2.8	4.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	23	1.39	2.562	12.22	0.86	7.929	2.816	0.992	1.1	3.	7.578
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	23	1.3	2.091	7.	0.91	3.017	1.737	0.99	1.06	1.94	5.41
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	23	2.	1.891	5.	0.7	1.221	1.105	0.88	1.	2.	3.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	23	13.	21.387	135.	8.6	745.294	27.3	9.88	10.8	16.7	49.82
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	23 ##	0.	4.13	20.	0.	35.573	5.964	0.	0.	5.	16.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	23 ##	0.	2.826	20.	0.	26.877	5.184	0.	0.	5.	11.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	23	220.	231.261	440.	60.	8408.383	91.697	82.	180.	270.	382.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	23	25.	26.739	110.	0.	635.474	25.209	0.	10.	40.	56.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	23	90.	103.391	200.	40.	2132.522	46.179	50.	60.	130.	186.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	23	70.	84.348	161.	30.	1215.783	34.868	44.	60.	120.	136.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	23 ##	0.	2.826	10.	0.	13.241	3.639	0.	0.	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	23 ##	0.	4.609	30.	0.	59.885	7.739	0.	0.	5.	18.4
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	23	150.	372.391	1840.	40.	253726.431	503.713	48.	93.	350.	1462.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	23	60.	82.609	300.	5.	6661.067	81.615	5.	20.	90.	236.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	20	37.	57.4	229.	29.	2519.726	50.197	30.	31.25	69.25	141.9
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	23	0.44	0.568	1.46	0.24	0.108	0.329	0.254	0.32	0.66	1.172
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	23	7.	27.	200.	2.	2285.909	47.811	2.4	4.	11.	98.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	15	8.	8.36	13.5	3.5	7.605	2.758	3.56	7.3	9.5	12.6
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	15	35.	47.133	147.	10.	1599.267	39.991	10.	15.	72.	120.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	15	64.	69.467	116.	46.	312.552	17.679	50.2	58.	79.	101.6
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	15	0.	0.2	1.	0.	0.171	0.414	0.	0.	0.	1.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	15	10.4	10.44	12.8	9.2	1.047	1.023	9.26	9.6	11.1	12.14
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	15	6.9	6.947	7.9	6.1	0.16	0.4	6.4	6.8	7.1	7.6
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	15	6.9	6.782	7.9	6.1	0.189	0.435	6.4	6.8	7.1	7.6
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	15	0.126	0.165	0.794	0.013	0.034	0.185	0.029	0.079	0.158	0.468
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	15	13.	13.667	27.	7.	26.095	5.108	7.6	10.	14.	23.4
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	15 ##	0.05	0.08	0.5	0.05	0.014	0.116	0.05	0.05	0.05	0.23
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	15	4.	25.2	230.	0.	3520.029	59.33	1.2	3.	12.	135.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	15 ##	0.01	0.059	0.75	0.01	0.037	0.191	0.01	0.01	0.01	0.306
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	15	0.1	0.335	1.33	0.025	0.176	0.42	0.046	0.07	0.53	1.258
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	15 ##	0.05	0.053	0.15	0.	0.002	0.047	0.	0.01	0.08	0.138
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	15	25.	26.4	46.	15.	76.4	8.741	16.2	21.	32.	43.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	15	6.	6.98	14.3	3.	9.957	3.156	3.3	5.2	9.3	13.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	15	2.1	2.067	2.4	1.5	0.058	0.241	1.68	1.9	2.2	2.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	15	1.27	1.384	2.61	0.01	0.37	0.608	0.478	1.15	1.9	2.244
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	15	1.08	1.186	1.89	0.88	0.088	0.297	0.88	0.94	1.3	1.776
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	15	2.	1.593	2.	0.9	0.266	0.516	0.96	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	15	12.1	15.527	29.	9.3	34.226	5.85	10.32	11.1	21.	24.8
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	15 ##	0.	2.	5.	0.	6.429	2.535	0.	0.	5.	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	15 ##	5.	4.333	20.	0.	35.238	5.936	0.	0.	5.	17.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	15	140.	139.067	250.	30.	3135.924	55.999	48.	110.	190.	214.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	15 ##	40.	34.	70.	0.	511.429	22.615	0.	10.	50.	58.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	15	50.	65.333	250.	20.	3183.81	56.425	20.	40.	80.	166.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	15	40.	48.	110.	20.	588.571	24.26	20.	30.	60.	92.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	15 ##	0.	3.	20.	0.	27.857	5.278	0.	0.	5.	11.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	15 ##	5.	9.	50.	0.	175.714	13.256	0.	0.	10.	32.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	15	150.	240.933	1080.	10.	85270.21	292.011	34.	100.	200.	900.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	15	50.	58.667	160.	5.	1933.81	43.975	5.	10.	85.	130.
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	15	33.	38.067	65.	25.	130.067	11.405	25.	31.	44.	60.2
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	15	0.28	0.387	1.7	0.16	0.138	0.371	0.196	0.25	0.39	0.95
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	15	8.	25.667	200.	3.	2433.524	49.331	3.6	6.	28.	99.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/90-03/03/97	20	17.65	17.93	25.2	9.4	14.832	3.851	13.31	15.475	21.	22.8
00080	COLOR (PLATINUM-COBALT UNITS)	06/18/90-03/03/97	20	38.	53.1	399.	5.	6919.884	83.186	10.	17.5	51.	61.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/90-03/03/97	20	95.5	103.45	173.	51.	1227.945	35.042	68.4	77.25	116.5	170.8
00134	STORM EVENT SERIAL NUMBER MAXIMUM OF 6 SIG.FIG.	06/18/90-03/03/97	20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/18/90-03/03/97	20	8.25	8.11	10.1	6.2	1.073	1.036	6.34	7.525	8.575	9.78
00406	PH, FIELD, STANDARD UNITS SU	06/18/90-03/03/97	20	7.2	7.18	7.6	6.5	0.089	0.298	6.8	6.9	7.475	7.5
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/90-03/03/97	20	7.2	7.074	7.6	6.5	0.101	0.318	6.8	6.9	7.475	7.5
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/90-03/03/97	20	0.063	0.084	0.316	0.025	0.005	0.07	0.032	0.034	0.126	0.158
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	06/18/90-03/03/97	20	26.	30.	53.	12.	218.632	14.786	12.1	17.	47.5	50.9
00435	ACIDITY, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/18/90-03/03/97	20	6.	8.045	65.	0.	197.262	14.045	0.04	1.25	7.75	15.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/18/90-03/03/97	20 ##	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/18/90-03/03/97	20	0.125	0.236	0.97	0.	0.071	0.266	0.02	0.031	0.453	0.589
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/18/90-03/03/97	20	0.05	0.103	0.36	0.	0.01	0.102	0.	0.043	0.175	0.269
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/18/90-03/03/97	20	39.	41.15	65.	21.	147.082	12.128	25.3	32.5	51.25	61.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/90-03/03/97	20	11.5	12.27	22.1	4.7	20.323	4.508	6.74	9.45	16.275	19.13
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/90-03/03/97	20	2.4	2.435	3.4	2.	0.121	0.348	2.01	2.225	2.575	3.07
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/90-03/03/97	20	1.815	2.147	4.1	0.66	0.959	0.979	0.873	1.47	2.778	3.907
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/90-03/03/97	20	1.53	1.919	4.8	0.96	1.117	1.057	1.14	1.17	2.09	4.1
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/18/90-03/03/97	20	2.	1.8	3.	1.	0.274	0.523	1.	1.25	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/18/90-03/03/97	20	15.1	15.375	28.	8.8	27.597	5.253	9.91	10.5	19.175	22.9
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/18/90-03/03/97	20 ##	5.	4.225	10.	0.	13.223	3.636	0.	0.125	5.	10.
01040	COPPER, DISSOLVED (UG/L AS CU)	06/18/90-03/03/97	20 ##	5.	3.95	10.	0.	14.682	3.832	0.	0.	5.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/90-03/03/97	20	175.	183.3	370.	79.	4203.063	64.831	111.	140.75	213.75	276.
01049	LEAD, DISSOLVED (UG/L AS PB)	06/18/90-03/03/97	20 ##	16.5	26.7	70.	0.	585.168	24.19	0.	5.	50.	59.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/18/90-03/03/97	20	75.	81.	140.	50.	830.526	28.819	50.	52.5	110.	128.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/90-03/03/97	20	64.5	73.6	140.	40.	777.937	27.892	49.1	50.	96.5	119.
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/18/90-03/03/97	20 ##	5.	4.125	10.	0.	13.786	3.713	0.	0.125	5.	10.
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/18/90-03/03/97	20	10.	11.05	45.	0.	155.734	12.479	0.	0.25	13.75	38.
01105	ALUMINUM, TOTAL (UG/L AS AL)	06/18/90-03/03/97	20	145.	209.5	1000.	40.	62089.211	249.177	41.	92.5	170.	775.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/90-03/03/97	20	49.	54.05	148.	5.	997.839	31.589	20.	31.75	70.	97.6
47004	SOLIDS,TOTAL DISSOLVED (ELECT-CONDUCTIVITY) MG/L	06/18/90-03/03/97	20	50.5	54.45	90.	27.	273.103	16.526	35.2	44.	65.75	80.7
74010	IRON, TOTAL (MG/L AS FE)	06/18/90-03/03/97	20	0.495	0.536	1.79	0.17	0.112	0.334	0.28	0.323	0.635	0.715
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/90-03/03/97	20	7.	10.9	101.	0.	456.305	21.361	2.2	5.	8.75	10.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0078

NPS Station ID: CUGA0078
Location: STELLA GOINS
Station Type: /TYPA/AMBNT/SPRING
RMI-Indexes:
RMI-Miles:
HUC: 05130101
Major Basin:
Minor Basin:
RF1 Index: 05130101
RF3 Index: 05130101049000.00
Description:

LAT/LON: 36.620837/ -83.702227
Depth of Water: 0
Elevation: 0
RF1 Mile Point: 0.000
RF3 Mile Point: 0.41

Agency: 112WRD
FIPS State/County: 21013 KENTUCKY/BELL
STORET Station ID(s): 363715083420801
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 5.60
Distance from RF3: 0.06

Date Created: 02/28/78
On/Off RF1:
On/Off RF3:

Parameter Inventory for Station: CUGA0078

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/03/65-11/03/65	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/03/65-11/03/65	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/03/65-11/03/65	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/03/65-11/03/65	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/03/65-11/03/65	1	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/03/65-11/03/65	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/03/65-11/03/65	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/03/65-11/03/65	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/03/65-11/03/65	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/03/65-11/03/65	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/03/65-11/03/65	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/03/65-11/03/65	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/03/65-11/03/65	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	11/03/65-11/03/65	1	60.	60.	60.	60.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0078

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0079

NPS Station ID: CUGA0079
LAT/LON: 36.608337/ -83.703615
Agency: 112WRD
Date Created: / /
Location: L YELLOW C AT MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401400
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 17.90
On/Off RF1:
RF3 Index: 05130101050501.49
RF3 Mile Point: 1.49
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/65-10/20/65	1	17.2	17.2	17.2	17.2	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	02/24/65-10/20/65	3	8.	15.6	38.	0.8	389.28	19.73	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-10/20/65	4	7.	12.25	35.	0.	243.583	15.607	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-10/20/65	4	15.	23.75	55.	10.	439.583	20.966	**	**	**	**
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	05/27/64-09/22/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/20/65	5	152.	144.2	278.	41.	8742.2	93.5	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/27/64-10/20/65	4	1.2	3.55	11.2	0.6	26.117	5.11	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-10/20/65	4	13.5	30.25	88.	6.	1498.917	38.716	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-10/20/65	4	6.7	6.725	7.1	6.4	0.089	0.299	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-10/20/65	4	6.689	6.654	7.1	6.4	0.096	0.31	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-10/20/65	4	0.205	0.222	0.398	0.079	0.019	0.137	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/22/64-09/22/64	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-02/24/65	3	48.	49.667	80.	21.	872.333	29.535	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-10/20/65	4	62.5	62.	98.	25.	896.667	29.944	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	02/24/65-10/20/65	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/20/65-10/20/65	1	0.56	0.56	0.56	0.56	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-10/20/65	4	49.	44.75	54.	27.	146.25	12.093	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-10/20/65	4	0.	1.5	6.	0.	9.	3.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-05/27/64	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-05/27/64	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-10/20/65	5	10.	13.6	35.	3.	170.3	13.05	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-10/20/65	4	6.5	7.5	11.	6.	5.667	2.38	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-02/24/65	2	0.05	0.05	0.1	0.	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-05/27/64	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	2	3150.	3150.	3300.	3000.	45000.	212.132	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-10/20/65	3	150.	220.	420.	90.	30900.	175.784	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/27/64-02/24/65	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-02/24/65	2	71.5	71.5	99.	44.	1512.5	38.891	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	02/24/65-02/24/65	1	0.95	0.95	0.95	0.95	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-02/24/65	2	0.095	0.095	0.13	0.06	0.002	0.049	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-10/20/65	3	0.8	2.3	5.9	0.2	9.81	3.132	**	**	**	**
71885	IRON (UG/L AS FE)	10/20/65-10/20/65	1	2900.01	2900.01	2900.01	2900.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0079

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	3	0.75	2	2	1.00				1	0	0.00	1	1	1.00
00400	PH	Fresh Chronic	9.	4	0	0.00	2	0	0.00				1	0	0.00	1	0	0.00
		Other-Lo Lim.	6.5	4	1	0.25	2	0	0.00				1	0	0.00	1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	2	0	0.00				1	0	0.00	2	0	0.00
		Drinking Water	250.	5	0	0.00	2	0	0.00				1	0	0.00	2	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00				1	0	0.00	1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00							1	0	0.00	1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	1	0	0.00				1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0080

NPS Station ID: CUGA0080
LAT/LON: 36.591670/ -83.704170
Agency: 112WRD
Date Created: / /
Location: L YELLOW C NR MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401380
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 9.10
On/Off RF1:
RF3 Index: 05130101050302.38
RF3 Mile Point: 2.42
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0080

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/18/64	3	1.	2.667	6.	1.	8.333	2.887	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/18/64	3	3.	3.667	5.	3.	1.333	1.155	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/18/64	3	31.	30.667	32.	29.	2.333	1.528	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/22/64-09/22/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	09/22/64-09/22/64	1	91.	91.	91.	91.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-09/18/64	3	6.5	6.533	6.8	6.3	0.063	0.252	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-09/18/64	3	6.5	6.488	6.8	6.3	0.066	0.258	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-09/18/64	3	0.316	0.325	0.501	0.158	0.029	0.172	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	3	8.	10.	15.	7.	19.	4.359	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/18/64	3	10.	12.	18.	8.	28.	5.292	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	3	10.	9.667	10.	9.	0.333	0.577	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/18/64	3	2.	1.333	2.	0.	1.333	1.155	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/18/64	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/18/64	3	4.	5.	7.	4.	3.	1.732	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/18/64	3	250.	240.	290.	180.	3100.	55.678	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/18/64	3	100.	583.333	1600.	50.	775833.333	880.814	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-09/18/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0080

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00							1	0	0.00
		Other-Lo Lim.	6.5	3	2	0.67	2	1	0.50							1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	250.	3	0	0.00	2	0	0.00							1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00							1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0081

NPS Station ID: CUGA0081
LAT/LON: 36.627503/ -83.707505
Agency: 112WRD
Date Created: / /
Location: YELLOW C AT MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401407
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101046
RF1 Mile Point: 4.900
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 05130101050800.00
RF3 Mile Point: 0.10
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0081

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/65-10/21/65	1	18.9	18.9	18.9	18.9	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	04/28/65-07/21/65	2	27.	27.	50.	4.	1058.	32.527	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	07/21/65-10/21/65	2	32.5	32.5	40.	25.	112.5	10.607	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	07/21/65-10/21/65	2	110.	110.	220.	0.	24200.	155.563	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/28/65-10/21/65	3	886.	791.333	1330.	158.	350117.333	591.707	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/21/65-10/21/65	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/21/65-10/21/65	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/21/65-10/21/65	2	7.7	7.7	7.8	7.6	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/21/65-10/21/65	2	7.689	7.689	7.8	7.6	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/21/65-10/21/65	2	0.02	0.02	0.025	0.016	0.	0.007	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	1	127.	127.	127.	127.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/21/65-10/21/65	2	171.5	171.5	188.	155.	544.5	23.335	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/21/65-10/21/65	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/21/65-10/21/65	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/21/65-10/21/65	2	247.5	247.5	252.	243.	40.5	6.364	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/21/65-10/21/65	2	107.	107.	116.	98.	162.	12.728	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/28/65-10/21/65	3	86.	62.333	92.	9.	2142.333	46.285	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/21/65-10/21/65	2	155.	155.	176.	134.	882.	29.698	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/21/65-10/21/65	1	60.	60.	60.	60.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10/21/65-10/21/65	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/21/65-10/21/65	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	10/21/65-10/21/65	1	680.	680.	680.	680.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0081

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	1	1.00	1	1	1.00									
00400	PH	Fresh Chronic	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	250.	3	0	0.00	2	0	0.00							1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0081

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0082

NPS Station ID: CUGA0082
LAT/LON: 36.596810/ -83.708199
Agency: 11NPSWRD
Date Created: 08/09/97
Location: KYBE548R
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): CUGA_NURE_02 /NURE_3022268
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 06010206022100.00
RF3 Mile Point: 0.09
Distance from RF3: 0.02
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE MIDDLESBORO SOUTH; KY-TENN-VA 1:24000 SERIES USGS TOPOGRAPHIC QUADRANGLE. THE SITE IS LOCATED ON A SPRING OUTSIDE OF THE CUMBERLAND GAP NATIONAL HISTORIC PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A 0.8 MICRON FILTER PRIOR TO ANALYSIS. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY; NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES SEDIMENT; SOIL; SURFACE WATER AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY THE SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY MARY BETH TALTY OF NPS-WRD FORT COLLINS CO 80525. PH (970)225-3516.

Parameter Inventory for Station: CUGA0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/78-06/18/78	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/18/78-06/18/78	1	75.	75.	75.	75.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/18/78-06/18/78	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/18/78-06/18/78	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/78-06/18/78	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/78-06/18/78	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/78-06/18/78	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/78-06/18/78	1	5.01	5.01	5.01	5.01	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/78-06/18/78	1	166.	166.	166.	166.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/18/78-06/18/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/18/78-06/18/78	1	155.	155.	155.	155.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/18/78-06/18/78	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	1	58.	58.	58.	58.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	1	2200.	2200.	2200.	2200.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	06/18/78-06/18/78	1	18.	18.	18.	18.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/18/78-06/18/78	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0082

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0083

NPS Station ID: CUGA0083 LAT/LON: 36.624170/ -83.709171 Agency: 112WRD Date Created: / /
Location: YELLOW CR AT MIDDLESBORO UPSTREAM FR. SEWAGE FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 03401406
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 05130101046 RF1 Mile Point: 5.010 Distance from RF1: 12.30 On/Off RF1: OFF
RF3 Index: 05130101050500.41 RF3 Mile Point: 0.78 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0083

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	07/21/65-07/21/65	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	07/21/65-07/21/65	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	07/21/65-07/21/65	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/21/65-07/21/65	1	691.	691.	691.	691.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/21/65-07/21/65	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/21/65-07/21/65	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/21/65-07/21/65	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	1	136.	136.	136.	136.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/21/65-07/21/65	1	166.	166.	166.	166.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/21/65-07/21/65	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/21/65-07/21/65	1	286.	286.	286.	286.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/21/65-07/21/65	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/21/65-07/21/65	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/21/65-07/21/65	1	223.	223.	223.	223.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0083

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0084

NPS Station ID: CUGA0084
LAT/LON: 36.611392/ -83.710281
Agency: 112WRD
Date Created: / /
Location: YELLOW C AT MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401370
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 18.60
On/Off RF1:
RF3 Index: 05130101052402.76
RF3 Mile Point: 4.31
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0084

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-05/27/64	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-05/27/64	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-05/27/64	1	800.	800.	800.	800.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-05/27/64	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-05/27/64	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-05/27/64	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-05/27/64	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-05/27/64	1	153.	153.	153.	153.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-05/27/64	1	184.	184.	184.	184.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/27/64-05/27/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-05/27/64	1	332.	332.	332.	332.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-05/27/64	1	219.	219.	219.	219.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-05/27/64	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-05/27/64	1	264.	264.	264.	264.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-05/27/64	1	160.	160.	160.	160.	0.	0.	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	05/27/64-05/27/64	1	290.	290.	290.	290.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0084

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0084

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00										1	1	1.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	0	0.00										1	0	0.00
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0085

NPS Station ID: CUGA0085 LAT/LON: 36.627503/ -83.710560 Agency: 112WRD Date Created: / /
Location: YELLOW C. BYPASS AT MOUTH AT MIDDLESBORO FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 03401520
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 05130101046 RF1 Mile Point: 4.900 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 05130101003804.12 RF3 Mile Point: 4.19 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0085

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	08/26/64-09/18/64	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/18/64	3	9.	15.	30.	6.	171.	13.077	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/18/64	3	3.	3.667	5.	3.	1.333	1.155	**	**	**	**
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	05/27/64-05/27/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-09/18/64	3	588.	577.667	738.	407.	27470.333	165.742	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/27/64-09/22/64	2	7.75	7.75	8.3	7.2	0.605	0.778	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	05/27/64-09/22/64	2	96.	96.	112.	80.	512.	22.627	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-09/18/64	3	7.5	7.233	7.7	6.5	0.413	0.643	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-09/18/64	3	7.5	6.912	7.7	6.5	0.569	0.754	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-09/18/64	3	0.032	0.123	0.316	0.02	0.028	0.168	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	3	74.	67.667	85.	44.	450.333	21.221	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/18/64	3	90.	82.667	104.	54.	665.333	25.794	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/18/64	3	264.	255.333	332.	170.	6617.333	81.347	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/18/64	3	190.	187.667	247.	126.	3664.333	60.534	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/27/64-05/27/64	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/27/64-05/27/64	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/18/64	3	4.	7.	14.	3.	37.	6.083	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/18/64	3	215.	209.667	268.	146.	3742.333	61.175	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/27/64-05/27/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/27/64-05/27/64	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/18/64	3	390.	350.	460.	200.	18100.	134.536	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/18/64	3	440.	403.333	640.	130.	66033.333	256.97	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/27/64-09/18/64	3	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/27/64-05/27/64	1	277.	277.	277.	277.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/27/64-05/27/64	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/27/64-05/27/64	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0085

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00							1	0	0.00
00400	PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00							1	0	0.00
		Other-Lo Lim.	6.5	3	1	0.33	2	0	0.00							1	1	1.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0085

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	250.	3	0	0.00	2	0	0.00							1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	1	0.33	2	1	0.50							1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0086

NPS Station ID: CUGA0086 LAT/LON: 36.606670/ -83.711670 Agency: 1114PEST Date Created: 06/06/81
Location: MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 210016H /KY0027235 H /YC-U MID
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: CUMBERLAND RIVER BASIN Elevation: 0 Water Body Id:
Minor Basin: YELLOW CR UPSTRM OF PLANT DISCHARGE ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 0.90 On/Off RF1:
RF3 Index: 05130101006901.49 RF3 Mile Point: 1.94 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0086

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00080	COLOR (PLATINUM-COBALT UNITS)	10/26/82-10/26/82	1 ##	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/26/82-10/26/82	2	80.	80.	80.	80.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/81-04/29/81	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/18/82-11/18/82	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	04/29/81-04/29/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	04/29/81-04/29/81	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	04/29/81-04/29/81	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/29/81-04/29/81	1 ##	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/29/81-04/29/81	1	45.	45.	45.	45.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01037	COBALT, TOTAL (UG/L AS CO)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/29/81-04/29/81	1	360.	360.	360.	360.	0.	0.	**	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	04/29/81-04/29/81	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01064	TELLURIUM, TOTAL IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	04/29/81-04/29/81	1 ##	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01082	STRONTIUM, TOTAL (UG/L AS SR)	04/29/81-04/29/81	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01087	VANADIUM, TOTAL (UG/L AS V)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01097	ANTIMONY, TOTAL (UG/L AS SB)	04/29/81-04/29/81	1 ##	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
01102	TIN, TOTAL (UG/L AS SN)	04/29/81-04/29/81	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	04/29/81-04/29/81	1	410.	410.	410.	410.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01152	TITANIUM, TOTAL (UG/L AS TI)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01203	YTTRIUM, TOTAL (UG/L AS Y)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34200	ACENAPHTHYLENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34220	ANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34247	BENZO-A-PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**

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Parameter Inventory for Station: CUGA0086

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34376	FLUORANTHENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34461	PHENANTHRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34469	PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	40.	40.	40.	40.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47006	BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	1	7400.	7400.	7400.	7400.	0.	0.	**	**	**	**
47006	LOG BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	1	3.869	3.869	3.869	3.869	0.	0.	**	**	**	**
47006	GM BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	GEOMETRIC MEAN =			7400.								
74010	IRON, TOTAL (MG/L AS FE)	04/29/81-04/29/81	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0086

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00				1	0	0.00						
		Drinking Water	0.2	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0086

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	0 &	0	0.00												
01027	CADMIUM, TOTAL	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	0 &	0	0.00												
01059	THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	2.	0 &	0	0.00												
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	1	0	0.00										1	0	0.00
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	0 &	0	0.00												
		Drinking Water	50.	1	0	0.00										1	0	0.00
34205	ACENAPHTHENE, TOTAL	Fresh Acute	1700.	1	0	0.00										1	0	0.00
34346	1,2-DIPHENYLHYDRAZINE, TOTAL	Fresh Acute	270.	1	0	0.00										1	0	0.00
34376	FLUORANTHENE, TOTAL	Fresh Acute	3980.	1	0	0.00										1	0	0.00
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL	Fresh Acute	7.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
34396	HEXACHLOROETHANE, TOTAL	Fresh Acute	980.	1	0	0.00										1	0	0.00
34403	IDENO (1,2,3-CD) PYRENE	Drinking Water	0.4	0 &	0	0.00												
34408	ISOPHORONE, TOTAL	Fresh Acute	117000.	1	0	0.00										1	0	0.00
34447	NITROBENZENE, TOTAL	Fresh Acute	27000.	1	0	0.00										1	0	0.00
34452	PARACHLOROMETA CRESOL, TOTAL	Fresh Acute	30.	1	0	0.00										1	0	0.00
34461	PHENANTHRENE, TOTAL	Fresh Acute	30.	1	0	0.00										1	0	0.00
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00										1	0	0.00
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	1	0	0.00										1	0	0.00
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00										1	0	0.00
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	1	0	0.00										1	0	0.00
34586	2-CHLOROPHENOL, TOTAL	Fresh Acute	4380.	1	0	0.00										1	0	0.00
34601	2,4-DICHLOROPHENOL, TOTAL	Fresh Acute	2020.	1	0	0.00										1	0	0.00
34606	2,4-DIMETHYLPHENOL, TOTAL	Fresh Acute	2120.	1	0	0.00										1	0	0.00
34611	2,4-DINITROTOLUENE, TOTAL	Fresh Acute	330.	1	0	0.00										1	0	0.00
34694	PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	Fresh Acute	10200.	1	0	0.00										1	0	0.00
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	1	0	0.00										1	0	0.00
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	0	0.00										1	0	0.00
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	1	0	0.00										1	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0087

NPS Station ID: CUGA0087 LAT/LON: 36.606670/ -83.711670 Agency: 1114PEST Date Created: 06/06/81
Location: MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 210016I /KY0027235 I /YC-D MID
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: CUMBERLAND RIVER BASIN Elevation: 0 Water Body Id:
Minor Basin: YELLOW CR DWNSTRM OF PLANT DISCHARGE ECO Region:
RF1 Index: 05130101 RF1 Mile Point: 0.000 Distance from RF1: 12.00 On/Off RF1:
RF3 Index: 05130101050302.38 RF3 Mile Point: 2.91 Distance from RF3: 0.13 On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0087

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/82-11/09/82	2	11.	11.	11.	11.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	10/26/82-10/26/82	2	112.	112.	112.	112.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/09/82-11/09/82	2	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/09/82-11/09/82	2	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/82-11/09/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/26/82-10/26/82	2	60.	60.	60.	60.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/81-04/29/81	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/09/82-11/09/82	2	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	04/29/81-04/29/81	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	04/29/81-04/29/81	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	04/29/81-04/29/81	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/29/81-04/29/81	1 ##	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/29/81-04/29/81	1	46.	46.	46.	46.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/29/81-04/29/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01037	COBALT, TOTAL (UG/L AS CO)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/29/81-04/29/81	1	350.	350.	350.	350.	0.	0.	**	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	04/29/81-04/29/81	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01064	TELLURIUM, TOTAL IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	04/29/81-04/29/81	1 ##	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01082	STRONTIUM, TOTAL (UG/L AS SR)	04/29/81-04/29/81	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01087	VANADIUM, TOTAL (UG/L AS V)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/29/81-04/29/81	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01097	ANTIMONY, TOTAL (UG/L AS SB)	04/29/81-04/29/81	1 ##	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
01102	TIN, TOTAL (UG/L AS SN)	04/29/81-04/29/81	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	04/29/81-04/29/81	1	600.	600.	600.	600.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	04/29/81-04/29/81	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
01152	TITANIUM, TOTAL (UG/L AS TI)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01203	YTTRIUM, TOTAL (UG/L AS Y)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34200	ACENAPHTHYLENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34220	ANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0087

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34247	BENZO-A-PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34376	FLUORANTHENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34461	PHENANTHRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34469	PYRENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	40.	40.	40.	40.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL TOTWUG/L	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE TOTWUG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	04/29/81-04/29/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
47006	BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	1	7200.	7200.	7200.	7200.	0.	0.	**	**	**	**
47006	LOG BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	04/29/81-04/29/81	1	3.857	3.857	3.857	3.857	0.	0.	**	**	**	**
47006	GM BACTERIA, TOTAL PER ML PLATE CT. AGS AGAR 23C	GEOMETRIC MEAN =			7200.								
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	04/29/81-04/29/81	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/29/81-04/29/81	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0087

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	2	0	0.00				2	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00				2	0	0.00						
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	2	1.00				2	2	1.00						
		Drinking Water	0.2	2	0	0.00				2	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	0 &	0	0.00												
01027	CADMIUM, TOTAL	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	0 &	0	0.00												
01059	THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	2.	0 &	0	0.00												
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01097	ANTIMONY, TOTAL	Fresh Acute	88.	1	0	0.00										1	0	0.00
		Drinking Water	6.	0 &	0	0.00												
01147	SELENIUM, TOTAL	Fresh Acute	20.	0 &	0	0.00												
		Drinking Water	50.	1	0	0.00										1	0	0.00
34205	ACENAPHTHENE, TOTAL	Fresh Acute	1700.	1	0	0.00										1	0	0.00
34346	1,2-DIPHENYLHYDRAZINE, TOTAL	Fresh Acute	270.	1	0	0.00										1	0	0.00
34376	FLUORANTHENE, TOTAL	Fresh Acute	3980.	1	0	0.00										1	0	0.00
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL	Fresh Acute	7.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
34396	HEXACHLOROETHANE, TOTAL	Fresh Acute	980.	1	0	0.00										1	0	0.00
34403	IDENO (1,2,3-CD) PYRENE	Drinking Water	0.4	0 &	0	0.00												
34408	ISOPHORONE, TOTAL	Fresh Acute	117000.	1	0	0.00										1	0	0.00
34447	NITROBENZENE, TOTAL	Fresh Acute	27000.	1	0	0.00										1	0	0.00
34452	PARACHLOROMETA CRESOL, TOTAL	Fresh Acute	30.	1	0	0.00										1	0	0.00
34461	PHENANTHRENE, TOTAL	Fresh Acute	30.	1	0	0.00										1	0	0.00
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00										1	0	0.00
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	1	0	0.00										1	0	0.00
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00										1	0	0.00
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	1	0	0.00										1	0	0.00
34586	2-CHLOROPHENOL, TOTAL	Fresh Acute	4380.	1	0	0.00										1	0	0.00
34601	2,4-DICHLOROPHENOL, TOTAL	Fresh Acute	2020.	1	0	0.00										1	0	0.00
34606	2,4-DIMETHYLPHENOL, TOTAL	Fresh Acute	2120.	1	0	0.00										1	0	0.00
34611	2,4-DINITROTOLUENE, TOTAL	Fresh Acute	330.	1	0	0.00										1	0	0.00
34694	PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	Fresh Acute	10200.	1	0	0.00										1	0	0.00
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	1	0	0.00										1	0	0.00
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	0	0.00										1	0	0.00
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	1	0	0.00										1	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	1	0	0.00										1	0	0.00
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0088

NPS Station ID: CUGA0088
LAT/LON: 36.606670/ -83.711670
Agency: 1114PEST
Date Created: 09/24/83
Location: MIDDLESBORO STP AT MIDDLESBORO KY TO YELLOW CR
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 210017L /KY0027235 LL/YC-3A MID
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: CUMBERLAND RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: YELLOW CR 3/4 MI DOWNSTREAM BENNETTS FRK
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 05130101004614.01
RF3 Mile Point: 14.01
Distance from RF3: 0.46
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0088

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

***** Data for this station locked by controlling agency *****

Station Inventory for Station: CUGA0089

NPS Station ID: CUGA0089
LAT/LON: 36.634726/ -83.715281
Agency: 112WRD
Date Created: 02/28/78
Location: LEE HATTFIELD
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363805083425501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 1.30
On/Off RF1:
RF3 Index: 05130101004612.60
RF3 Mile Point: 12.60
Distance from RF3: 0.19
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0089

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/64-05/20/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	05/20/64-05/20/64	1	320.	320.	320.	320.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0089

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	1	1.00										1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0090

NPS Station ID: CUGA0090
LAT/LON: 36.620004/ -83.716670
Agency: 21KY
Date Created: 11/02/85
Location: YELLOW CREEK AT KY 441 BRIDGE
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): SUD011 /02037001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin: OHIO RIVER
Elevation: 0
Water Body Id:
Minor Basin: CUMBERLAND RIVER
ECO Region:
RF1 Index: 05130101046
RF1 Mile Point: 0.550
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 05130101009000.00
RF3 Mile Point: 0.88
Distance from RF3: 0.00
On/Off RF3:
Description:
TOPOGRAPHIC MAP NO 2-51, MIDDLESBORO NORTH, KY QUADRANGLE SAMPLE COLLECTED AT KY 441 BRIDGE AND THE INTERSECTION OF YELLOW CREEK, ON 18 MAY 1982 IN BELL COUNTY STREAM ORDER 4, RMI 0.55
BIOLOGICAL, PHYSICOCHEMICAL STATION UPPER CUMBERLAND RIVER BASIN

Parameter Inventory for Station: CUGA0090

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/82-05/18/82	1	532.	532.	532.	532.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/18/82-05/18/82	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/18/82-05/18/82	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/18/82-05/18/82	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/18/82-05/18/82	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	1	95.	95.	95.	95.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/82-05/18/82	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/82-05/18/82	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/82-05/18/82	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/82-05/18/82	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/18/82-05/18/82	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/18/82-05/18/82	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) MG/L	05/18/82-05/18/82	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00746	SULFIDE, DISSOLVED (MG/L AS S)	05/18/82-05/18/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/18/82-05/18/82	1	262.	262.	262.	262.	0.	0.	**	**	**	**
00916	CALCIUM, TOTAL (MG/L AS CA)	05/18/82-05/18/82	1	59.	59.	59.	59.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)	05/18/82-05/18/82	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)	05/18/82-05/18/82	1	11.5	11.5	11.5	11.5	0.	0.	**	**	**	**
00937	POTASSIUM, TOTAL MG/L AS K)	05/18/82-05/18/82	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/18/82-05/18/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/82-05/18/82	1	163.	163.	163.	163.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/82-05/18/82	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/18/82-05/18/82	1	59.	59.	59.	59.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/82-05/18/82	1	14.	14.	14.	14.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: CUGA0090

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01042	COPPER, TOTAL (UG/L AS CU)	05/18/82-05/18/82	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/18/82-05/18/82	1	560.	560.	560.	560.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/18/82-05/18/82	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/82-05/18/82	1	17.	17.	17.	17.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/18/82-05/18/82	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/18/82-05/18/82	1	104.	104.	104.	104.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/82-05/18/82	1	82.	82.	82.	82.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-05/18/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/18/82-05/18/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/82-05/18/82	1	652.	652.	652.	652.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/18/82-05/18/82	1	346.	346.	346.	346.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/18/82-05/18/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/82-05/18/82	1	3.505	3.505	3.505	3.505	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			3200.								
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
31673	LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	05/18/82-05/18/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
31673	GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	GEOMETRIC MEAN =			1000.								
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/18/82-05/18/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	05/18/82-05/18/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1	19.	19.	19.	19.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/18/82-05/18/82	1	19.	19.	19.	19.	0.	0.	**	**	**	**
39117	PHTHLATE ESTERS IN WATER MG/L	05/18/82-05/18/82	1	51.	51.	51.	51.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/18/82-05/18/82	1	372.	372.	372.	372.	0.	0.	**	**	**	**
70508	ACIDITY, TOTAL, HOT (MG/L AS CACO3)	05/18/82-05/18/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/18/82-05/18/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/18/82-05/18/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/82-05/18/82	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0090

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00										1	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00										1	0	0.00
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION)	Fresh Acute	0.022	1	0	0.00										1	0	0.00
		Drinking Water	0.2	1	0	0.00										1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00										1	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00										1	0	0.00
		Drinking Water	4.	1	0	0.00										1	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00										1	0	0.00
		Drinking Water	5.	1	0	0.00										1	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00										1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0090

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00										1	0	0.00
		Drinking Water	1300.	1	0	0.00										1	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	1	1.00										1	1	1.00
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00										1	0	0.00
		Drinking Water	15.	1	0	0.00										1	0	0.00
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00										1	0	0.00
		Drinking Water	100.	1	0	0.00										1	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00										1	0	0.00
		Drinking Water	5000.	1	0	0.00										1	0	0.00
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00										1	0	0.00
		Drinking Water	50.	1	0	0.00										1	0	0.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00										1	1	1.00
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00										1	0	0.00
		Drinking Water	6.	1	1	1.00										1	1	1.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00										1	0	0.00
		Drinking Water	2.	1	0	0.00										1	0	0.00
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0091

NPS Station ID: CUGA0091
LAT/LON: 36.624726/ -83.721115
Agency: 112WRD
Date Created: 02/28/78
Location: GRACE RAINES
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363729083431601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 0.10
On/Off RF1:
RF3 Index: 05130101004613.12
RF3 Mile Point: 13.12
Distance from RF3: 0.17
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0091

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	1	19.4	19.4	19.4	19.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/64-05/20/64	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	05/20/64-05/20/64	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0091

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	1	1.00										1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0092

NPS Station ID: CUGA0092
LAT/LON: 36.636670/ -83.722226
Agency: 112WRD
Date Created: 02/28/78
Location: J.W. OWEN
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363812083432001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 6.30
On/Off RF1:
RF3 Index: 05130101050900.00
RF3 Mile Point: 0.53
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0092

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/64-06/10/64	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	06/10/64-06/10/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/64-06/10/64	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/10/64-06/10/64	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/10/64-06/10/64	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/64-06/10/64	1	1.995	1.995	1.995	1.995	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/10/64-06/10/64	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/10/64-06/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/10/64-06/10/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/10/64-06/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/10/64-06/10/64	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/64-06/10/64	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/64-06/10/64	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/64-06/10/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/10/64-06/10/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/64-06/10/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/10/64-06/10/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/64-06/10/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/10/64-06/10/64	1	16.	16.	16.	16.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/10/64-06/10/64	1	20.	20.	20.	20.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	06/10/64-06/10/64	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	06/10/64-06/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	06/10/64-06/10/64	1	90.	90.	90.	90.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0092

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	1	1.00										1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: CUGA0092

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0093

NPS Station ID: CUGA0093
LAT/LON: 36.626115/ -83.737504
Agency: 112WRD
Date Created: 02/28/78
Location: JACK RAINES
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363734083441501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 1.20
On/Off RF1:
RF3 Index: 05130101004612.90
RF3 Mile Point: 13.24
Distance from RF3: 0.22
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/64-05/20/64	1	13.9	13.9	13.9	13.9	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/20/64-05/20/64	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/20/64-05/20/64	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/64-05/20/64	1	0.501	0.501	0.501	0.501	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/20/64-05/20/64	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/20/64-05/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/20/64-05/20/64	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/20/64-05/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/20/64-05/20/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/20/64-05/20/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/20/64-05/20/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/20/64-05/20/64	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	05/20/64-05/20/64	1	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0093

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	1	1.00										1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0094

NPS Station ID: CUGA0094
LAT/LON: 36.594170/ -83.742505
Agency: 112WRD
Date Created: 02/28/78
Location: HUBERT BARNWELL
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 363539083443301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 10.20
On/Off RF1:
RF3 Index: 05130101050400.00
RF3 Mile Point: 3.24
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/15/64-05/15/64	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/15/64-05/15/64	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/15/64-05/15/64	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/15/64-05/15/64	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/64-05/15/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/15/64-05/15/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/15/64-05/15/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/15/64-05/15/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/15/64-05/15/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/15/64-05/15/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/15/64-05/15/64	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/15/64-05/15/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/15/64-05/15/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	05/15/64-05/15/64	1	110.	110.	110.	110.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0094

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00										1	0	0.00
		Other-Lo Lim.	6.5	1	1	1.00										1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00										1	0	0.00
		Drinking Water	250.	1	0	0.00										1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00										1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00										1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0095

NPS Station ID: CUGA0095 LAT/LON: 36.606670/ -83.746393 Agency: 112WRD Date Created: / /
Location: BENNETTS FORK ABV STONY FORK NR. MIDDLESBORO FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 03401430
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 05130101 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 05130101046 RF1 Mile Point: 7.810 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 05130101050800.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0095

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/65-11/23/65	2	13.3	13.3	16.1	10.5	15.68	3.96	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/21/65-11/23/65	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-11/23/65	4	4.	72.	280.	0.	19232.667	138.682	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-11/23/65	4	5.	4.5	5.	3.	1.	1.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-11/23/65	4	723.	727.5	902.	562.	22846.333	151.15	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/21/65-10/21/65	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/21/65-10/21/65	1	89.	89.	89.	89.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/64-11/23/65	4	7.75	7.575	8.1	6.7	0.382	0.618	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-11/23/65	4	7.725	7.213	8.1	6.7	0.558	0.747	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-11/23/65	4	0.019	0.061	0.2	0.008	0.009	0.092	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/64-11/23/65	2	19.2	19.2	35.	3.4	499.28	22.345	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-11/23/65	3	91.	111.333	174.	69.	3066.333	55.374	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-11/23/65	4	145.5	146.75	212.	84.	3526.25	59.382	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/21/65-10/21/65	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-11/23/65	4	321.	318.5	380.	252.	3091.667	55.603	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-11/23/65	4	201.	198.	207.	183.	124.667	11.165	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-11/23/65	4	3.	2.75	4.	1.	2.25	1.5	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-11/23/65	4	258.	255.5	308.	198.	2121.	46.054	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/22/64	2	205.	205.	220.	190.	450.	21.213	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-11/23/65	4	110.	270.	840.	20.	146800.	383.145	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/22/64-09/22/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	10/21/65-11/23/65	2	135.	135.	170.	100.	2450.	49.497	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0095

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00				1	0	0.00
		Other-Lo Lim.	6.5	4	0	0.00	2	0	0.00	1	0	0.00				1	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00				1	0	0.00
		Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00				1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	2	0.50	2	2	1.00	1	0	0.00				1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: CUGA0096

NPS Station ID: CUGA0096
LAT/LON: 36.601670/ -83.751670
Agency: 112WRD
Date Created: 07/28/90
Location: BENNETTS FORK AT MIDDLESBORO, KY
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401428
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101
RF1 Mile Point: 0.000
Distance from RF1: 12.20
On/Off RF1:
RF3 Index: 05130101048500.00
RF3 Mile Point: 0.67
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/13/85-10/05/89	40	15.	14.738	27.5	1.	36.564	6.047	6.3	10.	18.	23.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	58	34.5	118.086	1330.	3.	46592.782	215.854	4.	10.25	121.	350.3
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/26/86-04/14/87	4	377.5	368.25	418.	300.	2938.917	54.212	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/22/85-10/05/89	34	586.	546.882	776.	205.	27415.622	165.577	275.	440.	657.5	750.
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	10/14/86-10/05/89	29	77.	73.138	100.	21.	532.195	23.069	32.	63.	90.5	99.
70335	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 1.00MM	12/09/86-02/21/89	3	99.	98.667	99.	98.	0.333	0.577	**	**	**	**
70336	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 2.00MM	12/09/86-02/21/89	3	100.	99.667	100.	99.	0.333	0.577	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	11/26/86-06/15/89	19	33.	33.737	56.	21.	97.316	9.865	22.	25.	40.	49.
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	11/26/86-06/15/89	19	48.	49.421	73.	32.	129.368	11.374	37.	39.	56.	69.
70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	11/26/86-06/15/89	14	66.5	64.786	86.	47.	128.181	11.322	49.5	54.5	72.	83.
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	11/26/86-06/15/89	19	82.	80.632	96.	61.	107.912	10.388	66.	70.	88.	95.
70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	11/26/86-06/15/89	14	93.	89.643	99.	73.	74.401	8.626	76.	80.75	97.25	98.5
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	11/26/86-06/15/89	14	96.5	94.	99.	86.	18.462	4.297	87.5	89.75	97.25	98.5
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	11/26/86-06/15/89	14	99.	97.214	100.	91.	7.104	2.665	92.5	95.5	99.	99.5
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	11/26/86-06/15/89	13	100.	99.231	100.	96.	1.859	1.363	96.4	98.5	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	12/09/86-06/15/89	4	98.5	98.75	100.	98.	0.917	0.957	**	**	**	**
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	12/09/86-02/27/87	2	99.	99.	99.	99.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	58	86.5	674.569	13700.	0.	3831006.074	1957.296	2.9	7.	491.75	2117.
80181	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	08/11/86-09/01/86	2	35.5	35.5	44.	27.	144.5	12.021	**	**	**	**
80182	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	08/11/86-09/01/86	2	51.	51.	60.	42.	162.	12.728	**	**	**	**
80183	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	08/11/86-09/01/86	2	65.	65.	72.	58.	98.	9.899	**	**	**	**
80184	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	08/11/86-09/01/86	2	74.	74.	77.	71.	18.	4.243	**	**	**	**
80185	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	08/11/86-09/01/86	2	80.5	80.5	84.	77.	24.5	4.95	**	**	**	**
80186	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	08/11/86-09/01/86	2	96.5	96.5	99.	94.	12.5	3.536	**	**	**	**
80187	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	08/11/86-09/01/86	2	98.	98.	99.	97.	2.	1.414	**	**	**	**
80188	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	08/11/86-09/01/86	2	99.5	99.5	100.	99.	0.5	0.707	**	**	**	**
80189	TOT SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	09/01/86-09/01/86	1	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Annual Analysis for 1985 - Station CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	2	15.	15.	22.	8.	98.	9.899	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	2	29.5	29.5	59.	0.	1740.5	41.719	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	15	99.	134.	416.	4.	17716.571	133.104	5.2	15.	230.	372.2
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	15	198.	999.933	4550.	1.	2147058.924	1465.285	1.6	22.	1950.	4034.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	10	14.5	62.8	195.	3.	6131.289	78.303	3.1	4.75	120.	195.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	10	27.	131.3	566.	1.	47044.233	216.897	1.2	5.25	194.	560.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	18	20.	67.722	732.	3.	28242.212	168.054	3.9	7.75	44.75	173.1
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	18	107.5	373.778	2270.	0.	467711.948	683.895	5.4	8.5	358.5	2117.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station CUGA0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/13/85-10/05/89	13	118.	227.846	1330.	5.	134539.141	366.796	8.2	26.5	317.5	984.4
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	11/13/85-10/05/89	13	222.	1232.769	13700.	5.	14073459.692	3751.461	5.4	6.5	462.	8444.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: CUGA0097

NPS Station ID: CUGA0097
LAT/LON: 36.614170/ -83.753337
Agency: 112WRD
Date Created: / /
Location: STONY FORK NR. MOUTH AT MIDDLESBORO
FIPS State/County: 21013 KENTUCKY/BELL
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 03401450
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 05130101
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 05130101046
RF1 Mile Point: 8.650
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 05130101049300.00
RF3 Mile Point: 0.00
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: CUGA0097

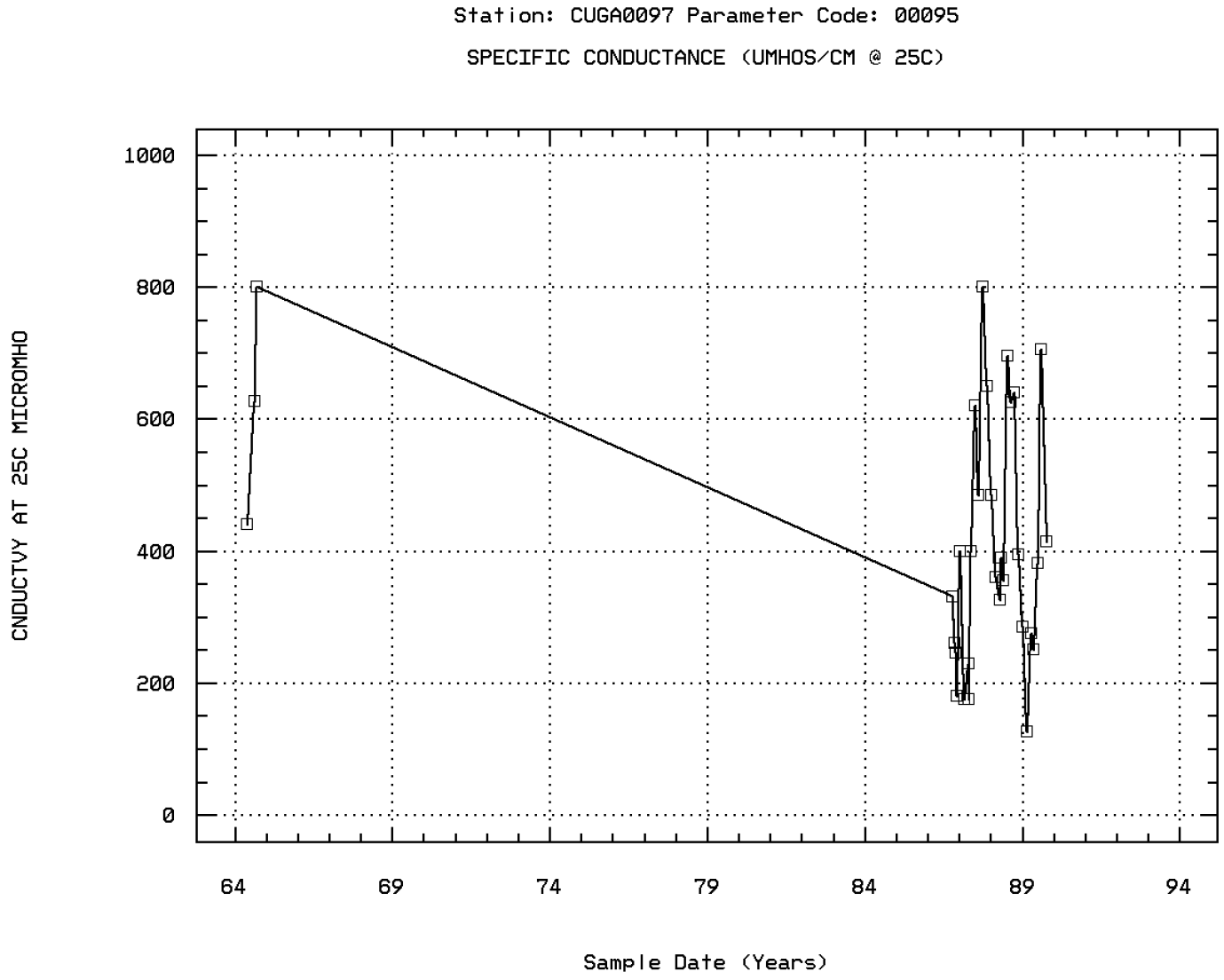
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/14/86-10/05/89	44	13.	13.182	25.	0.5	29.327	5.415	6.25	9.625	16.375	22.
00060	FLOW, STREAM, MEAN DAILY CFS	08/26/64-09/17/64	2	0.6	0.6	1.	0.2	0.32	0.566	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/14/86-10/05/89	74	55.	171.068	1800.	3.	82897.352	287.919	6.5	16.75	171.	584.
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	05/27/64-09/17/64	3	8.	203.	600.	1.	118219.	343.83	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/27/64-09/17/64	3	3.	6.667	15.	2.	52.333	7.234	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/26/86-09/19/87	8	272.	334.625	632.	187.	24921.411	157.865	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	33	390.	413.697	801.	126.	38122.405	195.25	175.	255.	622.5	701.
00400	PH (STANDARD UNITS)	05/27/64-09/17/64	3	7.3	6.933	7.3	6.2	0.403	0.635	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/64-09/17/64	3	7.3	6.613	7.3	6.2	0.557	0.746	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/64-09/17/64	3	0.05	0.244	0.631	0.05	0.112	0.335	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/27/64-09/17/64	3	38.	36.333	41.	30.	32.333	5.686	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/27/64-09/17/64	3	46.	44.	50.	36.	52.	7.211	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/27/64-09/17/64	3	292.	289.667	384.	193.	9124.333	95.521	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/27/64-09/17/64	3	262.	253.333	346.	152.	9465.333	97.29	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/27/64-09/17/64	3	6.	5.333	7.	3.	4.333	2.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/27/64-09/17/64	3	264.	267.333	370.	168.	10209.333	101.041	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/27/64-09/17/64	3	480.	700.	1400.	220.	384400.	620.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/27/64-09/17/64	3	430.	566.667	1200.	70.	333233.333	577.264	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/26/64-09/17/64	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/14/87-10/05/89	35	98.	90.629	100.	62.	151.064	12.291	67.	85.	99.	100.
70335	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 1.00MM	12/09/86-04/04/89	5	92.	94.2	99.	90.	19.7	4.438	**	**	**	**
70336	SUSPENDED SED SIEVE DIAMETER,% FINER THAN 2.00MM	12/09/86-04/04/89	4	96.5	96.25	99.	93.	7.583	2.754	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	11/26/86-06/15/89	44	36.	36.023	59.	16.	139.186	11.798	20.5	24.25	46.	52.
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	11/26/86-06/15/89	44	53.5	50.545	87.	25.	254.905	15.966	28.	34.25	63.5	71.
70339	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .008MM	11/26/86-06/15/89	37	66.	66.027	97.	37.	309.971	17.606	41.4	50.	81.5	89.2
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	11/26/86-06/15/89	44	86.	80.114	98.	49.	215.266	14.672	55.5	68.	92.	96.
70341	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .031MM	11/26/86-06/15/89	36	92.5	88.056	100.	59.	133.711	11.563	67.7	82.25	97.75	99.
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	11/26/86-06/15/89	30	95.5	92.567	100.	67.	78.806	8.877	79.1	90.25	99.	100.
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	11/26/86-06/15/89	26	98.5	96.038	100.	74.	42.998	6.557	84.6	95.5	100.	100.
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	11/26/86-06/15/89	17	100.	96.882	100.	82.	32.61	5.711	83.6	96.	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	11/26/86-06/15/89	8	99.	96.375	100.	90.	20.268	4.502	**	**	**	**
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	02/27/87-02/21/89	3	99.	96.	99.	90.	27.	5.196	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/14/86-10/05/89	75	528.	1034.093	6810.	0.	2089336.518	1445.454	5.	86.	1190.	2670.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: CUGA0097

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00400	PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00							1	0	0.00
		Other-Lo Lim.	6.5	3	1	0.33	2	0	0.00							1	1	1.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	250.	3	0	0.00	2	0	0.00							1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	2	0.67	2	2	1.00							1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter



STONY FORK NR. MOUTH AT MIDDLESBORO

Seasonal Analysis for Season #1: 7/01 to 10/31 - Station CUGA0097

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	11	627.	612.909	801.	330.	22269.291	149.229	346.8	485.	705.	800.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 11/01 to 1/31 - Station CUGA0097

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	8	340.	362.5	650.	180.	23392.857	152.947	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 2/01 to 3/31 - Station CUGA0097

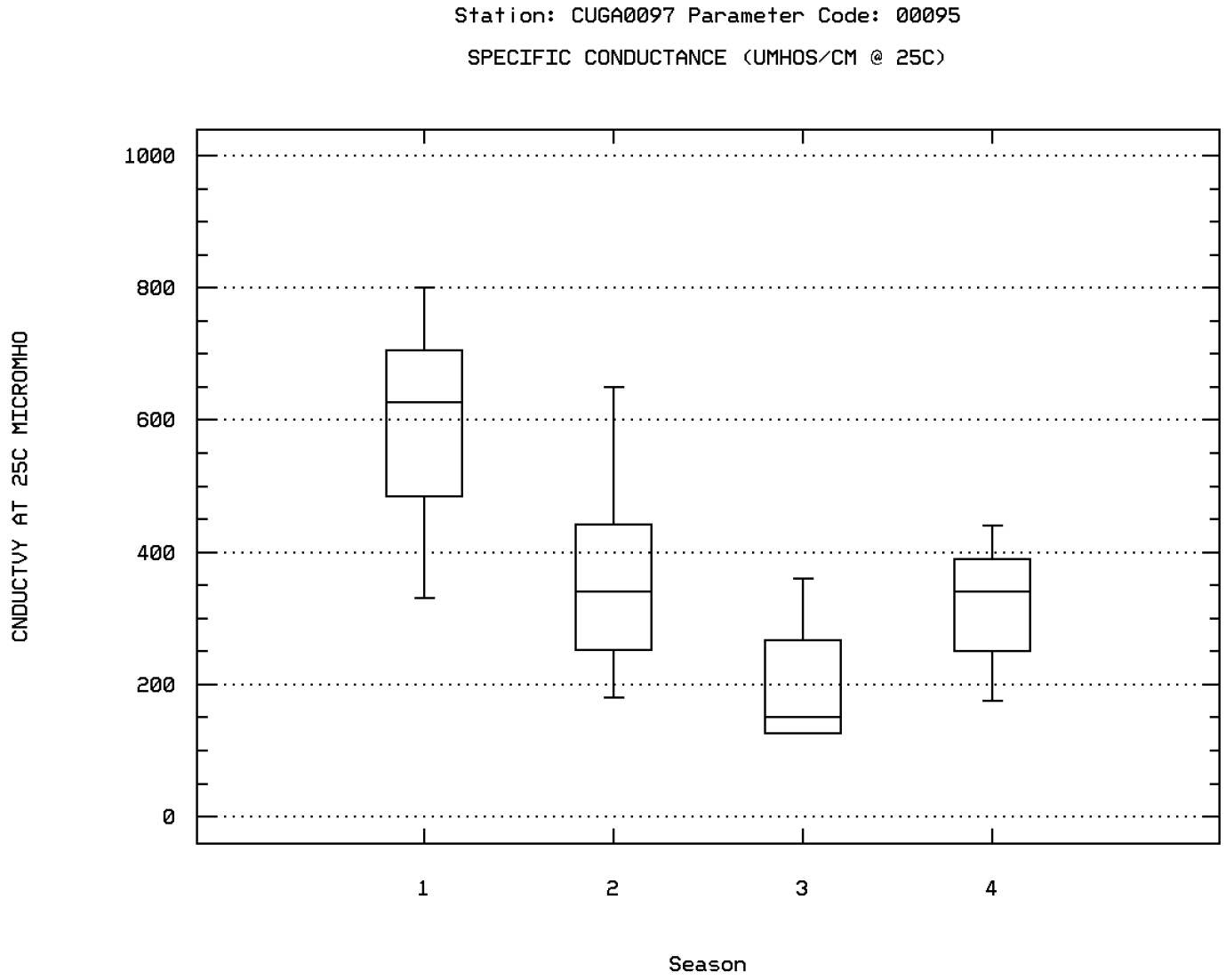
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	4	150.5	196.75	360.	126.	12378.25	111.258	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #4: 4/01 to 6/30 - Station CUGA0097

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/27/64-10/05/89	10	340.	322.3	441.	175.	7448.011	86.302	180.5	245.	392.5	436.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot



STONY FORK NR. MOUTH AT MIDDLESBORO

EPA Water Quality Criteria Analysis for Entire CUGA Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	39	2	0.05	13	2	0.15	9	0	0.00	7	0	0.00	10	0	0.00
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2484	79	0.03	857	37	0.04	616	4	0.01	450	33	0.07	561	5	0.01
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	254	17	0.07	135	16	0.12	22	0	0.00	19	0	0.00	78	1	0.01
00400	PH	Fresh Chronic	9.	354	8	0.02	169	2	0.01	46	1	0.02	33	2	0.06	106	3	0.03
		Other-Lo Lim.	6.5	354	108	0.31	169	56	0.33	46	3	0.07	33	1	0.03	106	48	0.45
00403	PH, LAB	Fresh Chronic	9.	1999	42	0.02	656	13	0.02	458	11	0.02	334	5	0.01	551	13	0.02
		Other-Lo Lim.	6.5	1999	82	0.04	656	18	0.03	458	32	0.07	334	16	0.05	551	16	0.03
00406	PH, FIELD	Fresh Chronic	9.	2487	56	0.02	857	16	0.02	615	18	0.03	451	7	0.02	564	15	0.03
		Other-Lo Lim.	6.5	2487	201	0.08	857	60	0.07	615	70	0.11	451	37	0.08	564	34	0.06
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2548	18	0.01	878	7	0.01	631	0	0.00	460	2	0.00	579	9	0.02
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	2510	15	0.01	862	6	0.01	625	6	0.01	455	3	0.01	568	0	0.00
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	46	0	0.00	18	0	0.00	9	0	0.00	6	0	0.00	13	0	0.00
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	43	0	0.00	17	0	0.00	8	0	0.00	6	0	0.00	12	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	17	2	0.12	1	0	0.00	3	2	0.67	13	0	0.00			
		Drinking Water	0.2	17	0	0.00	1	0	0.00	3	0	0.00	13	0	0.00			
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION)	Fresh Acute	0.022	4	0	0.00										4	0	0.00
		Drinking Water	0.2	4	0	0.00										4	0	0.00
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	142	0	0.00	56	0	0.00	28	0	0.00	21	0	0.00	37	0	0.00
		Drinking Water	250.	142	1	0.01	56	1	0.02	28	0	0.00	21	0	0.00	37	0	0.00
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2503	0	0.00	860	0	0.00	622	0	0.00	454	0	0.00	567	0	0.00
		Drinking Water	250.	2503	0	0.00	860	0	0.00	622	0	0.00	454	0	0.00	567	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	144	8	0.06	58	7	0.12	28	0	0.00	21	0	0.00	37	1	0.03
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2505	0	0.00	860	0	0.00	622	0	0.00	456	0	0.00	567	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2534	0	0.00	881	0	0.00	625	0	0.00	446	0	0.00	582	0	0.00
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	29	0	0.00	9	0	0.00	8	0	0.00	6	0	0.00	6	0	0.00
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	481	1	0.00	158	0	0.00	114	1	0.01	77	0	0.00	132	0	0.00
		Drinking Water	50.	196 &	8	0.04	83	0	0.00	61	8	0.13	11	0	0.00	41	0	0.00
01002	ARSENIC, TOTAL	Fresh Acute	360.	20	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00	9	0	0.00
		Drinking Water	50.	20	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00	9	0	0.00
01005	BARIUM, DISSOLVED	Drinking Water	2000.	582	0	0.00	200	0	0.00	123	0	0.00	120	0	0.00	139	0	0.00
01007	BARIUM, TOTAL	Drinking Water	2000.	7	0	0.00	1	0	0.00							6	0	0.00
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	19	0	0.00							13	0	0.00	6	0	0.00
		Drinking Water	4.	4 &	0	0.00										4	0	0.00
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	265 &	54	0.20	127	29	0.23	60	10	0.17	13	2	0.15	65	13	0.20
		Drinking Water	5.	265 &	54	0.20	127	29	0.23	60	10	0.17	13	2	0.15	65	13	0.20
01027	CADMIUM, TOTAL	Fresh Acute	3.9	10 &	0	0.00	5	0	0.00							5	0	0.00
		Drinking Water	5.	10 &	0	0.00	5	0	0.00							5	0	0.00
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2505	3	0.00	860	1	0.00	622	1	0.00	454	0	0.00	569	1	0.00
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	2	0	0.00							1	0	0.00
		Drinking Water	100.	3	0	0.00	2	0	0.00							1	0	0.00
01034	CHROMIUM, TOTAL	Drinking Water	100.	37	0	0.00	15	0	0.00	8	0	0.00	1	0	0.00	13	0	0.00
01040	COPPER, DISSOLVED	Fresh Acute	18.	2468 &	87	0.04	832	30	0.04	618	28	0.05	449	6	0.01	569	23	0.04
		Drinking Water	1300.	2505	1	0.00	860	1	0.00	622	0	0.00	454	0	0.00	569	0	0.00
01042	COPPER, TOTAL	Fresh Acute	18.	40	4	0.10	16	0	0.00	9	1	0.11	1	1	1.00	14	2	0.14
		Drinking Water	1300.	40	0	0.00	16	0	0.00	9	0	0.00	1	0	0.00	14	0	0.00
01049	LEAD, DISSOLVED	Fresh Acute	82.	2507 &	76	0.03	862	29	0.03	622	18	0.03	453	11	0.02	570	18	0.03
		Drinking Water	15.	1202 &	667	0.55	402	250	0.62	327	170	0.52	197	110	0.56	276	137	0.50
01051	LEAD, TOTAL	Fresh Acute	82.	31	0	0.00	12	0	0.00	8	0	0.00	1	0	0.00	10	0	0.00
		Drinking Water	15.	29 &	6	0.21	12	2	0.17	8	1	0.13	1	1	1.00	8	2	0.25
01059	THALLIUM, TOTAL	Fresh Acute	1400.	2	0	0.00										2	0	0.00
		Drinking Water	2.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	2505	0	0.00	864	0	0.00	626	0	0.00	453	0	0.00	562	0	0.00
		Drinking Water	100.	2505	0	0.00	864	0	0.00	626	0	0.00	453	0	0.00	562	0	0.00
01067	NICKEL, TOTAL	Fresh Acute	1400.	6	0	0.00										6	0	0.00
		Drinking Water	100.	6	0	0.00										6	0	0.00
01077	SILVER, TOTAL	Fresh Acute	4.1	5 &	0	0.00	1	0	0.00							4	0	0.00
		Drinking Water	100.	20	0	0.00	1	0	0.00				13	0	0.00	6	0	0.00
01090	ZINC, DISSOLVED	Fresh Acute	120.	2503	18	0.01	860	6	0.01	622	4	0.01	454	2	0.00	567	6	0.01
		Drinking Water	5000.	2503	0	0.00	860	0	0.00	622	0	0.00	454	0	0.00	567	0	0.00
01092	ZINC, TOTAL	Fresh Acute	120.	41	1	0.02	16	0	0.00	9	0	0.00	2	0	0.00	14	1	0.07
		Drinking Water	5000.	41	0	0.00	16	0	0.00	9	0	0.00	2	0	0.00	14	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire CUGA Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/31 Obs	7/01-10/31 Exceed	7/01-10/31 Prop.	11/01-1/31 Obs	11/01-1/31 Exceed	11/01-1/31 Prop.	2/01-3/31 Obs	2/01-3/31 Exceed	2/01-3/31 Prop.	4/01-6/30 Obs	4/01-6/30 Exceed	4/01-6/30 Prop.
01097	ANTIMONY, TOTAL	Fresh Acute	88.	2 &	0	0.00										2	0	0.00
		Drinking Water	6.	0 &	0	0.00												
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00										2	0	0.00
		Drinking Water	50.	2	0	0.00										2	0	0.00
01147	SELENIUM, TOTAL	Fresh Acute	20.	18 &	0	0.00	1	0	0.00				13	0	0.00	4	0	0.00
		Drinking Water	50.	20	0	0.00	1	0	0.00				13	0	0.00	6	0	0.00
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	6	0	0.00										6	0	0.00
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	25	13	0.52	7	7	1.00	6	2	0.33	6	2	0.33	6	2	0.33
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	15	15	1.00	7	7	1.00	3	3	1.00	1	1	1.00	4	4	1.00
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	8	8	1.00	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	90	62	0.69	30	25	0.83	20	11	0.55	17	7	0.41	23	19	0.83
31648	E. COLI, MTEC, MF	Other-Hi Lim.	126.	287	36	0.13	96	7	0.07	71	3	0.04	36	9	0.25	84	17	0.20
34205	ACENAPHTHENE, TOTAL	Fresh Acute	1700.	2	0	0.00										2	0	0.00
34346	1,2-DIPHENYLHYDRAZINE, TOTAL	Fresh Acute	270.	2	0	0.00										2	0	0.00
34376	FLUORANTHENE, TOTAL	Fresh Acute	3980.	2	0	0.00										2	0	0.00
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL	Fresh Acute	7.	2	0	0.00										2	0	0.00
		Drinking Water	50.	2	0	0.00										2	0	0.00
34396	HEXACHLOROETHANE, TOTAL	Fresh Acute	980.	2	0	0.00										2	0	0.00
34403	IDENO (1,2,3-CD) PYRENE	Drinking Water	0.4	0 &	0	0.00												
34408	ISOPHORONE, TOTAL	Fresh Acute	117000.	2	0	0.00										2	0	0.00
34447	NITROBENZENE, TOTAL	Fresh Acute	27000.	2	0	0.00										2	0	0.00
34452	PARACHLOROMETA CRESOL, TOTAL	Fresh Acute	30.	2	0	0.00										2	0	0.00
34461	PHENANTHRENE, TOTAL	Fresh Acute	30.	2	0	0.00										2	0	0.00
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	2	0	0.00										2	0	0.00
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	2	0	0.00										2	0	0.00
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	2	0	0.00										2	0	0.00
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	2	0	0.00										2	0	0.00
34586	2-CHLOROPHENOL, TOTAL	Fresh Acute	4380.	2	0	0.00										2	0	0.00
34601	2,4-DICHLOROPHENOL, TOTAL	Fresh Acute	2020.	2	0	0.00										2	0	0.00
34606	2,4-DIMETHYLPHENOL, TOTAL	Fresh Acute	2120.	2	0	0.00										2	0	0.00
34611	2,4-DINITROTOLUENE, TOTAL	Fresh Acute	330.	2	0	0.00										2	0	0.00
34694	PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	Fresh Acute	10200.	2	0	0.00										2	0	0.00
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	2	0	0.00										2	0	0.00
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00										2	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	6	0	0.00										6	0	0.00
		Drinking Water	6.	6	2	0.33										6	2	0.33
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00										2	0	0.00
		Drinking Water	1.	0 &	0	0.00												
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	2	0	0.00										2	0	0.00
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00										1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	73	0	0.00	26	0	0.00	17	0	0.00	12	0	0.00	18	0	0.00
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	3	0	0.00	2	0	0.00							1	0	0.00
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	551 &	9	0.02	195	1	0.01	189	6	0.03	123	1	0.01	44	1	0.02
		Drinking Water	2.	551 &	9	0.02	195	1	0.01	189	6	0.03	123	1	0.01	44	1	0.02
71900	MERCURY, TOTAL	Fresh Acute	2.4	30	0	0.00	11	0	0.00	8	0	0.00	1	0	0.00	10	0	0.00
		Drinking Water	2.	30	0	0.00	11	0	0.00	8	0	0.00	1	0	0.00	10	0	0.00
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	2311	195	0.08	834	69	0.08	536	53	0.10	419	45	0.11	522	28	0.05
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	4	1	0.25										4	1	0.25

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Missing Level I Groups

There are STORET Data for Every Level I I&M Parameter Group Within the CUGA Study Area

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Present Level I Groups

STORET Data Within the CUGA Study Area Exist for These Groups:

Alkalinity		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	116	6	54	56	30
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	24	0	16	8	1
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	2503	2503	0	0	42
00435	ACIDITY, TOTAL (MG/L AS CACO3)	2509	2503	6	0	44
00440	BICARBONATE ION (MG/L AS HCO3)	2076	1984	0	92	59
00445	CARBONATE ION (MG/L AS CO3)	78	2	0	76	17
		7306	6998	76	232	193 (80)[1]

pH		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00400	PH (STANDARD UNITS)	354	80	122	152	34
00403	PH, LAB (STANDARD UNITS)	1999	1994	3	2	48
00406	PH, FIELD (STANDARD UNITS)	2487	2487	0	0	40
		4840	4561	125	154	122 (80)[1]

Conductivity		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	2633	2577	56	0	45
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	374	143	104	127	34
		3007	2720	160	127	79 (77)[1]

Dissolved Oxygen		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	2484	2484	0	0	40
00300	OXYGEN, DISSOLVED (MG/L)	254	80	102	72	15
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	14	0	0	14	7
		2752	2564	102	86	62 (55)[1]

Water Temperature		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3056	2729	185	142	70
		3056	2729	185	142	70 (70)[1]

Flow		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	4	0	4	0	2
00060	FLOW, STREAM, MEAN DAILY CFS	84	0	0	84	8
00061	FLOW, STREAM, INSTANTANEOUS CFS	2523	2404	102	17	45
		2611	2404	106	101	55 (51)[1]

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Clarity/Turbidity		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00070	TURBIDITY, (JACKSON CANDLE UNITS)	39	1	27	11	4
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	40	0	0	40	11
00078	TRANSPARENCY, SECCHI DISC (METERS)	6	3	3	0	1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	2578	2505	53	20	52
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	2311	2311	0	0	40
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	4	2	2	0	4
		4978	4822	85	71	112 (64)[1]

Nitrate/Nitrogen		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	37	0	29	8	2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	90	8	51	31	11
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	2510	2503	0	7	43
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	46	0	15	31	2
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	48	5	20	23	6
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	43	8	35	0	9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	73	0	0	73	13
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	3	0	0	3	2
		2850	2524	150	176	88 (67)[1]

Phosphate/Phosphorus		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	2	0	0	2	2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	52	8	35	9	9
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	2540	2506	27	7	45
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10	5	5	0	5
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	2524	2486	15	23	43
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	38	0	15	23	1
		5166	5005	97	64	105 (54)[1]

Chlorophyll		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	5	2	3	0	1
		5	2	3	0	1 (1)[1]

Sulfates/Total Dissolved Solids/Hardness		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00900	HARDNESS, TOTAL (MG/L AS CACO3)	2613	2506	15	92	67
00945	SULFATE, TOTAL (MG/L AS SO4)	144	2	42	100	27
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2505	2503	2	0	44
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	108	2	42	64	14
		5370	5013	101	256	152 (70)[1]

Bacteria		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
31501	COLIFORM, TOT, MEMBRANE FILTER,IMMED.M-ENDOMED,35C	25	0	25	0	2
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	15	0	0	15	2
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	8	0	0	8	1
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	90	1	48	41	6
31648	E. COLI - MTEC-MF	287	287	0	0	12
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	2	0	2	0	2
		427	288	75	64	25 (18)[1]

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
01097	ANTIMONY, TOTAL (UG/L AS SB)	15	13	2	0	11
01000	ARSENIC, DISSOLVED (UG/L AS AS)	481	478	0	3	38
01002	ARSENIC, TOTAL (UG/L AS AS)	20	5	8	7	9
01012	BERYLLIUM, TOTAL (UG/L AS BE)	19	15	4	0	15
01025	CADMIUM, DISSOLVED (UG/L AS CD)	555	550	2	3	41
01027	CADMIUM, TOTAL (UG/L AS CD)	26	5	9	12	9
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2505	2503	2	0	44
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	3	0	0	3	2
01034	CHROMIUM, TOTAL (UG/L AS CR)	37	5	10	22	10
01040	COPPER, DISSOLVED (UG/L AS CU)	2505	2503	2	0	44
01042	COPPER, TOTAL (UG/L AS CU)	40	5	10	25	10
01049	LEAD, DISSOLVED (UG/L AS PB)	2508	2503	2	3	46
01051	LEAD, TOTAL (UG/L AS PB)	31	5	10	16	9
71890	MERCURY, DISSOLVED (UG/L AS HG)	906	904	2	0	40
71900	MERCURY, TOTAL (UG/L AS HG)	30	2	8	20	6
01065	NICKEL, DISSOLVED (UG/L AS NI)	2505	2494	5	6	43
01067	NICKEL, TOTAL (UG/L AS NI)	6	2	4	0	6
01145	SELENIUM, DISSOLVED (UG/L AS SE)	2	0	2	0	2
01147	SELENIUM, TOTAL (UG/L AS SE)	20	15	5	0	16
01077	SILVER, TOTAL (UG/L AS AG)	20	15	5	0	16
01059	THALLIUM, TOTAL (UG/L AS TL)	2	0	2	0	2
01090	ZINC, DISSOLVED (UG/L AS ZN)	2503	2503	0	0	42
01092	ZINC, TOTAL (UG/L AS ZN)	41	5	10	26	10
00720	CYANIDE, TOTAL (MG/L AS CN)	17	13	4	0	12
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) (MG/L)	4	2	2	0	4
34586	2-CHLOROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	2	0	2	0	2
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	2	0	2	0	2
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34591	2-NITROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34646	4-NITROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	2	0	2	0	2
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	2	0	2	0	2
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	2	0	2	0	2
34205	ACENAPHTHENE, TOTAL (UG/L)	2	0	2	0	2
34200	ACENAPHTHYLENE, TOTAL (UG/L)	2	0	2	0	2
34220	ANTHRACENE, TOTAL (UG/L)	2	0	2	0	2
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	2	0	2	0	2
34247	BENZO-A-PYRENE, TOTAL (UG/L)	2	0	2	0	2
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	2	0	2	0	2
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	2	0	2	0	2
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	2	0	2	0	2
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	2	0	2	0	2
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	2	0	2	0	2
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	6	2	4	0	6
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	2	0	2	0	2
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	6	2	4	0	6
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	2	0	2	0	2
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	2	0	2	0	2
34320	CHRYSENE, TOTAL (UG/L)	2	0	2	0	2
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	2	0	2	0	2
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	2	0	2	0	2

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 09/24/97	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	2	0	2	0	2
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	2	0	2	0	2
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	2	0	2	0	2
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	6	2	4	0	6
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	6	2	4	0	6
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	6	2	4	0	6
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	2	0	2	0	2
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	2	0	2	0	2
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	6	2	4	0	6
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	2	0	2	0	2
34376	FLUORANTHENE, TOTAL (UG/L)	2	0	2	0	2
34381	FLUORENE, TOTAL (UG/L)	2	0	2	0	2
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	2	0	2	0	2
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	2	0	2	0	2
34396	HEXACHLOROETHANE, TOTAL (UG/L)	2	0	2	0	2
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	2	0	2	0	2
34408	ISOPHORONE, TOTAL (UG/L)	2	0	2	0	2
34696	NAPHTHALENE, TOTAL (UG/L)	2	0	2	0	2
34447	NITROBENZENE, TOTAL (UG/L)	2	0	2	0	2
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	2	0	2	0	2
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	2	0	2	0	2
34461	PHENANTHRENE, TOTAL (UG/L)	2	0	2	0	2
34469	PYRENE, TOTAL (UG/L)	2	0	2	0	2
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	2	0	2	0	2
		14935	14557	232	146	621 (53)[1]

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Park Summary: Level I Group Currentness and Distribution

Parameter Group	Total Obs.	Obs. Since 1985	% Obs. Since 1985	Stations Measuring This Group	% of Total Stations Measuring This Group	Obs. Per Station Measuring This Group	Period of Record For This Group	Observations Per Year of Period of Record
Alkalinity	7306	6998	95.8	80	83.3	91.3	08/06/53-09/24/97	165.5
pH	4840	4561	94.2	80	83.3	60.5	08/06/53-09/24/97	109.7
Conductivity	3007	2720	90.5	77	80.2	39.1	08/06/53-09/24/97	68.1
Dissolved Oxygen	2752	2564	93.2	55	57.3	50.0	09/11/61-09/24/97	76.4
Water Temperature	3056	2729	89.3	70	72.9	43.7	08/06/53-09/24/97	69.2
Flow	2611	2404	92.1	51	53.1	51.2	09/11/61-09/24/97	72.5
Clarity/Turbidity	4978	4822	96.9	64	66.7	77.8	09/11/61-09/24/97	138.1
Nitrate/Nitrogen	2850	2524	88.6	67	69.8	42.5	08/06/53-09/24/97	64.6
Phosphate/Phosphorus	5166	5005	96.9	54	56.3	95.7	10/20/65-09/24/97	161.8
Chlorophyll	5	2	40.0	1	1.0	5.0	05/05/82-08/08/90	0.6
Sulfates/Total Dissolved Solids/Hardness	5370	5013	93.4	70	72.9	76.7	08/06/53-09/24/97	121.7
Bacteria	427	288	67.4	18	18.8	23.7	06/22/67-08/11/97	14.2
Toxic Elements	14935	14557	97.5	53	55.2	281.8	05/27/64-09/24/97	448.1

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0006	71890	MERCURY, DISSOLVED (UG/L AS HG)	920503		70.0000000	11NPSWRD	CUGA_CPSU_MF5	
CUGA0006	71890	MERCURY, DISSOLVED (UG/L AS HG)	920821		100.0000000	11NPSWRD	CUGA_CPSU_MF5	
CUGA0006	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_MF5	
CUGA0008	71890	MERCURY, DISSOLVED (UG/L AS HG)	920503		70.0000000	11NPSWRD	CUGA_CPSU_MF2	
CUGA0008	71890	MERCURY, DISSOLVED (UG/L AS HG)	920821		100.0000000	11NPSWRD	CUGA_CPSU_MF2	
CUGA0008	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_MF2	
CUGA0011	71890	MERCURY, DISSOLVED (UG/L AS HG)	920503		70.0000000	11NPSWRD	CUGA_CPSU_SH10	
CUGA0011	71890	MERCURY, DISSOLVED (UG/L AS HG)	920821		100.0000000	11NPSWRD	CUGA_CPSU_SH10	
CUGA0011	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_SH10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	920504		70.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0015	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_ST10	
CUGA0017	71890	MERCURY, DISSOLVED (UG/L AS HG)	920504		70.0000000	11NPSWRD	CUGA_CPSU_ST5	
CUGA0017	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_ST5	
CUGA0017	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_ST5	
CUGA0017	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_ST5	
CUGA0017	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_ST5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	920504		70.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		960.0000000	11NPSWRD	CUGA_CPSU_LH5	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0021	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_LH5	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0022	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_STOR1	
CUGA0026	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_CUDJO	
CUGA0027	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_IF	
CUGA0030	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_SR10	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_GC3	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0031	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_GC3	
CUGA0032	00080	COLOR (PLATINUM-COBALT UNITS)	910218		541.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	00080	COLOR (PLATINUM-COBALT UNITS)	910910		1650.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	00080	COLOR (PLATINUM-COBALT UNITS)	911122		770.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	00080	COLOR (PLATINUM-COBALT UNITS)	911201		1020.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	00080	COLOR (PLATINUM-COBALT UNITS)	911202		720.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	01065	NICKEL, DISSOLVED (UG/L AS NI)	910214		5000.0000000	11NPSWRD	CUGA_CPSU_GC4	X
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0032	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_GC4	
CUGA0033	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DR9	
CUGA0033	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_DR9	
CUGA0033	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_DR9	
CUGA0033	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_DR9	
CUGA0035	00080	COLOR (PLATINUM-COBALT UNITS)	910604		535.0000000	11NPSWRD	CUGA_CPSU_TD1	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920113		30.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0035	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_TD1	
CUGA0036	00080	COLOR (PLATINUM-COBALT UNITS)	910715	1200	660.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	00080	COLOR (PLATINUM-COBALT UNITS)	910715	1200	660.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	00080	COLOR (PLATINUM-COBALT UNITS)	910910		1660.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0036	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_GC5	
CUGA0037	00080	COLOR (PLATINUM-COBALT UNITS)	910218		942.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	00080	COLOR (PLATINUM-COBALT UNITS)	910315		640.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	00080	COLOR (PLATINUM-COBALT UNITS)	911201		1430.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	00080	COLOR (PLATINUM-COBALT UNITS)	911202		600.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	920420		70.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_GC7	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0037	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_GC7	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0039	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_CAVE	
CUGA0041	00080	COLOR (PLATINUM-COBALT UNITS)	911202		554.0000000	11NPSWRD	CUGA_CPSU_DB6	
CUGA0041	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DB6	
CUGA0043	00080	COLOR (PLATINUM-COBALT UNITS)	911201		512.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	921016		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_988	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0043	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_988	
CUGA0045	00080	COLOR (PLATINUM-COBALT UNITS)	920421		925.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0045	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_DB5	
CUGA0046	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DB7	
CUGA0047	00080	COLOR (PLATINUM-COBALT UNITS)	910716		541.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_RR1	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0047	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_RR1	
CUGA0051	00080	COLOR (PLATINUM-COBALT UNITS)	911202		507.0000000	11NPSWRD	CUGA_CPSU_DB8	
CUGA0051	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DB8	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	910701		674.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	910731		900.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	910828		2280.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	910911		1110.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	910923		5000.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	911008		665.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	911024		790.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	911102		4750.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	911202		16550.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	911216		8925.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920113		1840.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920210		2755.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920406		3450.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920504		1370.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920518		820.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920601		1000.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	00080	COLOR (PLATINUM-COBALT UNITS)	920615		1000.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	01055	MANGANESE, TOTAL (UG/L AS MN)	920615		12870.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	01105	ALUMINUM, TOTAL (UG/L AS AL)	910923		21920.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	01105	ALUMINUM, TOTAL (UG/L AS AL)	911202		71950.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	01105	ALUMINUM, TOTAL (UG/L AS AL)	920601		49680.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0053	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_TC7N	
CUGA0054	00080	COLOR (PLATINUM-COBALT UNITS)	920601		1000.0000000	11NPSWRD	CUGA_CPSU_TC7NP	
CUGA0054	00080	COLOR (PLATINUM-COBALT UNITS)	920615		1000.0000000	11NPSWRD	CUGA_CPSU_TC7NP	
CUGA0054	01055	MANGANESE, TOTAL (UG/L AS MN)	920615		14430.0000000	11NPSWRD	CUGA_CPSU_TC7NP	
CUGA0055	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_TUNEL	
CUGA0055	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_TUNEL	
CUGA0055	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_TUNEL	
CUGA0055	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_TUNEL	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	910521		788.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	910701		8575.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	910716		1800.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	910828		4625.0000000	11NPSWRD	CUGA_CPSU_TC7	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	910923		1380.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	911008		660.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	911024		985.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	911201		610.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	911202		790.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	911216		1740.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920113		1420.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920210		36900.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920309		110000.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920406		7400.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920518		2440.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920601		1000.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	00080	COLOR (PLATINUM-COBALT UNITS)	920615		1000.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01055	MANGANESE, TOTAL (UG/L AS MN)	910701		6630.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01055	MANGANESE, TOTAL (UG/L AS MN)	920309		19360.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01055	MANGANESE, TOTAL (UG/L AS MN)	920601		30170.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01055	MANGANESE, TOTAL (UG/L AS MN)	920615		19460.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	910701		30010.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	911216		25550.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	920113		47800.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	920309		474870.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	920406		46880.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	01105	ALUMINUM, TOTAL (UG/L AS AL)	920601		231070.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	71890	MERCURY, DISSOLVED (UG/L AS HG)	920113		40.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0056	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_TC7	
CUGA0058	00080	COLOR (PLATINUM-COBALT UNITS)	911202		524.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	910425		50.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_DB10	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0058	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_DB10	
CUGA0060	00080	COLOR (PLATINUM-COBALT UNITS)	911216		616.0000000	11NPSWRD	CUGA_CPSU_SB8	
CUGA0061	00080	COLOR (PLATINUM-COBALT UNITS)	681015	1355	700.0000000	112WRD	03402000	
CUGA0061	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	930528	1400	0.0000000	112WRD	03402000	X
CUGA0065	00080	COLOR (PLATINUM-COBALT UNITS)	910731		1285.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	00080	COLOR (PLATINUM-COBALT UNITS)	910828		606.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	00080	COLOR (PLATINUM-COBALT UNITS)	911122		3440.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	00080	COLOR (PLATINUM-COBALT UNITS)	911201		2150.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	00080	COLOR (PLATINUM-COBALT UNITS)	911202		1150.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	01105	ALUMINUM, TOTAL (UG/L AS AL)	911122		27100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	910424		50.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_TC10	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0065	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_TC10	
CUGA0066	00080	COLOR (PLATINUM-COBALT UNITS)	911201		1355.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0066	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_YC5A	
CUGA0067	01025	CADMIUM, DISSOLVED (UG/L AS CD)	950215		28000.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	931205		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940214		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940223		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940302		100.0000000	11NPSWRD	CUGA_CPSU_YC5	

Water Quality Observations
Outside STORET Edit Criteria for CUGA

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940328		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940413		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940418		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	940526		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	941128		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	950215		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	950510		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	951107		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	960306		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	960801		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0067	71890	MERCURY, DISSOLVED (UG/L AS HG)	960812		100.0000000	11NPSWRD	CUGA_CPSU_YC5	
CUGA0070	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_YC6	
CUGA0070	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_YC6	
CUGA0070	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_YC6	
CUGA0070	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_YC6	
CUGA0071	00080	COLOR (PLATINUM-COBALT UNITS)	910604		535.0000000	11NPSWRD	CUGA_CPSU_KY18	
CUGA0071	00080	COLOR (PLATINUM-COBALT UNITS)	910619		762.0000000	11NPSWRD	CUGA_CPSU_KY18	
CUGA0071	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_KY18	
CUGA0071	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_KY18	
CUGA0073	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_YC1	
CUGA0073	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_YC1	
CUGA0073	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_YC1	
CUGA0073	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_YC1	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	900618		20.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	910426		50.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	920421		70.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	920518		200.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	920629		70.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	920825		100.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	920828		100.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	921019		100.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	921217		100.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0077	71890	MERCURY, DISSOLVED (UG/L AS HG)	930323		100.0000000	11NPSWRD	CUGA_CPSU_YC12	
CUGA0097	00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	640527		600.0000000	112WRD	03401450	

APPENDICES

Appendix A

Computer Files Transmitted With

Park Baseline Water Quality Data Inventory and Analysis

Computer disk(s) accompanying this report include up to seven (depending on the presence or absence of certain data elements) compressed (ZIP) files containing digital copies of nearly all the tables, figures, and other materials used to produce this report. To decompress these files, you must use the commonly available shareware program PKUNZIP. The command to type at the DOS prompt is:

PKUNZIP -E *COMPRESS.ZIP FILENAME.EXT*

where COMPRESS.ZIP is the name of one of the seven compressed (ZIP) files listed below and FILENAME.EXT is the name of the file you wish to extract. If you want to decompress all of the files in COMPRESS.ZIP, simply omit the FILENAME.EXT. To obtain a listing of all the files compressed into a particular ZIP file, type the following:

PKUNZIP -V *COMPRESS.ZIP* |MORE

where COMPRESS.ZIP is the name of one of the seven compressed ZIP files listed below. If a ZIP file spans multiple disks, use the last disk of the series (span) when obtaining a listing of all the files compressed into a particular ZIP file. Once you see the file you wish to obtain, substitute this file name for FILENAME.EXT in the first command line above to extract and decompress this particular file.

Included on one of the disk(s) accompanying this report is a program named PRINTZIP. This program will decompress ZIP files which don't span multiple disks and print certain files to a Hewlett-Packard (or compatible) Laser Printer. To use PRINTZIP, however, you must still have a copy of PKUNZIP in a directory listed in your path or in the same directory as the PRINTZIP program. PRINTZIP provides an easy, menu-driven interface for using PKUNZIP to decompress files and then send them to the printer. PRINTZIP allows you to send individual files, groups of files, or all files to the printer. PRINTZIP will not work with ZIP files that span multiple disks.

The following compressed (ZIP) files are included on the disk(s) accompanying this report:

(1) CUGATABS.ZIP

This compressed file contains all the tables presented in the report. The files compressed into this file include:

(a) CUGASITE.DOC - Descriptive listing of select fields from the industrial facilities discharges, drinking water intakes, and EPA-USGS stream gages databases.

(b) CUGAAGNC.DOC - Contacts for agencies whose data were retrieved within the study area.

(c) CUGAAGNQ.DOC - Number of stations, observations, and parameters retrieved by agency code within the study area and park.

(d) CUGAOV0.DOC - Overview of park and retrieved data.

(e) CUGAOV1.DOC - Station period of record table.

(f) CUGAOV2.DOC - Parameter period of record table.

(g) CUGAOV3.DOC - Station/parameter period of record table.

(h) CUGAINV.DOC - Station by station descriptive statistics over the entire period of record and comparison against EPA Water Quality Criteria for each station.

(i) CUGASEAN.DOC - Seasonal and annual water quality descriptive statistics at stations with water quality data meeting the default seasonal and annual criteria.

(j) CUGAEPAS.DOC - EPA Water Quality Criteria comparison for data at all stations combined within the study area.

(k) CUGAIDEA.DOC - Comparison of downloaded STORET data with NPS Servicewide Inventory and Monitoring Program "Level I" water quality parameters.

(l) CUGABAD.DOC - Water quality observation values that were outside the range of one of 190 STORET edit criteria and were either discarded or retained.

All these compressed document files are in ASCII format and contain printer codes appropriate to Hewlett-Packard (or compatible) Laser Printers. While at the DOS prompt, any of these document files may be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the PRINT command. For example, if the document CUGAOV1.DOC is in the subdirectory C:\WATER, you could type: PRINT C:\WATER\CUGAOV1.DOC. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). Alternatively, you can use the PRINTZIP program to decompress and print any of these files provided the ZIP file doesn't span multiple disks. These ASCII files can also be imported into word-processed documents, but the printer codes will then have to be removed.

(2) CUGAFIGS.ZIP

This compressed file contains graphics files for all the statistical figures (time series plots; annual box and whiskers plots; seasonal box and whiskers plots) in the report in two different formats: Computer Graphic Metafile (CGM) and Hewlett-Packard Printer Control Language (PCL). The files are named with the last three digits of the Station Name followed by the five digit STORET code. The file name extension begins with either a 1 (time series), 2 (annual), or 3 (seasonal) and then either GM for CGM or CL for PCL. For example, 00100300.2GM would denote the file contains an annual box and whiskers plot in CGM format for parameter 00300 (dissolved oxygen) at station CUGA0001. While at the DOS prompt, any PCL file can be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the COPY command. For example, if the graphic 00100300.2CL (an annual box and whiskers plot of parameter 00300, dissolved oxygen, at station CUGA0001) is in the subirectory C:\WATER, you would type: COPY C:\WATER\00100300.2CL LPT1: /B. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). The /B is necessary because the PCL file is in a binary format. Alternatively, you can use the PRINTZIP program to decompress and print any of the PCL files provided the ZIP file doesn't span multiple disks. The CGM files can be imported and/or edited in most graphics packages, including WordPerfect.

(3) CUGAPARM.ZIP

This file compresses CUGAPARM.DBF which contains all the actual values (raw data) of all the water quality data downloaded from STORET and summarized in the report. The detailed database structure for this file is contained in Appendix B.

(4) CUGASITE.ZIP

This compressed file contains up to five geo-referenced, DBASE III+ compatible site (point location) files documenting the location in the study area of water quality monitoring stations, industrial facilities discharges, drinking water intakes, water gages, and water impoundments. These files include:

(a) CUGAWQ.DBF - All water quality monitoring station locations within the project's study area downloaded from STORET.

(b) CUGAIFD.DBF - All municipal and industrial facility discharges within the project's study area downloaded from the IFD database.

(c) CUGADRIN.DBF - All drinking water intakes within the project's study area downloaded from the DRINKS database.

(d) CUGAGAGE.DBF - All water gages within the project's study area downloaded from the GAGES database.

(e) CUGADAMS.DBF - All water impoundments within the project's study area downloaded from the DAMS database.

The absence of any of these files indicates that none of the particular sites were found within the study area. Detailed database structures for each of these files are contained in Appendix B.

(5) CUGAMISC.ZIP

This compressed file contains a variety of graphic and document files that are contained in the report. They are grouped into this miscellaneous compressed (ZIP) file because they don't fit neatly into any of the other compressed files. The files contained in this compressed file include:

(a) CUGAEXEC.DOC - WordPerfect Ver. 5.1 copy of the Executive Summary in the report.

(b) CUGATOC.DOC - WordPerfect Ver. 5.1 copy of the report's Table of Contents.

(c) INTRO.DOC - WordPerfect Ver. 5.1 copy of all the text in the report from the Introduction through the Interpretive Guide to Water Quality Results.

(d) APPENDIX.DOC - WordPerfect Ver. 5.1 copy of all the Appendices in the report.

(e) CUGAREGI - PCL and CLP (Windows Clipboard) copies of map displaying the regional location of the park and study area.

(f) CUGAWQ - PCL and CLP (Windows Clipboard) copies of park maps displaying water quality station locations within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (CUGAWQA, CUGAWQB, CUGAWQC, etc.) and the index map name will end with an ampersand (&).

(g) CUGAIDG - PCL and CLP (Windows Clipboard) copies of park maps displaying locations of industrial facilities discharges, drinking water intakes, and stream gages within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (CUGAIDGA, CUGAIDGB, CUGAIDGC, etc.) and the index map name will end with an ampersand (&). If no industrial facilities discharges, drinking water intakes, water gages, or water impoundments exist within the park's study area, these files will not be in the compressed (ZIP) file.

(h) CUGASEHY - PCL and CLP (Windows Clipboard) copies of the hydrographs or other materials used by WRD staff as the basis for a first attempt at a seasonal analysis of the park's water quality data.

Other materials may also be included in this miscellaneous compressed (ZIP) file as warranted by conditions at the park. As with CUGAFIGS.ZIP and CUGATABS.ZIP, you can use the PRINTZIP program to print any of the PCL files in CUGAMISC.ZIP provided the ZIP file doesn't span multiple disks. You should not, however, use PRINTZIP to print the WordPerfect document files. The CLP (Windows Clipboard) files can be imported (pasted) and/or edited in most Windows-based word processors and graphics packages.

(6) CUGARF3.ZIP

This compressed file contains the Environmental Protection Agency's River Reach File Ver. 3.0 provisional data for the USGS catalog unit(s) encompassing the study area. The attribute data exist in both ASCII and DBASE III+ format, while the geographic traces exist in ASCII format. This compressed file contains four files for each catalog unit that touches the study area. Catalog units are identified by unique 8-character numeric names which identify the region, subregion, accounting unit, and catalog unit. Examples (your 8-character numeric names will be different) of the file types included in this compressed file are:

(a) 12345678.RF3 - ASCII formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(b) 12345678.DBF - DBASE III+ formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(c) 12345678.TRC - ASCII formatted geographic file from the River Reach File containing digital, geo-referenced descriptions of all hydrographic traces within the catalog unit at a scale of 1:100,000 suitable for import into a geographic information system.

(d) 12345678.CUB - ASCII formatted geographic file from the River Reach File containing a digital, geo-referenced description of the catalog unit boundary suitable for import into a geographic information system.

Detailed database structures for RF3-related files are contained in Appendix B.

(7) CUGAWQMW.ZIP

Between 2000 and 2002, all Baseline Water Quality Data Inventory and Analysis Reports were compiled or re-compiled in Microsoft Word 2000 (Ver. 9.0) format. This complete, digital version of the report will be made available through various means, including the Internet. Although the reports can be opened in Microsoft Word 1997 (Ver. 8.0), the time series and annual and seasonal box-plots may not be centered appropriately on a page due to discrepancies with how Word 2000 formats pictures and how Word 1997 formatted pictures. Consequently, Word 2000 is the recommended software for viewing the report. Prior to printing the report from Word, be sure to enable "Print Text as Graphics" or "Print True Type Font as Graphics" in the Printer Properties. This ensures a more faithful reproduction of the maps included in the Word document.

The Microsoft Word version of the Baseline Water Quality Data Inventory and Analysis Report may differ slightly from the original analog version. Reports issued during 1994-1996 didn't have as many "bells-and-whistles" as subsequent reports. In compiling digital Microsoft Word versions of these earlier reports, attempts were made to bring these 1994-1996 reports up to the current standard wherever feasible and practicable. Unfortunately, some changes were not feasible or practicable. For example, water quality criteria screens were added or modified over time when newer criteria became available. The digital Microsoft Word version of Appendix F presents the latest criteria screening parameters and values. Some of these parameters and/or values may not have been screened against in the EPA water quality criteria analyses for each station and the entire study area in the 1994-1996 analog versions of the report. Similarly, the Introduction, Methodology, and Interpretive Guide to Water Quality Results may mention certain features that aren't included in the 1994-1996 reports. Additionally, to prepare a Microsoft Word version of this report, data were processed through different versions of software than used originally. Consequently, some results presented in the Overview and Executive Summary may differ slightly from those presented in the analog report (eg. # of In Park and Longer Term Stations).

Appendix B

Water Quality Database File Structures

The following table provides the DBASE III+ database field structure for all the water quality parameter data downloaded from STORET. This data will allow parks or other interested parties to replicate the statistical analyses and graphics contained in this report; perform more sophisticated analyses; or to establish a baseline park water quality database.

Parameter Data File: CUGAPARM.DBF in CUGAPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
BEGDATE	9	14	6	Measurement Start Date [yymmdd]
BEGTIME	15	18	4	Measurement Start Time [hhmm]
PARMCODE	19	23	5	STORET Parameter Code
PARMVALU	24	39	16.7	Parameter Value
REMARK	40	40	1	Parameter Remark Value
				A=Value is Mean of 2 or More Determinations
				B=Results Based Upon Colony Counts Outside Acceptable Range
				C=Value Calculated
				D=Field Measurement
				E=Extra Sample Taken in Compositing Process
				F=Female Species
				G=Maximum of 2 or More Determinations
				H=Based on Field Kit Determination
				I=Value is Less Than Practical Quantitation Limit and Greater Than or Equal to the Method Detection Limit
				J=Estimated, Not the Result of Analytic Measurement
				K=Off-scale Low, Actual Value Not Known, But Known to be Less Than Value Shown
				L=Off-scale High, Actual Value Not Known, But Known to be Greater Than Value Shown

Parameter Data File: CUGAPARM.DBF in CUGAPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				M=Presence Verified, But Not Quantified, Below Quantification Limit; For Species, Male; For Oxygen Reduction Potential, Indicates a Negative Value
				N=Presumptive Evidence of Presence
				O=Analysis Lost
				P=Too Numerous to Count
				Q=Exceeded Normal Holding Time
				R=Significant Rain in Last 48 Hours
				S=Laboratory test
				T=Less Than Detection Criteria
				U=Analyzed For But Not Detected, Value is Detection Limit For Process Used; If Species, Undetermined
				V=Analyte was Detected in Sample and Method Blank
				W=Less Than Lowest Value Reportable Under Remark "T"
				X=Quasi Vertically-Integrated Sample
				Y=Analysis of Unpreserved Sample
				Z=Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value
				$=Calculated By Retrieval Software
MEDIA	41	46	6	Sample Media
DEPTH	47	55	9.3	Depth of Sample [in feet]
ENDDATE	56	61	6	Measurement End Date [yymmdd] [all composite samples]
ENDTIME	62	65	4	Measurement End Time [hhmm] [all composite samples]
SAMPTYPE	66	69	4	Type of Sample ["sophisticated" composite samples]
				C=Continuous Collection
				G=Collection of Individual Grab Samples
				GNxx=xx is the Number of Individual Grab Samples
				B=N/A

Parameter Data File: CUGAPARM.DBF in CUGAPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
COMPTYPE	70	70	1	Composite Value Type ["sophisticated" composite samples]
				A=Average
				H=Maximum
				L=Minimum
				N=Number of Observations
				#=Number of Observations
				S=Standard Deviation
				U=Sum of Squares
				V=Variance
				C=Coefficient of Error
				X=Coefficient of Variance
				E=Skewness
				F=Kurtosis
				Z=Number of Observations That Exceed an Established Limit
				%=Precision
				$=Accuracy
				B=N/A
				D=Indicates Replicate Sample
COMPST	71	71	1	Composite Space/Time Indicator
				S=Space
				T=Time
				B=Space and Time
				F=Flow Proportional
				1-9=Replicate Number

Note: DBASE III+ record lengths will be one greater than the last stop column displayed (71 here) because DBASE III+ reserves the first space/column of every record for a deletion flag. Hence, DBASE III+ will display a record length of 72 for this database.

The following table provides the DBASE III+ database field structure for all the water quality station locations downloaded from STORET. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Quality Station Data File: CUGAWQ.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
AGENCY	9	16	8	Agency Code of Station Owner
STORIDP	17	31	15	STORET Primary Station Code
STORIDS1	32	43	12	STORET First Secondary Station Code
STORIDS2	44	55	12	STORET Second Secondary Station Code
STORIDS3	56	65	10	STORET Third Secondary Station Code
LATITUDE	66	73	8	Station Latitude [degrees:minutes:seconds]
LONGITUDE	74	82	9	Station Longitude [degrees:minutes:seconds]
LAT	83	93	11.6	Station Latitude [decimal degrees, (-) below equator]
LON	94	104	11.6	Station Longitude [decimal degrees, (-) western hemisphere]
LLPREC	105	105	1	Latitude/Longitude Precision Code
RMI	106	329	224	River Mile Index
STATLOC	330	377	48	Station Location Description
CNTYCODE	378	382	5	FIPS State/County Code
STNAME	383	398	16	State Name
CNTYNAME	399	418	20	County Name
HYDUNIT	419	426	8	Hydrologic Unit Code (MAJ/MIN/SUB = Catalog Unit)
MAJBASN	427	450	24	Major Basin Name
MINBASN	451	490	40	Minor Basin Name
STATTYPE	491	550	60	Station Type
STORDATE	551	556	6	Date Station was Stored in STORET
RF1INDEX	557	567	11	RF1 Reach Number Location [2]
RF1MILE	568	575	8.3	Mile Point on RF1 Reach [2]
RF1LOC	576	578	3	Indicates the Location as ON or OFF RF1 Reach [2]
RF1DIST	579	584	6.2	Distance From RF1 Reach

Water Quality Station Data File: CUGAWQ.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
RF3INDEX	585	601	17	RF3 Reach Number Location [3]
RF3MILE	602	607	6.2	Mile point on RF3 Reach [3]
RF3LOC	608	610	3	Indicates the Location as ON or OFF RF3 Reach [2]
RF3DIST	611	616	6.2	Distance From RF3 Reach
DEPH2O	617	620	4	Depth of Water at Station Location [in feet]
ELEV	621	625	5	Station Elevation
ECOREG	626	628	3	ECO Region
H2OBODY	629	678	50	Waterbody ID
AQUIFERS	679	718	40	Aquifer Description
STATDESC1	719	790	72	Station Sentence Description
STATDESC2	791	862	72	Station Sentence Description
STATDESC3	863	934	72	Station Sentence Description
STATDESC4	935	1006	72	Station Sentence Description
STATDESC5	1007	1078	72	Station Sentence Description
STATDESC6	1079	1150	72	Station Sentence Description
STATDESC7	1151	1222	72	Station Sentence Description
STATDESC8	1223	1294	72	Station Sentence Description
STATDESC9	1295	1366	72	Station Sentence Description
STATDESC10	1367	1438	72	Station Sentence Description
STATDESC11	1439	1510	72	Station Sentence Description
STATDESC12	1511	1582	72	Station Sentence Description
STATDESC13	1583	1654	72	Station Sentence Description
STATDESC14	1655	1726	72	Station Sentence Description
STATDESC15	1727	1798	72	Station Sentence Description
STATLOCKED	1799	1799	1	Station Locked (Logical) True/False

The following table provides the DBASE III+ database field structures for the EPA Industrial Facilities Discharge database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Industrial Facilities Discharges File: CUGAIFD.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	9	9	Site Identifier (NPDES Number)
LATITUDE	10	17	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	18	26	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	27	37	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	38	48	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	49	59	11	RF1 Reach Number Location
RF1MILE	60	65	6.2	Mile Point on RF1 Reach
RF1DIST	66	71	6.2	Distance From RF1 Reach
RF3INDEX	72	88	17	RF3 Reach Number Location
RF3MILE	89	94	6.2	Mile Point on RF3 Reach
RF3DIST	95	100	6.2	Distance From RF3 Reach
ADR	101	125	25	Address
BFL	126	132	7.2	Total Direct Combined C&P Flow (1000 GPD)
CCFLG	133	133	1	Coastal County Flag "Y"/"N"/"E"=Estuary
CC1	134	138	5	City Code #1 (EPA Code)
CFL	139	145	7.2	Total Direct Cooling Flow (1000 GPD)
CNC	146	148	3	County Code (FIPS)
CTY	149	168	20	City Name
CZIP	169	177	9	Canadian Zip Code
DNB	178	186	9	Dunn & Bradstreet Number
DNBFLG	187	187	1	Dunn & Bradstreet PCS Source Flag
EGF	188	202	15.4	Flow From Effluent Guidelines (1000 GPD)
EGS	203	208	6	Effluent Guidelines Subcategory
EXPDT	209	216	8	Expiration Date (mm/dd/yy)
E308SN	217	220	4	Effluent Guidelines Survey Number
FAC	221	229	9	SCS Facility Identifier (Cross-Reference)
FDS	230	232	3	Facility Data Source

Industrial Facilities Discharges File: CUGAIFD.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
FFL	233	239	7.2	Total Facility Flow (1000 GPD)
FHF	240	240	1	Fac. Hit Flag (Reach File) V=Versar Assumed
FLOTYP	241	243	3	I=Blow Down, R=Bottom Ash, S=Fly Ash
FLR	244	250	7.2	Flow Recvd-Industrial (1000 GPD) Permit Data
FRDS	251	259	9	FRDS ID# - XREF To Water Supply
FRW	260	289	30	Facility Receiving Water Name
FS1	290	293	4	Facility SIC Code (From PCS)
FS2	294	297	4	Facility SIC Code #1
FS3	298	301	4	Facility SIC Code #2
FS4	302	305	4	Facility SIC Code #3
FS5	306	309	4	Facility SIC Code #4
FUD	310	317	8	Facility Level Last Date Updated (mm/dd/yy)
IACC	318	318	1	Inactive/Active Indicator ("I" or "A")
ICAT	319	320	2	WQAB Industrial Category
ICAT2	321	322	2	WQAB Industrial Category 2
ICAT3	323	324	2	WQAB Industrial Category 3
IFL	325	331	7	Total Indirect Flow (1000 GPD)
IFT	332	332	1	Illinois Facility Type (A thru Z)
IG1	333	334	2	Facility Industrial Group #1
IG2	335	336	2	Facility Industrial Group #2
IJCN	337	346	10	Canadian Record Identifier
INACT	347	353	7	Inactive/Rescinded P=Based on Permit;A=Actual
INDCNT	354	357	4	Computed Number of Indirect Dischargers
LATLON	358	372	15	Polygon Retrieval Lat/Long.
MAJ	373	373	1	Major-Minor Flag (From PCS)
MAPID	374	377	4	Map Identifier
MJMN	378	381	4	Major/Minor Basin (EPA-STORET)
NAM	382	441	60	Facility Name
NDC	442	444	3	Number of Discharges (Pipes)

Industrial Facilities Discharges File: CUGAIFD.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NDSFLO	445	451	7.2	NEEDS Flow (1000 GPD)
NDSIFLO	452	458	7.2	NEEDS Industrial Flow (1000 GPD)
NID	459	462	4	Number of Indirect Dischargers
NPC	463	463	1	NEEDS Pre-Treatment Code "Y"=Yes, "N"=No
NPS	464	464	1	NPDES Facility Source/Status
NSN	465	473	9	NEEDS Survey Number
NTC	474	474	1	NEEDS Treatment Code
OCP	475	480	6	Organic Chemical Producers ID Number
ODESCC	481	481	1	ODES Coastal County "Y"=Yes; "N"=No
OFL	482	488	7.2	Total Non-Direct Other Flow (1000 GPD)
OWN	489	491	3	Ownership Code
PFL	492	498	7.2	Total Direct Process Flow (1000 GPD)
REG	499	500	2	EPA Region
REGKEY	501	504	4	Region Key
RSLOFLO	505	511	7.2	Receiving Stream Low Flow
RSMNFLO	512	518	7.2	Receiving Stream Mean Flow
STA	519	520	2	State Postal Abbreviation
STAID	521	535	15	State Identifier
STC	536	537	2	State Code (FIPS)
STCITY	538	544	7	State/City Code
TFLOW	545	551	7.2	Type Flow (1000 GPD)
UFL	552	558	7.2	Total Direct Undefined Flow (1000 GPD)
XEGS	559	561	3	Effluent Guidelines Subcat Index
XKEY	562	562	1	"1","2","3","4","5","6","7","8","9"
XNME	563	565	3	GLP,DIR,F2C,ENF,CET,LAG,PPB,M85,M86
ZIP	566	570	5	Zip Code

The following table provides the DBASE III+ database field structures for drinking water intakes from the EPA DRINKS database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Drinking Water Intakes File: CUGADRIN.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	29	37	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
AQCD	112	115	4	Aquifer Code
ASC	116	138	23	STORET Agency/Station Code
AVGD	139	142	4	Average Depth
BUY	143	143	1	Purchase Code
CC1	144	148	5	City Code #1 (EPA Code)
CNC	149	151	3	County Code (FIPS)
CNME	152	166	15	Contact Name
CNN	167	186	20	County Name
CTITLE	187	201	15	Contact Title
CTY	202	221	20	City Name
DUD	222	229	8	Date of Update
FRDS	230	238	9	FRDS ID# - Cross-Reference
GEOAG	239	258	20	Geologic Age
GEOCDE	259	261	3	Geologic Age Code
IDAT	262	269	8	Date (mm/dd/yy)

Drinking Water Intakes File: CUGADRIN.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
INTAKET	270	270	1	Type Source G/S/B
INTRVWR	271	285	15	Interviewer
MAXD	286	289	4	Maximum Depth
MILES	290	296	7.2	Miles
MIND	297	300	4	Minimum Depth
NAME	301	320	20	Name
NPD	321	329	9	NPDES# XREF to IFD Database
NWLS	330	332	3	Number of Wells
OWN	333	335	3	Ownership
PAVGF	336	342	7.2	Production Avg. Daily (Gal/Day)
PCTSUP	343	345	3	%Surface / %Ground
PHONE	346	355	10	Telephone Number
PMAXF	356	362	7.2	Production Max. Daily (Gal/Day)
POPSV	363	371	9	Population Served
REG	372	373	2	EPA Region
SHLAT	374	379	6	Sitehelp Latitude (DDMMSS)
SHLNG	380	386	7	Sitehelp Longitude (DDDMMSS)
SHMILES	387	393	7.2	Sitehelp Miles
SHNME	394	403	10	Sitehelp Source Name
SHPCT	404	410	7.2	Sitehelp Percent of Reach Miles
SRC	411	413	3	Sitehelp Source Code
STA	414	415	2	State Abbreviation
STC	416	417	2	State Code (FIPS)
TUF	418	424	7.2	Total Utility Flow
TYPCDE	425	425	1	Type Code
UHF	426	426	1	Utility Hit Flag (Reach File)
VCDE	427	427	1	Versar Code='V'=>25K; '*'=<25K POPSVD
WFPC	428	428	1	Wellfield Precision Code
WFTYP	429	429	1	Well Type (Cassing,Artesian,Infiltration,etc.)

Drinking Water Intakes File: CUGADRIN.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
WUN	430	449	20	Water Utility Name

The following table provides the DBASE III+ database field structures for the Water Gage database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Gage File: CUGAGAGE.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (DDMMSS)
LONGITUDE	29	37	9	Facility Longitude (DDDMMSS)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
JAN	112	118	7.2	Monthly Flow - January
FEB	119	125	7.2	Monthly Flow - February
MAR	126	132	7.2	Monthly Flow - March
APR	133	139	7.2	Monthly Flow - April
MAY	140	146	7.2	Monthly Flow - May
JUN	147	153	7.2	Monthly Flow - June
JUL	154	160	7.2	Monthly Flow - July
AUG	161	167	7.2	Monthly Flow - August
SEP	168	174	7.2	Monthly Flow - September
OCT	175	181	7.2	Monthly Flow - October
NOV	182	188	7.2	Monthly Flow - November
DEC	189	195	7.2	Monthly Flow - December
RGN	196	197	2	Region Code
AREA	198	204	7.2	Drainage Area (SQ.MI.)
DUD	205	212	8	Date of Update

Water Gage File: CUGAGAGE.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
FBCF	213	213	1	Flag - Basic Characteristic File ('Y')
FDFF	214	214	1	Flag - Daily Flows File ('Y')
FQMINV	215	224	10	IHS Pt. Files Index
GHF	225	225	1	Hit Flag (Reach File)
ICDE	226	226	1	Integrity Code
LFVEL	227	233	7.2	Low Flow Velocity
METHOD	234	236	3	Calculation Method Code
MFVEL	237	243	7.2	Mean Flow Velocity
MNFLO	244	250	7.2	USGS Mean Annual Flow
NME	251	298	48	Station Name
SHLAT	299	304	6	Sitehelp Latitude (DDMMSS)
SHLNG	305	311	7	Sitehelp Longitude (DDDMMSS)
SHMILES	312	318	7.2	Sitehelp Miles
SHNME	319	328	10	Sitehelp Source Name
SHPCT	329	335	7.2	Sitehelp Percent of Reach Miles
SITE	336	337	2	Site Location
SRC	338	340	3	Sitehelp Source Code
STCTY	341	345	5	State/County Numeric Code
SVTEN	346	352	7.2	USGS 7-10 Year Flow
BEG_WYR	353	356	4	Beginning Water Year
END_WYR	357	359	4	Ending Water Year
ELEV	361	368	8.2	Elevation (Feet)
WELL_DP	369	376	8.2	Well Depth (Feet)

The following table provides the DBASE III+ database field structures for the Water Impoundment database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Impoundment File: CUGADAMS.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	7	7	Site Identifier
SOURCE	8	10	3	Source of Data
ST1	11	12	2	Primary State Code Abbreviation
STCTY1	13	17	5	State/County Numeric Code
NAME	18	47	30	Official Name of Dam
LATITUDE	48	53	6	Facility Latitude (DDMMSS)
LONGITUDE	54	60	7	Facility Longitude (DDDMMSS)
LAT	61	70	10.6	Facility Latitude (decimal degrees, (-) below equator)
LON	71	81	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
INME	82	111	30	Impoundment Name
RNME	112	139	28	River, Stream, or Tributary Name on Which Dam Built
CUSEGMI	140	149	10	Catalog Unit, Segment, and Segment Length
REGN	150	151	2	Water Resources Council Region Code
RGBSN	152	155	4	Water Resources Region/Basin Code
CU	156	163	8	Catalog Unit
SEG	164	166	3	Reach Segment of Dam
SEGL	167	171	5.2	Reach Segment Length
PURP	172	172	1	Major Purpose of Dam
				I=Irrigation
				H=Hydroelectric
				N=Navigation
				S=Water Supply
				R=Recreation
				P=Stock/Farm Pond
				D=Debris Control
				F=Flood Control

Water Impoundment File: CUGADAMS.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				O=Other
FRF3	173	189	17	RF3 Reach Number Location
FRF3MI	190	194	5	Mile Point on RF3 Reach
PURPKEY	195	195	1	Purpose Key
PUR2	196	196	1	Purpose of Dam 2 (See Above)
PUR3	197	197	1	Purpose of Dam 3 (See Above)
PUR4	198	198	1	Purpose of Dam 4 (See Above)
PUR5	199	199	1	Purpose of Dam 5 (See Above)
PUR6	200	200	1	Purpose of Dam 6 (See Above)
PUR7	201	201	1	Purpose of Dam 7 (See Above)
PUR8	202	202	1	Purpose of Dam 8 (See Above)
PUR9	203	203	1	Purpose of Dam 9 (See Above)
PUR10	204	204	1	Purpose of Dam 10 (See Above)
TYPDAM	205	206	2	Major Dam Portion Type
				RE=Earth
				VA=Vaulted Arch
				CD=Buttress
				PG=Gravity
				ER=Rockfill
				MV=Multi-Arch
				OT=Other
YRCMP	207	210	4	Year Dam Completed
SHGT	211	214	4	Structural Height (Feet)
HHGT	215	218	4	Hydraulic Height (Feet)
VNORM	219	236	8	Normal Storage of Impoundment (Acre-Feet)
VMAX	227	234	8	Maximum Storage of Impoundment (Acre-Feet)
LCRST	235	239	5	Crest Length of Dam (Feet)
TSPL	240	240	1	Spillway Type
				C=Controlled

Water Impoundment File: CUGADAMS.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				U=Uncontrolled
				N=None
				X=Unknown
WSPL	241	244	4	Dam Spillway Width (Feet)
QMAX	245	251	7	Maximum Spillway Discharge (CFS)
PINS	252	258	7.2	Quantity of Installed Power (Megawatts)
PPRO	259	265	7.2	Quantity of Proposed Power (Megawatts)
LOCK	266	266	1	Number of Navigational Locks
OWNR	267	290	24	Name of Impoundment Owner
PFOWN	291	291	1	Ownership Code
				N=Non-Federal
				G=Federal Government Agency
				C=Corps of Engineers
				X=Unknown
FEDR	292	292	1	Federally Regulated (Y=Yes, N=No, X=Unknown)
FLND	293	293	1	Private Dam on Federal Land (Y=Yes, N=No, X=Unknown)
SCSA	294	294	1	Type of Soil Conservation Service Assistance
				N=No Assistance
				T=Technical Assistance
				F=Financial Assistance
				B=Both Technical and Financial Assistance
				X=Unknown
DHAZ	295	295	1	Degree of Downstream Hazard
				1=High (More than a Few Lives Lost; Excessive Economic Loss)
				2=Significant (A Few Lives Lost; Appreciable Economic Loss)
				3=Low (No Lives Expected Lost; Minimal Economic Loss)
DCITY	296	319	24	Nearest Downstream City

Water Impoundment File: CUGADAMS.DBF in CUGASITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
POP	320	326	7	Population of Downstream City
DMILE	327	331	5.2	Distance of Downstream City From Dam (Miles)
RET	332	342	11.2	Retention Coefficient (Dimensionless)
MIX	343	353	11.2	Mixing Coefficient (Dimensionless)
SAREA	354	361	8	Surface Area of Impoundment (Acres)
SAFLG	362	362	1	Surface Area Flag (C=Calc., M=Measured, O=Other)
ILNTH	363	367	5	Length of Impoundment (Feet)
ILFLG	368	368	1	Impoundment Length Flag (C=Calc., M=Measured, O=Other)
UPKEY	369	374	6	Update Key (YYMMDD)

The following table provides the ASCII and DBASE III+ database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) attributes. The actual numeric file names will vary depending on the catalog unit(s). This information can be readily incorporated into the park's Geographic Information System.

RF3 Structure File: 12345678.RF3 and 12345678.DBF in CUGARF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
CATUNIT	1	8	8	Cataloging Unit (CU)
SEGM	9	12	4	Segment Number (SEG)
MI	13	17	5.2	Mile Point (MI)
UPMI	18	22	5.2	Upstream Mile Pt.
SEQNO	23	33	11.6	Hydro Sequence No.
RFLAG	34	34	1	Reach Flag (0,1)
OWFLAG	35	35	1	Open Water Flag (0,1)
TFLAG	36	36	1	Terminal Flag (0,1)
SFLAG	37	37	1	Start Flag (0,1)
RCHTYPE	38	38	1	Reach Type Code
LEV	39	40	2	Stream Level
JUNC	41	42	2	Level of Downstream Reach
DIVERGENCE	43	43	1	Divergence Code
STARTCU	44	51	8	Start CU
STRTSG	52	55	4	Start SEG
STOPCU	56	63	8	Stop CU
STOPSG	64	67	4	Stop SEG
USDIR	68	68	1	Upstream Direction
TERMID	69	73	5	Terminal Stream ID
TRMBLV	74	74	1	Terminal Base Level
PNAME	75	104	30	Primary Name
PNMCD	105	115	11	Primary Name Code
CNAME	116	145	30	Complement Name
CNMCD	146	156	11	Complement Name Code

RF3 Structure File: 12345678.RF3 and 12345678.DBF in CUGARF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
OWNAME	157	186	30	Open Water Name
OWNMCD	187	197	11	Open Water Name Code
DSCU	198	205	8	Downstream CU
DSSEG	206	209	4	Downstream SEG
DSMI	210	214	5.2	Downstream MI
CCU	215	222	8	Complement CU
CSEG	223	226	4	Complement SEG
CMILE	227	231	5.2	Complement MI
CDIR	232	232	1	Complement Direction
ULCU	233	240	8	Upstream Left CU
ULSEG	241	244	4	Upstream Left SEG
ULMI	245	249	5.2	Upstream Left MI
URCU	250	257	8	Upstream Right CU
URSEG	258	261	4	Upstream Right SEG
URMI	262	266	5.2	Upstream Right MI
SEGL	267	272	6.2	Reach Length (Miles)
RFORGFLAG	273	273	1	RF Orgin flag(1,2,3)
ALTPNMCD	274	281	8	Alt. Primary Name Code
ALTOWNMC	282	289	8	Alt. OW Name Code
DLAT	290	297	8.4	Downstream Latitude
DLONG	298	305	8.4	Downstream Longitude
ULAT	306	313	8.4	Upstream Latitude
ULONG	314	321	8.4	Upstream Longitude
MINLAT	322	329	8.4	Minimum Latitude
MINLONG	330	337	8.4	Minimum Longitude
MAXLAT	338	345	8.4	Maximum Latitude
MAXLONG	346	353	8.4	Maximum Longitude
NDLGREC	354	357	4	No. of DLG Records
LL1KEY1	358	367	10	Starting DLG LL Key1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in CUGARF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
LL2KEY1	368	377	10	Ending DLG LL Key1
LL1KEY2	378	387	10	Starting DLG LL Key2
LL2KEY2	388	497	10	Ending DLG LL Key2
LL1KEY3	398	407	10	Starting DLG LL Key3
LL2KEY3	408	417	10	Ending DLG LL Key3
LL1KEY4	418	427	10	Starting DLG LL Key4
LL2KEY4	428	437	10	Ending DLG LL Key4
LL1KEY5	438	447	10	Starting DLG LL Key5
LL2KEY5	448	457	10	Ending DLG LL Key5
LL1KEY6	458	467	10	Starting DLG LL Key6
LL2KEY6	468	477	10	Ending DLG LL Key6
LL1KEY7	478	487	10	Starting DLG LL Key7
LL2KEY7	488	597	10	Ending DLG LL Key7
LL1KEY8	498	507	10	Starting DLG LL Key8
LL2KEY8	508	517	10	Ending DLG LL Key8
LL1KEY9	518	527	10	Starting DLG LL Key9
LL2KEY9	528	537	10	Ending DLG LL Key9
LL1KEY10	538	547	10	Start DLG LL Key 10
LL2KEY10	548	557	10	Ending DLG LL Key10
LN1AT2	558	561	4	DLG Line Attr. 1
LN2AT2	562	565	4	DLG Line Attr. 2
AREA1	566	569	4	DLG Area ID 1
AREA2	570	573	4	DLG Area ID 2
AR1AT2	574	577	4	DLG Area Attribute
AR1AT4	578	581	4	DLG Area Attribute
AR2AT2	582	585	4	DLG Area Attribute
AR2AT4	586	589	4	DLG Area Attribute
UPDATE1	590	595	6	Update Date #1 (mmddyy)
UPDTCD1	596	603	8	Update Type Code #1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in CUGARF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
UPDTSRC1	604	611	8	Update Source #1
UPDATE2	612	617	6	Update Date #2 (mmddyy)
UPDTCD2	618	625	8	Update Type Code#2
UPDTSRC2	626	633	8	Update Source #2
UPDATE3	634	639	6	Update Date #3 (mmddyy)
UPDTCD3	640	647	8	Update Type Code #3
UPDTSRC3	648	655	8	Update Source #3
DIVCU	656	663	8	Divergent CU
DIVSEG	664	667	4	Divergent SEG
DIVMILE	668	672	5.2	Divergent MI
DLGID	673	678	6	DLG Number Special Use For Internal State Codes
FILLER	678	685	7	Filler: Future Use

Note: The structure for the .DBF file varies slightly from the RF3 structure displayed here in that the fields UPDATE1, UPDATE2, and UPDATE3 have a width of 8 and the last two fields, DLGID and FILLER, have been replaced with a field named ID of length 17. This ID field combines the CATUNIT, SEGM, and MI fields.

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) traces. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual hydrographic network and is suitable for conversion into a variety of Geographic Information System formats.

RF3 Trace File: 12345678.TRC in CUGARF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
(Header Record)				
CATUNIT	1	8	8	Cataloging Unit
SEGM	9	12	4	Segment Number
MI	13	17	5.2	Mile Point
NPTS	18	21	4	Number of Lat/Lon Coordinates
(Coordinate Record)				
LATITUDE	1	8	8.4	Latitude in Decimal
LONGITUDE	9	16	8.4	Longitude in Decimal
FILLER	17	21	5	

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) catalog unit boundary file. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual catalog unit boundary and is suitable for conversion into a variety of Geographic Information System formats.

Catalog Unit Boundary File: 12345678.CUB in CUGARF3.ZIP
First Line = Catalog Unit Number (8 Characters)
Subsequent Lines:
L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS, ...
Example:
02070010
L=391259,L=0770809,L=391220,L=0770749,L=391147,L=0770715,L=391120,L=0770633,
L=391058,L=0770535,L=391042,L=0770520,L=391016,L=0770427,L=390948,L=0770416,
L=390526,L=0765331,L=390500,L=0765149,L=390456,L=0765139,L=390357,L=0765123,
...
L=390744,L=0771007,L=390826,L=0771022,L=390910,L=0771022,L=390950,L=0771003,
L=391107,L=0770922,
There can be as many as four latitude/longitude pairs per line.

The following table provides the DBASE III+ database field structure of the Water Resources Division's "encyclopedia" file that documents the minimum and maximum parameter values found and the park(s) where they occurred. This file is intended for Water Resources Division internal use, but will be available to anyone upon request after Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks.

Encyclopedia File: WRD File For Internal Use Only				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
PARM	1	5	5	STORET Parameter Code
PARMNAME	6	45	40	Parameter Name
MINVAL	46	61	16.7	Minimum Value
MINVALPARK	62	65	4	Park Unit with Minimum Value
MAXVAL	66	71	16.7	Maximum Value
MAXVALPARK	72	75	4	Park Unit with Maximum Value

Appendix C

STORET Water Quality Control/Edit Checking

The following table provides the high and low values used by STORET since November 1983 for 190 common water quality parameters to screen or error check data. Data entered into STORET prior to November 1983, however, were not subjected to this edit/bounds check. Additionally, data from the USGS WATSTORE system that is loaded into STORET is never subjected to these edit criteria and agencies entering data in STORET can override these edit criteria to enter data values that fall outside a range. As a consequence, all data downloaded from STORET for the purposes of this project were filtered through these edit criteria to document values outside the generally accepted ranges. Decisions were then made on a case-by-case basis to retain or discard obviously incorrect data. Refer to the Water Quality Observations Outside STORET Edit Criteria section of the Interpretive Guide To Water Quality Results chapter for more information on this subject.

STORET Code	STORET Parameter Description	High Value	Low Value
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	37.0	-2.0
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	98.0	31.0
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	52.0	-40.0
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	125.0	-40.0
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE	1990.9	1977.0
00032	CLOUD COVER (PERCENT)	101.0	0.0
00035	WIND VELOCITY (MILES PER HOUR)	85.0	0.0
00036	WIND DIRECTION IN DEGREES FROM TRUE N (CLOCKWISE)	361.0	0.0
00045	PRECIPITATION, TOTAL (INCHES PER DAY)	15.0	0.0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	1500.0	0.0
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	101.0	0.0
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	500.0	0.0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	1000.0	0.0
00077	TRANSPARENCY, SECCHI DISC (INCHES)	600.0	0.0
00080	COLOR (PLATINUM-COBALT UNITS)	500.0	0.0
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	500.0	0.0
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	250.0	0.0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	60000.0	1.0
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	60000.0	1.0
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	30.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00300	OXYGEN, DISSOLVED (MG/L)	30.0	0.0
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION%	200.0	0.0
00310	BOD, 5 DAY, 20 DEG C (MG/L)	150.0	0.0
00335	COD, .025N K2CR2O7 (MG/L)	1000.0	0.0
00340	COD, .25N K2CR2O7 (MG/L)	1000.0	0.0
00365	CHLORINE DEMAND, 15 MINUTE (MG/L)	15.0	0.0
00400	PH (STANDARD UNITS)	12.0	0.9
00403	PH, LAB, STANDARD UNITS, (STANDARD UNITS)	12.0	0.9
00405	CARBON DIOXIDE (MG/L AS CO2)	100.0	0.0
00406	PH, FIELD (STANDARD UNITS)	12.0	0.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	750.0	0.0
00435	ACIDITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00436	ACIDITY, MINERAL (METHYL ORANGE) (MG/L AS CACO3)	1000.0	0.0
00437	ACIDITY, CO2 (PHENOLPHTHALEIN) (MG/L AS CACO3)	750.0	0.0
00440	BICARBONATE ION (MG/L AS HCO3)	450.0	0.0
00445	CARBONATE ION (MG/L AS CO3)	100.0	0.0
00480	SALINITY - PARTS PER THOUSAND	40.0	0.0
00500	RESIDUE, TOTAL (MG/L)	15000.0	0.0
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10000.0	0.0
00510	RESIDUE, TOTAL FIXED (MG/L)	10000.0	0.0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C), (MG/L)	20000.0	0.0
00520	RESIDUE, VOLATILE FILTRABLE (MG/L)	10000.0	0.0
00525	RESIDUE, FIXED FILTRABLE (MG/L)	10000.0	0.0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10000.0	0.0
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10000.0	0.0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10000.0	0.0
00545	RESIDUE, SETTLEABLE (ML/L)	1000.0	0.0
00546	RESIDUE, SETTLEABLE (MG/L)	1000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00550	OIL & GREASE (SOXHLET EXTRACTION) TOTAL,REC., (MG/L)	250.0	0.0
00600	NITROGEN, TOTAL (MG/L AS N)	100.0	0.0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	15.0	0.0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	25.0	0.0
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20.0	0.0
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5.0	0.0
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	50.0	0.0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	50.0	0.0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	55.0	0.0
00635	NITROGEN, AMMONIA & ORG., TOTAL 1 DET (MG/L AS N)	70.0	0.0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	30.0	0.0
00653	PHOSPHATE, TOTAL SOLUBLE (MG/L)	30.0	0.0
00655	PHOSPHATE, POLY (MG/L AS PO4)	30.0	0.0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	30.0	0.0
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10.0	0.0
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10.0	0.0
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	100.0	0.0
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	100.0	0.0
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	100.0	0.0
00690	CARBON, TOTAL (MG/L AS C)	150.0	0.0
00720	CYANIDE, TOTAL (MG/L AS CN)	10.0	0.0
00745	SULFIDE, TOTAL (MG/L AS S)	1500.0	0.0
00746	SULFIDE, DISSOLVED (MG/L AS S)	1500.0	0.0
00760	SULFITE WASTE LIQUOR, PEARL BENSON INDEX (MG/L)	150.0	0.0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	5000.0	0.0
00910	CALCIUM (MG/L AS CACO3)	3000.0	0.0
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1000.0	0.0
00916	CALCIUM, TOTAL (MG/L AS CA)	1000.0	0.0
00920	MAGNESIUM (MG/L AS CACO3)	3000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1000.0	0.0
00927	MAGNESIUM, TOTAL (MG/L AS MG)	1000.0	0.0
00929	SODIUM, TOTAL (MG/L AS NA)	5000.0	0.0
00930	SODIUM, DISSOLVED (MG/L AS NA)	5000.0	0.0
00931	SODIUM ADSORPTION RATIO	50.0	0.0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	175.0	0.0
00937	POTASSIUM, TOTAL MG/L AS K)	175.0	0.0
00940	CHLORIDE, TOTAL IN WATER, (MG/L)	22000.0	0.0
00945	SULFATE, TOTAL (MG/L AS SO4)	2500.0	0.0
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2500.0	0.0
00950	FLUORIDE, DISSOLVED (MG/L AS F)	15.0	0.0
00951	FLUORIDE, TOTAL (MG/L AS F)	15.0	0.0
00955	SILICA, DISSOLVED (MG/L AS SI02)	2000.0	0.0
00956	SILICA, TOTAL (MG/L AS SI02)	2000.0	0.0
01000	ARSENIC, DISSOLVED (UG/L AS AS)	5000.0	0.0
01002	ARSENIC, TOTAL (UG/L AS AS)	5000.0	0.0
01005	BARIUM, DISSOLVED (UG/L AS BA)	2000.0	0.0
01007	BARIUM, TOTAL (UG/L AS BA)	2000.0	0.0
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	2000.0	0.0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	2000.0	0.0
01020	BORON, DISSOLVED (UG/L AS B)	5000.0	0.0
01022	BORON, TOTAL (UG/L AS B)	5000.0	0.0
01025	CADMIUM, DISSOLVED (UG/L AS CD)	500.0	0.0
01027	CADMIUM, TOTAL (UG/L AS CD)	500.0	0.0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2000.0	0.0
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	2000.0	0.0
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	2000.0	0.0
01034	CHROMIUM, TOTAL (UG/L AS CR)	2000.0	0.0
01040	COPPER, DISSOLVED (UG/L AS CU)	2000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
01042	COPPER, TOTAL (UG/L AS CU)	5000.0	0.0
01045	IRON, TOTAL (UG/L AS FE)	56000.0	0.0
01046	IRON, DISSOLVED (UG/L AS FE)	56000.0	0.0
01047	IRON, FERROUS (UG/L AS FE)	56000.0	0.0
01049	LEAD, DISSOLVED (UG/L AS PB)	1000.0	0.0
01051	LEAD, TOTAL (UG/L AS PB)	1000.0	0.0
01055	MANGANESE, TOTAL (UG/L AS MN)	5000.0	0.0
01056	MANGANESE, DISSOLVED (UG/L AS MN)	5000.0	0.0
01065	NICKEL, DISSOLVED (UG/L AS NI)	2000.0	0.0
01067	NICKEL, TOTAL (UG/L AS NI)	2000.0	0.0
01075	SILVER, DISSOLVED (UG/L AS AG)	5000.0	0.0
01077	SILVER, TOTAL (UG/L AS AG)	5000.0	0.0
01090	ZINC, DISSOLVED (UG/L AS ZN)	25000.0	0.0
01092	ZINC, TOTAL (UG/L AS ZN)	25000.0	0.0
01105	ALUMINUM, TOTAL (UG/L AS AL)	20000.0	0.0
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	20000.0	0.0
01145	SELENIUM, DISSOLVED (UG/L AS SE)	100.0	0.0
01501	ALPHA, TOTAL	200.0	0.0
01503	ALPHA, DISSOLVED	75.0	0.0
01505	ALPHA, SUSPENDED	150.0	0.0
03501	BETA, TOTAL	3500.0	0.0
03503	BETA, DISSOLVED	3000.0	0.0
03505	BETA, SUSPENDED	1500.0	0.0
09503	RADIUM 226, DISSOLVED	500.0	0.0
13501	STRONTIUM 90, TOTAL	500.0	0.0
22703	URANIUM, NATURAL, DISSOLVED	500.0	0.0
31501	COLIFORM, TOT,MEMBRANE FILTER,IMMED.M-ENDO MED, 35C	24000000.0	0.0
31502	COLIFORM, TOTAL, 10/ML	24000000.0	0.0
31503	COLIFORM, TOT,MEMBR FILTER, DELAYED,M-ENDO MED, 35C	24000000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
31504	COLIFORM, TOT,MEMBR FILTER,IMMED,LES ENDO AGAR, 35C	24000000.0	0.0
31613	FECAL COLIFORM, MEMBR FILTER, M-FC AGAR,44.5C, 24HR	10000000.0	0.0
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	10000000.0	0.0
31616	FECAL COLIFORM, MEMBR FILTER,M-FC BROTH, 44.5C	10000000.0	0.0
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48HR	500000.0	0.0
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	500000.0	0.0
31677	FECAL STREPTOCOCCI,MPN,AD-EVA, 35C (TUBE 31678)	500000.0	0.0
31679	FECAL STREPTOCOCCI, MF M-ENTEROCOCCUS AGAR,35C,48H	500000.0	0.0
31749	PLATE COUNT, TOTAL, TPC AGAR, 20C, 48 HRS	99999999.0	0.0
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	99999999.0	0.0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	500.0	0.0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	750.0	0.0
32212	CHLOROPHYLL-B UG/L TRICHROMATIC UNCORRECTED	1000.0	0.0
32214	CHLOROPHYLL-C UG/L TRICHROMATIC UNCORRECTED	200.0	0.0
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	500.0	0.0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	200.0	0.0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	2.0	0.0
32221	CHLOROPHYLL A,% OF(PHEOPHYTIN A+CHL A),SPEC-ACID.	101.0	0.0
32230	CHLOROPHYLL A (MG/L)	0.5	0.0
32231	CHLOROPHYLL B (MG/L)	0.8	0.0
32232	CHLOROPHYLL C (MG/L)	0.2	0.0
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	1.0	0.0
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	5.0	0.0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	1500.0	0.0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10.0	0.0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39340	GAMMA-BHC(LINDANE),WHOLE WATER, (UG/L)	20.0	0.0
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER, (UG/L)	20.0	0.0
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	5.0	0.0
60050	ALGAE, TOTAL (CELLS/ML)	700000.0	0.0
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	4000.0	0.0
70505	PHOSPHATE, TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10.0	0.0
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10.0	0.0
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	65.0	0.0
71886	PHOSPHORUS, TOTAL, AS PO4 - (MG/L)	30.0	0.0
71890	MERCURY, DISSOLVED (UG/L AS HG)	10.0	0.0
71895	MERCURY, SUSPENDED (UG/L AS HG)	10.0	0.0
71900	MERCURY, TOTAL (UG/L AS HG)	10.0	0.0
74010	IRON, TOTAL (MG/L AS FE)	56000.0	0.0

Appendix D

STORET Administrative Parameters

STORET Code	Description of STORET Administrative Parameters
00022	LENGTH OF EXPOSURE OF SAMPLE OR TEST - DAYS
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00073	SAMPLE LOC CODE DEFINED BY THERMAL STRUCT & DEPTH
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
00116	INTENSIVE SURVEY IDENTIFICATION NUMBER
00145	TOTAL PRODUCTION OF PRODUCT MANUFACTURED TONS/DAY
01273	TOTAL ACID PRIORITY POLLUTANTS MG/L
01274	TOTAL BASE-NEUTRAL PRIORITY POLLUTANTS MG/L
01275	TOTAL VOLATILE PRIORITY POLLUTANTS MG/L
01365	ANALYSIS DATE (DIOXIN) (YYMMDD)
04177	SAMPLE STABILIZATION, RECOVERY TEST CODE
04178	FIELD PROTOCOL(CONFDNCE ASSIGNED FIELD SAMPLE) CODE
04179	SAMPLE STATION LOCKED CODE
04180	CONDITION OF STATION SITE CODE
04181	LABORATORY QA/QC PLAN CONFIDENCE CODE
04182	SAMPLE TYPE CODE
04183	SAMPLE REMARKS CODE
30333	BAG MESH SIZE, BEDLOAD SAMPLER, MM
34772	NPDES NUMBER, CROSS REFERENCE CODE
34785	GAGE TYPE, METHOD CODE

STORET Code	Description of STORET Administrative Parameters
45575	GC MAKE AND MODEL INFORMATION CODE
45576	GC DETECTOR TYPE CODE
45577	GC COLUMN TYPE CODE
45580	METHOD OF ANALYSIS CODE
45581	LABORATORY LOCATION CODE
46107	SAMPLE LOCATION CODE (TREATMENT PLANT OPERATION)
46390	TOXICITY CHARACTERISTIC LEACHING PROCEDURE P OR F
46396	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS YES OR NO
46397	PROCESS TO FURTHER REDUCE PATHOGENS YES OR NO
47001	PERMIT EXPIRATION DATE (JULIAN CALENDAR)
47044	OBSERVATIONS,WASTE SITE-SEVERITY OF PROBLEMS CODE
47460	SUBSAMPLE - DECIMAL FRACTION OF WHOLE NUMBER
47477	COMPOSITION AND/OR DISPOSITION OF CATCH NUM CODE
70231	CURRENT DIRECTION (DEGREES FROM DOWNSTREAM FLOW)
71999	SAMPLE PURPOSE CODE
72032	NUMBER OF SPILLWAY GATES OPEN
73672	DATE OF ANALYSIS YYMMDD
73673	DATE OF EXTRACTION YYMMDD
74031	GRANT, PROJECT COST ELIGIBLE FOR CONSTRUCTION
74032	GRANT, AMOUNT OF PL 660 GRANT FOR THIS PROJECT
74033	GRANT, FEDERAL, OTHER THAN PL 660 GRANT
74034	GRANT, FUTURE PL 660 WHICH MAY APPLY TO THIS PROJ
74035	GRANT, TOTAL FEDERAL, WHICH APPLIES TO THIS PROJ
74036	GRANT, PROJ NUMBER ASSIGNED TO THIS APPLICATION
74037	GRANT, TYPE OF PROJECT TO WHICH GRANT APPLIES
74038	GRANT, STATUS OF PROJECT TO WHICH GRANT APPLIES
74039	PCS/STORET WATER QUALITY FILE INTERFACE YR/MO/DAY
74040	SURVEY NUMBER YYMMNO
74041	STORET STORAGE TRANSACTION DATE YR/MO/DAY

STORET Code	Description of STORET Administrative Parameters
74050	RADIOACTIVITY, GENERAL (PERMIT)
74051	ALGICIDES, GENERAL (PERMIT)
74052	CHLORINATED HYDROCARBONS, GENERAL (PERMIT)
74053	PESTICIDES, GENERAL (PERMIT)
74056	COLIFORM, TOTAL, GENERAL (PERMIT)
74065	STREAM FLOW CLASS
74066	ANNUAL RUNOFF
74067	SOIL CLASSIFICATION
74068	WATER QUALITY DESIGNATED USE CLASSIFICATION (IA)
74100	PRIMARY 1972 SIC CODE
74101	SECONDARY 1972 SIC CODE
74102	SECONDARY 1972 SIC CODE
74103	SECONDARY 1972 SIC CODE
74200	SAMPLE PRESERVATION METHODS ONE OR MORE IN COMB.
74205	LAND RESOURCE AREA (IOWA)
74206	SOIL EROSION POTENTIAL (IOWA)
74209	WATER QUALITY INDEX - STATE OF ILLINOIS, EPA
74210	FOREST STREAM WATER QUALITY INDEX CALC. NUMBER
74990	FISH SPECIES NUMERIC CODE - F&W SERVICE
74995	ANATOMY CODE
75000	SPECIES CODE-REMARK=SEX (M=MALE,F=FEMALE,U=UNK.)
81028	WITHDRAWAL OF GROUNDWATER (MILLION GAL/DAY)
82258	WATER CLASSIFICATION CODE (1-9) CODE
82292	DATA RELAY GROUND STATION SOURCE NODE CODE, CODE
82309	CONTAMINATION SOURCE POSSIBLE CODES NUMERIC CODE
82310	DEPTH CONFIDENCE IN REPORTED VALUES NUMERIC CODES
82373	FREQUENCY OF SAMPLING M=MON,Q=QUAR,Y=YR,R=RNFFCODE
82519	DRILLER REGISTRATION NUMBER ALPHA-NUMERIC CODE
82562	NARRATIVE REQUIREMENT EXCEEDANCES INTEGER

STORET Code	Description of STORET Administrative Parameters
82576	DAILY EXCURSION TIME, WATER MIN
82577	MONTHLY EXCURSION TIME, WATER TOTAL MIN
82578	DAY/MAXIMUM EXCURSION TIME, WATER MIN
82579	CODE NUMBER FOR PERSON COLLECTING SAMPLE
84002	CODE, GENERAL INFORMATION - ALPHA, NUMERIC CODE
84003	WATER SHED ID NUMBER (IOWA)
84005	FISH SPECIES CODE-FISH & WILDLIFE SER
84006	OWNERSHIP CLASSIFICATION OF LAKE, ILLINOIS SYSTEM
84010	PUBLIC ACCESS TO LAKE ILLINOIS SYSTEM
84011	CONFIDENCE CODE FOR GLC CONFIRMATION CODE
84012	PATIENT PARAMETERS (AGE, SEX, WT, ETC.) CODE
84013	SAMPLE PARAMETERS D=DESIGN SPECIMEN, S=SURPLUS
84027	CODE NUMBER FOR AGENCY COLLECTING SAMPLE
84028	CODE NO FOR AGENCY ANALYZING SAMPLE
84029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE FIELD
84033	EGD ANALYTICAL DATA COMPLETENESS Y=YES N=NO CODE
84034	EGD SMPL NO.(SMPL.IDENT) NUMERIC=SCS ALPH+4NUM=JRB
84035	EGD SAMPLE CLASSIFICATION CATEGORY ALPHA CODE
84036	EGD INDUSTRIAL CATEGORY NUMERIC CODE
84037	EGD INDUSTRIAL CATEGORY NAME ALPHA CODE
84038	EGD LABORATORY NUMERIC CODE
84039	EGD LABORATORY NAME ALPHA CODE
84040	EGD SAMPLE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84041	EGD ACID STATUS (1-5,9,AND BLANK) NUMERIC CODE
84042	EGD BASE STATUS (1-5,9AND BLANK) NUMERIC CODE
84043	EGD PESTICIDE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84044	EGD VOA FRACT. STATUS INDICATOR (1-5,9,BLANK) CODE
84045	EGD ACID EXTRACT DATE (YYMMDD) NUMERIC CODE
84046	EGD BASE EXTRACTION DATE (YYMMDD) NUMERIC CODE

STORET Code	Description of STORET Administrative Parameters
84047	EGD PESTICIDE EXTRACTION DATE (YYMMDD) NUMERIC CODE
84048	EGD VOA FRACTION INJECTION DATE YYMMDD NUMERIC CODE
84049	EGD ACID CONC. FACTOR (FIVE NUMERIC DIGITS) CODE
84050	EGD BASE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84051	EGD PESTICIDE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84052	EGD VOA FRACTION CONC. FACTOR (5 NUMERIC DIGITS) CODE
84053	SAMPLE TYPE AND FREQUENCY OF COLLECTION CODE
84054	LITHOLOGY ALPHA-NUMERIC CODE
84055	AVAILABLE LOGS ALPHA-NUMERIC CODE
84056	WATER USE CATEGORY ALPHA-NUMERIC CODE
84057	INSPECTION TYPE ALPHA-NUMERIC CODE
84058	HYDROGEOLOGIC SYSTEM ALPHA-NUMERIC CODE
84059	WELL OWNERSHIP ALPHA-NUMERIC CODE
84060	TOPOGRAPHY ALPHA-NUMERIC CODE
84061	WELL USE ALPHA-NUMERIC CODE
84062	MEASURING POINT DESCRIPTION ALPHA-NUMERIC CODE
84063	DRILLING METHOD ALPHA-NUMERIC CODE
84064	WELL DATA AVAILABILITY ALPHA-NUMERIC CODE
84065	PERMIT COMPLIANCE DATA ALPHA-NUMERIC CODE
84067	NATURE OF MONITORING ALPHA-NUMERIC CODE
84073	REPLACES EXISTING WELL ALPHA-NUMERIC CODE
84074	AQUIFER TYPE (SEE USGS HANDBOOK) ALPHA CODE
84075	WELL PERMIT NUMBER ALPHA-NUMERIC CODE
84076	TSD MONITORING WELL TYPE ALPHA CODE
84077	TSD MONITORING WELL SAMPLING METHOD ALPHA CODE
84083	POLLUTION VERIFICATION ALPHA CODE
84084	WELL SAMPLE PURPOSE ALPHA CODE
84090	SAMPLE FILE CONTROL PROJECT IDENTIFICATION A-CODE
84091	INFILTRATION DATE/BEGINNING 'YYMMDD'

STORET Code	Description of STORET Administrative Parameters
84092	INFILTRATION DATE/ENDING 'YYMMDD'
84093	ENFORCEMENT FORM #2-C,DATA IDENTIFICATION CODE
84102	SAMPLE SPECIES-SUB ID ALPHA CODE
84103	DIOXIN LABORATORY ALPHA CODE
84104	DIOXIN STUDY ALPHA CODE
84112	SOURCE OF GEOHYDROLOGIC DATA CODE
84119	SOURCE OF EVACUATION DATA CODE
84121	REGULATING AGENCY CODE
84122	SAMPLE PURPOSE CODE
84126	SOURCE OF DEPTH DATA CODE
84127	METHOD OF DEPTH MEASUREMENT CODE
84128	SOURCE OF WATER-LEVEL DATA CODE
84129	DATA QUALITY
84141	LAKE, PHYSICAL CONDITION AT SAMPLE TIME, 1-5, CODE
84142	LAKE,RECREATIONAL SUITABILITY @ SMPL TIME,1-5, CODE
84164	SAMPLER TYPE, CODE
85300	PROBLEM CODE NES SURVEY
85327	WATER LEVEL AT SAMPLE COLLECTION TIME-CODE-NES
85332	CLOUD COVER AT SAMPLE COLLECTION TIME-CODE-NES
85553	WELL COMPLETION DATE (MONTH/YEAR)
85554	WELL WORKOVER DATE, LATEST (MONTH/YEAR)

Appendix E

STORET Parameters Not Suitable for Statistical Analysis

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)
00006	DISTANCE FROM LOCATION IN X MILES
00007	DISTANCE FROM LOCATION IN Y MILES
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00009	X-SEC. LOC.(FT FROM LEFT BANK LOOKING DOWNSTRM)
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00033	WEATHER CODE FOR OCEAN-OBSERV. (WMO CODE 4677)
00037	WIND FORCE (BEAUFORT UNITS)
00038	WIND DIRECTION (WMO CODES 0885 + 0887)
00041	WEATHER (WMO CODE 4501)
00042	ALTITUDE IN FEET ABOVE MEAN SEA LEVEL
00043	CLOUD TYPE (WMO CODE 0500)
00044	CLOUD AMOUNT (WMO CODE 2700)
00047	TOTAL PARTIAL PRESSURE DISSOLVED GASES (MM HG)
00048	TOTAL PARTIAL PRESSURE DISSOLVED GASES (% SAT)
00049	SURFACE AREA IN SQUARE MILES
00050	EVAPORATION, TOTAL (INCHES PER DAY)
00051	SURFACE AREA IN SQUARE FEET
00053	SURFACE AREA, ACRES
00054	RESERVOIR STORAGE - ACRE FEET
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00067	TIDE STAGE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00069	SEA WAVES(0=NONE;1=0-3";2=4-20";3=21-48";4=4-8')
00097	SAMPLING STATION LOCATION, VERTICAL (FEET)
00098	SAMPLING STATION LOCATION, VERTICAL (METERS)
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
01300	OIL-GREASE (SEVERITY)
01305	DETERGENT SUDS (SEVERITY)
01310	GAS BUBBLES (SEVERITY)
01315	SLUDGE, FLOATING (SEVERITY)
01320	GARBAGE, FLOATING (SEVERITY)
01325	ALGAE, FLOATING MATS (SEVERITY)
01330	ODOR, ATMOSPHERIC (SEVERITY)
01331	TASTE (SEVERITY)
01335	SEWAGE SOLIDS, FRESH, FLOATING (SEVERITY)
01340	FISH, DEAD (SEVERITY)
01345	DEBRIS, FLOATING (SEVERITY)
01350	TURBIDITY (SEVERITY)
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE
01355	ICE COVER, FLOATING OR SOLID (SEVERITY)
03595	BIOASSAY (96 HR), EFFLUENT, TOTAL CODE
03596	BIOASSAY (48 HR), EFFLUENT, TOTAL CODE
03597	BIOASSAY (24 HR), EFFLUENT, TOTAL CODE
03598	TOXICITY, EFFLUENT, TOTAL CODE
03599	TOXICITY, CHOICE OF SPECIES, EFFLUENT CODE
03600	TOXICITY, TROUT, EFFLUENT, TOTAL CODE
03601	TOXICITY, SAND DOLLAR, EFFLUENT CODE
03602	BIOCHEMICAL OXYGEN DEMAND, EFFLUENT, TOTAL CODE
03603	SOLIDS, TOTAL SUSPENDABLE, EFFLUENT, TOTAL CODE
03605	FLOW METER CALIBRATION, WATER CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
03717	ONCORHYNCHUS MYKISS, WATER CODE
04117	TETHER LINE USED FOR COLLECTING SAMPLE CODE
04160	HALOCARBONS, PURGEABLE, SCAN, EFFLUENT CODE
04161	HALOCARBONS, PURGEABLE, SCAN, SLUDGE CODE
04162	AROMATIC, PURGEABLE, SCAN, EFFLUENT CODE
04163	AROMATIC, PURGEABLE, SCAN, SLUDGE CODE
04164	PHENOLIC, TOTAL, SCAN, EFFLUENT CODE
04165	PHENOLIC, TOTAL, SCAN, SLUDGE CODE
04166	PCB, TOTAL, SCAN, EFFLUENT CODE
04167	PCB, TOTAL, SCAN, SLUDGE CODE
04174	FREE LIQUIDS IN SEWAGE SLUDGE CODE
34765	AVIAN NUMERICAL SPECIES CODE (BIRDS)
34766	MAMMALIAN NUMERICAL SPECIES CODE
34771	MACROPHYTE, INSTREAM, VISUAL SIGHTING CODE
34773	ODOR, AMBIENT WATER CODE
34774	FISH, INSTREAM, VISUAL SIGHTING CODE
34775	STREAMBANK CHANNEL ALTERATIONS CODE
34776	HYDRAULIC STRUCTURES, INSTREAM CODE
34780	LAND USE, ADJACENT STREAM CODE
34781	SAMPLE POINTS, # OF LONGTDNL TRANSECTS, REACH CODE
34782	STREAM STAGE TREND CODE
34789	HABITATS, TYPES SAMPLED CODE
45613	FLOATING SOLIDS/VISIBLE FOAM, VISUAL, YES=1, NO=0, CODE
45614	SANITARY WASTE DISCHARGE ASSESSMENT, YES=1, NO=0, CODE
45615	INTERMITTENT DISCHARGE ASSESSMENT, YES=1, NO=0,CODE
46001	WATER APPEARANCE CODE (BASED ON FIELD ASSESSMENT)
46478	EQUIPMENT INSPECTION, VISUAL CODE
46486	TOXICITY,ACUTE 24HR(STATIC)CERIODAPHNIA (P/F) CODE
47454	FLOW METER REVOLUTIONS NUMBER

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
47455	LATITUDE, STARTING, OF A SAMPLE TOW DDMMSS
47456	LONGITUDE, STARTING, OF A SAMPLE TOW DDDMMSS
47457	LATITUDE, FINISHING, OF A SAMPLE TOW DDMMSS
47458	LONGITUDE, FINISHING, OF A SAMPLE TOW DDDMMSS
47459	LENGTH FREQUENCY NUMBER
47461	TIME THAT THE EQUIPMENT WAS SAMPLING MINUTES
47476	DIRECTION OF TOW IN RELATION TO CURRENT NUM CODE
50044	HYDROGRAPH LIMB, 1BASE, 2RISING, 3PEAK, 4FALLING, CODE
61390	DIATOMS,FIRST DOMINANT SPECIES OF UNITS - CODE
61391	DIATOMS,SECOND DOMINANT SPECIES OF UNITS - CODE
61392	DIATOMS,THIRD DOMINANT SPECIES OF UNITS - CODE
61393	DIATOMS,FOURTH DOMINANT SPECIES OF UNITS - CODE
70220	WAVE DIRECTION (WMO CODES 0885 + 0887)
70222	WAVE HEIGHT (WMO CODE 1555)
70223	WAVE PERIOD (WMO CODE 3155)
71090	BIVALVE SPECIES CODE
71500	EQUITABILITY INDEX,BENTHIC MACROINVER CODE
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)
72001	DEPTH, TOTAL OF HOLE (FT BELOW LAND SURFACE DATUM)
72002	DEPTH TO TOP OF WATER-BEARING ZONE SAMPLED (FT)
72003	DEPTH TO BOTTOM OF WATER-BEARING ZONE SAMPLED (FT)
72004	PUMP OR FLOW PERIOD PRIOR TO SAMPLING MINUTES
72005	SAMPLE SOURCE CODE (BM WELL DATA)
72006	SAMPLING CONDITION CODE (BM WELL DATA)
72007	FORMATION NAME CODE (BM WELL DATA)
72017	SERIES CODE (BM WELL DATA)
72018	SYSTEM CODE (BM WELL DATA)
72111	DIRECT READOUT GROUND STATN TRANSMIT EROR CODE NUM
74054	FECAL STREPTOCOCCI, GENERAL (PERMIT)

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
74055	FECAL COLIFORM, GENERAL (PERMIT)
80889	ACTIVATED SLUDGE PROCESS MODIFICATION CODE
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)
81637	SHELLFISH SPECIES NUMERIC CODE
82289	LAGOON OBSERVATION, VISUAL, Y=YES N=NO CODE
82398	SAMPLING METHOD (CODES)
82524	STORAGE COEFFICIENT NUMERICAL CODE
82923	ATMOSPHERIC DEPOSITION TYPE, WET CODE
83205	ATMOSPHERIC DEPOSITION TYPE, BULK CODE
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)
84001	AQUIFER NAME CODE (SEE USGS CATALOG)
84004	LAKE TYPE ILLINOIS CLASSIFICATION SYSTEM
84007	ANATOMY ALPHA CODE
84008	LIFE STYLE/HABITAT OF THE INDIVIDUALS IN THE SAMPLE
84009	SHELLFISH SPECIES ALPHANUMERIC CODE
84014	SPECIES SEX CODE
84030	CLOUD AMOUNT ALPHA WEATHER CODES
84031	PHYSICAL WEATHER ALPHA WEATHER CODES
84032	STREAM CONDITION ALPHA WEATHER CODES
84066	OIL AND GREASE, VISUAL, ALPHA-NUMERIC CODE
84068	SERIES CODE ALPHA-NUMERIC CODE
84069	FORMATION CODE ALPHA-NUMERIC CODE
84070	METHOD OF TESTING WELL YIELD ALPHA-NUMERIC CODE
84071	WATER LEVEL MEASUREMENT CONDITIONS ALPHA-NUM CODE
84072	WATER LEVEL MEASUREMENT METHOD ALPHA-NUMERIC CODE
84078	GIARDIA LAMBLIA, 2HSO4 OR SUC GRAD, MICRO, CODE
84079	BACTERIA, CELLUOLYTIC, AEROBIC-ANAEROBIC, RT 5-7, CODE
84080	BACTERIA, HYDROCARBONOCLASTIC, SHAKE INC 32C/WK, CODE
84081	YERSINIA ENTEROCOLITICA, SB BROTH, MAC AGAR,22C, CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84082	SALMONELLA/SHIGELLA, QUANT OR QUAL, HVF OR SWAB, CODE
84085	ORGANICS, VOLATILE, DETECTED, NUMERIC CODE, CODE
84086	MACROINVERTEBRATE SPECIES NUMERIC CODE
84087	MACROINVERTEBRATE HABITAT CODE
84088	BIOLOGY 1 MACROINVERTEBRATE CODE
84089	BIOLOGY 2 MACROINVERTEBRATE CODE
84094	PHYTOPLANKTON SPECIES CODE, NUMERIC
84095	PHYTOPLANKTON SPECIES CODE, ALPHA
84096	SEVERITY OF NON-PLANKTON ALGAE-MAT COVERAGE CODE
84097	LAGOON MOUTH CONDITION CODE
84098	COLOR OF NON-PLANKTONIC ALGAE CODE
84099	WATER - RELATIVE WATER LEVEL CODE
84100	SEX(1-MALE,2-FEMALE,3-MIXED,4-UNKNOWN) NUM CODE
84101	METAFORM, BENTHIC, ADULT(A), PUPAE(P), LARVAE(L) CODE
84105	OIL-SEPARATOR OBSERVATION ASSESS (0=DID NOT,1=DID)
84106	EVAPORAT/BED OBS ASSESS (0=DID NOT LOOK, 1=DID LOOK)
84107	AREA INSPECTION, VISUAL (0=DID NOT, 1=DID) CODE
84108	DRAIN FIELD INSPECTION ASSESS (0=DID NOT, 1=DID) CODE
84109	SLUDGE BUILD-UP IN WATER (0=DID NOT OBS, 1=OBS) CODE
84110	POND OBSERVATION ASSESS WATER (0=DID NOT, 1=DID) CODE
84111	LITHOLOGIC MODIFIER CODE
84113	WELL INTAKE FINISH CODE
84114	WELL CASING MATERIAL CODE
84115	TYPE OF MATERIAL FROM WHICH OPENING IS MADE CODE
84116	DRILLING FLUID CODE
84117	TYPE OF SURFACE SEAL CODE
84118	METHOD OF DEVELOPMENT CODE
84120	PACKING MATERIAL CODE
84124	METHOD OF EVACUTAION CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84125	METHOD OF WATER-LEVEL MEASUREMENT CODE
84130	OUTFALL OBSERVATION, VISUAL, Y=YES N=NO CODE
84131	SAMPLING METHOD, CONFIDENCE CODE (A,B,C,D) CODE
84132	STREAMBANK, VEGETATIVE STABILITY RATING CODE
84133	STREAMBANK, STABILITY (BANK EROSION) RATING CODE
84134	PARTICLES, DEGREE SURROUNDED BY FINE SEDIMENT, CODE
84135	STREAMSIDE, (SHORELINE) COVER RATING CODE
84136	CANOPY TYPE CODE
84137	CHANNEL STABILITY RATING CODE (E,G,F,P) CODE
84138	COLIFORM, TOTAL, WATER, WHOLE, MPN, PRES=1, ABSNT=2, CODE
84139	ENTEROBACTER AGGLOMERANS, WTR, MF, PRES=1, ABSNT=2, CODE
84140	KLEBSIELLA PNEUMONIAE, WTR, WH, MF, PRES=1, ABSNT=2, CODE
84143	WELL, PURGING CONDITION CODE
84144	WELL, SELECTION CRITERIA CODE
84145	PROJECT COMPONENT CODE
84146	LAND USE, PREDOMINANT, WITHIN 100 FT OF WELL, CODE
84147	LAND USE, PREDOMINANT, 1/4 MI.RADIUS OF WELL, CODE
84148	LAND USE, PREDMNT., FRAC., WITHIN 1/4 MI OF WELL, CODE
84149	LAND USE, CHANGE, LAST 10 YRS, WITHIN 1/4MI WELL, CODE
84150	HABITAT QUALITY INDEX RATING CODE
84151	AQUATIC LIFE, USE CLASSES CODE
84152	STREAM, STAGE CLASS CODE
84153	STREAMBANKS, GRAZING DAMAGE CODE
84154	CHANNEL, MAJOR ALTERATIONS CODE
84155	RIFFLE/RUNS, OCCURRENCE CODE
84156	POOL, DESCRIPTION CODE
84157	SANDBARS, LARGE, OCCURRENCE CODE
84158	LAND USE, NEAR STREAM, PREDOMINANT CODE
84159	STREAM,COVER (INSTREAM SHELTER FOR ADULT FISH), CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84160	STREAM, DEGRADATION RATING CODE
84161	STREAM, ORDER CODE
84162	LAND RESOURCE AREA CODE
84163	FLOW, STREAM, CLASSIFICATION CODE
84165	DISCHARGE EVENT OBSERVATION, YES=1 NO=0, CODE
84166	STORM HYDROGRAPH, DIRECTION, (RISE,FALL), CODE
84167	MICROSCOPIC EXAMINATION CODE
84168	AVIAN SPECIES ALPHA CODE (BIRDS)
84169	MAMMALIAN ALPHA SPECIES CODE
84170	ALPHA AGE TEXT CODE
84200	LATITUDE/LONGITUDE COORDINATES OF WELL, METHOD CODE
84201	NATIONAL REFERENCE DATUM, ALTITUDE(VERTICAL) CODE
84202	ALTITUDE METHOD CODE
85000	STREAM MILE, ACTUAL MILES
85014	HABITAT, 1970 ACRES THIS TYPE FOR THIS STATION
85015	HAB., ESTIMATED ACRES THIS TYPE THIS STATION
85016	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 1990
85017	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 2000
85018	TYPE CODES: 1=CLEAR CUT/2=SELECT CUT/3=RNGE DEVLP
85019	ACRES, NO. ALTERED FROM 1965-1970 (0-5 YEARS OLD)
85020	ACRES, NO. ALTERED 1960-1965 (5-10 YEARS OLD)
85021	ACRES, NO. ALTERED 1955-1960 (10-15 YEARS OLD)
85022	ACRES, NO. ALTERED 1950-1955 (15-20 YEARS OLD)
85023	ACRES, NO. ALTERED BEFORE 1950 (20+ YEARS OLD)
85024	ACRES,PREDICTED YRLY.AVE.TO BE ALTERED IN FUTURE
85025	LANDOWNERS, CODES FOR ALL IN STATE OF OREGON
85026	ACRES, CURRENT OWNED THIS LANDOWNER THIS STATION
85027	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1980
85028	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1990

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85029	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 2000
85030	LAND USES, CODES FOR ALL IN STATE OF OREGON
85031	ACRES, CURRENT DEDICATED TO THIS USE THIS STATION
85032	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1980
85033	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1990
85034	ACRES, ESTM. DEDICTD TO THIS USE BY YR.2000 --STA.
85035	HAB., INDICATED ANIMAL USES THIS TYPE IN WINTER
85036	HAB., INDICATED ANIMAL USES THIS TYPE IN SPRING
85037	HAB., INDICATED ANIMAL USES THIS TYPE IN SUMMER
85038	HAB., INDICATED ANIMAL USES THIS TYPE IN FALL
85039	HAB., INDICATED ANML USES THIS TYPE FOR WINTERING
85040	HAB., INDICATED ANML USES THIS TYPE FOR FEEDING
85041	HAB., INDICATED ANML USES TYPE FOR REARING YOUNG
85042	HAB., INDICATED BIRD USES THIS TYPE FOR NESTING
85043	HAB., INDICATED ANML USES THIS TYPE FOR SHELTER
85044	HAB., INDICATED ANML USES THIS TYPE FOR REST AREA
85045	ANML, SHOWS PRESENCE/ABSNC OF COMMENTS ON THIS ANML
85046	HAB.,ACRES OCCUPIED BY THIS ANML THIS UNIT & CO.
85050	ANIMALS ARE NOT PRESENT THIS STATION
85051	ANIMALS, ONLY A FEW ARE PRESENT THIS STATION
85052	ANIMALS COMMONLY SEEN; USE MODERATE THIS STATION
85053	ANIMALS FREQUENTLY SEEN; USE HEAVY THIS STATION
85070	OWNERSHIP (.1) AND ACCESS (.2) BY YEAR
85071	PRIVATE OWNERSHIP AND ACCESS MILEAGE
85072	FEDERAL OWNERSHIP AND ACCESS MILEAGE
85073	STATE OWNERSHIP AND ACCESS MILEAGE
85074	COUNTY OWNERSHIP AND ACCESS MILEAGE
85075	CITY OWNERSHIP AND ACCESS MILEAGE
85076	WATER YEAR DATA REFERS TO

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85077	CALENDAR YEAR DATA REFERS TO
85088	MONTHS POLLUTION IS A PROBLEM JAN THRU JUNE
85089	MONTHS POLLUTION IS A PROBLEM JULY TO DECEMBER
85090	MAN-CAUSED CHANNEL CHANGE IN MILES
85091	STREAM BANK HABITAT DESTROYED IN MILES
85092	STREAMBED SILTED IN MILES
85093	TURBIDITY PROBLEM IN MILES
85094	SEVERITY: 1=ELIMINATES 2=INTERFERES 3=NO PROBLEM
85095	DURATION OF TURBIDITY PROBLEM IN MONTHS
85096	SEASON OF NATURAL DRY CHANNEL 1=SP 2=SU 3=F 4=W
85097	NATURAL DRY CHANNEL IN MILES
85098	MAN-CAUSED DRY CHANNEL SEASON 1=SP 2=SU 3=F 4=W
85099	MAN-CAUSED DRY CHANNEL IN MILES
85100	YEAR BARRIER IS PRESENT
85101	NUMBER OF NATURAL BARRIERS
85102	MILES BLOCKED BY NATURAL BARRIERS
85103	NUMBER OF NATURAL BARRIERS TO BE REMOVED
85104	NUMBER OF DAMS AND MAN CAUSED OBSTRUCTIONS
85105	MILES BLOCKED BY DAMS OR MAN CAUSED OBSTRUCTIONS
85106	NUMBER OF DAMS TO BE ALTERED
85107	MILES OF STREAM OCCUPIED BY IMPOUNDMENT
85108	LOWER END OF SECTION COVERED BY THIS FORM
85109	UPPER END OF SECTION COVERED BY THIS FORM
85110	LOWER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85111	UPPER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85112	STREAM SURVEY:1=COMPLETE 2=INCOMPLETE 3=NONE
85113	ABUNDANCE: 1=FSHWY/TAG&R 2=SURVEY 3=EST PLUS 4=EST
85114	ABUNDANCE: N=S&ST 1=ABUNDANT 4=SCARCE RGH FSH 3=SCARCE
85116	SQUARE YARDS OF SPAWNING AREA IN 1970

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85117	SQUARE YARDS OF SPAWNING AREA IN 1980
85118	SQUARE YARDS OF SPAWNING AREA IN 1990
85119	SQUARE YARDS OF SPAWNING AREA IN 2000
85120	MILES OF REARING AREA IN 1970
85121	MILES OF REARING AREA IN 1980
85122	MILES OF REARING AREA IN 1990
85123	MILES OF REARING AREA IN 2000
85124	CATCH BY SPORT ANGLING IN 1970
85125	RECREATION DAYS SPENT ANGLING IN 1970
85126	RECREATION DAYS SPENT ANGLING IN 1980
85127	RECREATION DAYS SPENT ANGLING IN 1990
85128	RECREATION DAYS SPENT ANGLING IN 2000
85129	CONTRIBUTION TO COMMERCIAL CATCH IN 1970
85130	PERCENT OF TOTAL FISHING DONE FROM BOAT IN 1970
85131	PERCENT OF TOTAL FISHING DONE FROM BANK IN 1970
85132	PERCENT OF TOTAL FISHING DONE WITH LURE IN 1970
85133	PERCENT OF TOTAL FISHING DONE WITH BAIT IN 1970
85134	PERCENT OF TOTAL FISHING DONE WITH A FLY IN 1970
85146	YEAR THIS FACTOR HAS A LIMITING EFFECT
85157	MAN DAYS OF WATER SKIING
85158	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85159	MAN DAYS OF BOATING OTHER THAN ANGLING
85160	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85161	MAN DAYS OF SWIMMING
85162	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85163	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NOT PRESENT
85165	NUMBER OF MONTHS SUSPENDED SOLIDS ARE A PROBLEM
85167	NUMBER OF MONTHS PLANKTON IS A PROBLEM
85168	1=ELIMINATE PROD 2=REDUCE 3=NO INTER. 4=NOT PRES

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85169	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85170	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85171	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85172	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85173	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85174	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85175	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85176	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85177	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85178	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85179	YEAR THIS NUMBER OF FACILITIES PRESENT
85180	NUMBER OF BOAT RAMPS
85181	NUMBER OF MOORAGES
85182	NUMBER OF PICNIC AREAS
85183	NUMBER OF CAMP AREAS
85184	NUMBER OF RESORTS
85185	YEAR THIS ZONED AREA PRESENT
85186	ACRES SET ASIDE FOR OTHER BOATING
85187	ACRES SET ASIDE FOR WATER SKIING
85188	MILES OF SHORE LOST TO ACCESS BY HOME SITES
85189	TOTAL MILES OF SHORELINE
85193	WILL RECR BE INC BY RELEASE OF FINGERL 0=NO 1=YES
85195	CATCH AND RECREATION ESTIMATE 1=BEST 4=POOREST
85333	PRECIPITATION-SAMPLE COLLECTION TIME-CODE- NES
85538	GAMMA SCAN DATE (YR,MO,DAY)
85539	DATE OF REPORT (YR,MO,DAY)
85658	TIME NIGHT CO2 HR
85661	TIME, INTERVAL DAY CO2 HR

Appendix F

National EPA Water Quality Criteria Summary[1]

The following table presents the national water quality criteria that were used to assess water quality data on a station-by-station basis and within the entire study area. Criteria are, for the most part, maximum values (except for dissolved oxygen, pH, and as noted). Criteria exist in any of four categories: Fresh Acute, Drinking Water, Marine Acute, and Other. Acute criteria are the highest 1-hour average concentrations which should not result in unacceptable impacts to aquatic organisms in either fresh or marine waters, respectively. The Drinking Water criteria are intended for human consumption; while the Other criteria represents National Park Service or other concerns. Parameters are listed in ascending order by STORET code. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to obtain the criteria for all parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	00070				50[t]	TURBIDITY, JACKSON CANDLE UNITS	JTU	Physical
	00076				50[t]	TURBIDITY, HACH TURBIDIMETER, FORMAZIN TUR. UNITS	FTU	Physical
14808798	00154		250[s]			SULFATE (AS S) WHOLE WATER	MG/L	General Inorganic
7782447	00299				4.0[u]	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	Dissolved Oxygen
7782447	00300				4.0[u]	OXYGEN, DISSOLVED	MG/L	Dissolved Oxygen
	00400				≤6.5, ≥9.0[#]	PH	SU	Physical
	00403				≤6.5, ≥9.0[#]	PH, LAB	SU	Physical
	00406				≤6.5, ≥9.0[#]	PH, FIELD	SU	Physical

[1]Sources: (1) U.S. Environmental Protection Agency, Quality Criteria for Water 1995, Final Draft; (2) U.S. Environmental Protection Agency, 40 CFR 141 - National Primary Drinking Water Regulations, and 40 CFR 143 - National Secondary Drinking Water Regulations, July 1, 1994; and (3) Others as Noted in Footnotes.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
471341	00409				<200[=]	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS	UEQ/L	General Inorganic
17778880	00613		1			NITRITE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00615		1			NITRITE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00618		10			NITRATE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00620		10			NITRATE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00628		10			NITRITE + NITRATE, SUSPENDED AS N	MG/L	Nitrogen
17778880	00630		10			NITRITE PLUS NITRATE, TOTAL 1 DET.	MG/L	Nitrogen
17778880	00631		10			NITRITE PLUS NITRATE, DISSOLVED 1 DET.	MG/L	Nitrogen
57125	00718	22	200	1.0		CYANIDE, WEAK ACID, DISSOCIABLE, WATER, WHOLE	UG/L	General Inorganic
57125	00719	22	200	1.0		CYANIDE, FREE,IN WATER&WASTEWATERS, HBG METHOD	UG/L	General Inorganic
57125	00720	0.022	0.2	0.001		CYANIDE, TOTAL	MG/L	General Inorganic
57125	00722	0.022	0.2	0.001		CYANIDE, FREE (AMENABLE TO CHLORINATION)	MG/L	General Inorganic
57125	00723	22	200	1.0		CYANIDE, DISSOLVED STD METHOD	UG/L	General Inorganic
57125	00724	22	200	1.0		CYANIDE COMPLEXED TO A RANGE OF COMPNDS, WATER	UG/L	General Inorganic
16887006	00940	860	250[s]			CHLORIDE,TOTAL IN WATER	MG/L	General Inorganic
16887006	00941	860	250[s]			CHLORIDE, DISSOLVED IN WATER	MG/L	General Inorganic
14808798	00945		250[s]			SULFATE, TOTAL (AS SO4)	MG/L	General Inorganic
14808798	00946		250[s]			SULFATE, DISSOLVED (AS SO4)	MG/L	General Inorganic
1332214	00948		7000000			ASBESTOS, WHOLE SAMPLE	CNT/L	General Inorganic
16984488	00950		4.0			FLUORIDE, DISSOLVED AS F	MG/L	General Inorganic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
16984488	00951		4.0			FLUORIDE, TOTAL AS F	MG/L	General Inorganic
7782414	00953		4000			FLUORINE, TOTAL	UG/L	General Inorganic
7440382	00978	360	50	69		ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	UG/L	Metal
7782492	00981	20	50	300		SELENIUM,TOTAL RECOVERABLE IN WATER AS SE	UG/L	Metal
7440280	00982	1400*	2.0	2130*		THALLIUM, TOTAL RECOVERABLE IN WATER AS TL	UG/L	Metal
7782492	00990	20	50	300		SELENITE, TOTAL RECOVERABLE INORGANIC	UG/L	Metal
7440382	00991	360	50	69		ARSENIC, TOTAL RECOVERABLE TRIVALENT INORGANIC	UG/L	Metal
7440382	00995	360	50	69		ARSENIC, INORGANIC DISS	UG/L	Metal
7440382	00996	360	50	69		ARSENIC, INORGANIC SUSP	UG/L	Metal
7440382	00997	360	50	69		ARSENIC, INORGANIC TOT	UG/L	Metal
7440417	00998	130*	4.0			BERYLLIUM,TOTAL RECOVERABLE IN WATER AS BE	UG/L	Metal
7440382	01000	360	50	69		ARSENIC, DISSOLVED	UG/L	Metal
7440382	01001	360	50	69		ARSENIC, SUSPENDED	UG/L	Metal
7440382	01002	360	50	69		ARSENIC, TOTAL	UG/L	Metal
7440393	01005		2000			BARIUM, DISSOLVED	UG/L	Metal
7440393	01006		2000			BARIUM, SUSPENDED	UG/L	Metal
7440393	01007		2000			BARIUM, TOTAL	UG/L	Metal
7440393	01009		2000			BARIUM,TOTAL RECOVERABLE IN WATER AS BA	UG/L	Metal
7440417	01010	130*	4.0			BERYLLIUM, DISSOLVED	UG/L	Metal
7440417	01011	130*	4.0			BERYLLIUM, SUSPENDED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440417	01012	130*	4.0			BERYLLIUM, TOTAL	UG/L	Metal
7440439	01025	3.9+	5.0	43		CADMIUM, DISSOLVED	UG/L	Metal
7440439	01026	3.9+	5.0	43		CADMIUM, SUSPENDED	UG/L	Metal
7440439	01027	3.9+	5.0	43		CADMIUM, TOTAL	UG/L	Metal
7440473	01030		100			CHROMIUM, DISSOLVED	UG/L	Metal
7440473	01031		100			CHROMIUM, SUSPENDED	UG/L	Metal
7440473	01032	16	100	1100		CHROMIUM, HEXAVALENT	UG/L	Metal
16065831	01033	1700+	100	10300*		CHROMIUM, TRI-VAL	UG/L	Metal
7440473	01034		100			CHROMIUM, TOTAL	UG/L	Metal
7440508	01040	18+	1300a	2.9		COPPER, DISSOLVED	UG/L	Metal
7440508	01041	18+	1300a	2.9		COPPER, SUSPENDED	UG/L	Metal
7440508	01042	18+	1300a	2.9		COPPER, TOTAL	UG/L	Metal
7439921	01049	82+	15a	220		LEAD, DISSOLVED	UG/L	Metal
7439921	01050	82+	15a	220		LEAD, SUSPENDED	UG/L	Metal
7439921	01051	82+	15a	220		LEAD, TOTAL	UG/L	Metal
7440280	01057	1400*	2.0	2130*		THALLIUM, DISSOLVED	UG/L	Metal
7440280	01058	1400*	2.0	2130*		THALLIUM, SUSPENDED	UG/L	Metal
7440280	01059	1400*	2.0	2130*		THALLIUM, TOTAL	UG/L	Metal
7440020	01065	1400+	100	75		NICKEL, DISSOLVED	UG/L	Metal
7440020	01066	1400+	100	75		NICKEL, SUSPENDED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	01067	1400[+]	100	75		NICKEL, TOTAL	UG/L	Metal
7440020	01074	1400[+]	100	75		NICKEL, TOTAL RECOVERABLE IN WATER AS NI	UG/L	Metal
7440224	01075	4.1[+]	100[s]	0.12		SILVER, DISSOLVED	UG/L	Metal
7440224	01076	4.1[+]	100[s]	0.12		SILVER, SUSPENDED	UG/L	Metal
7440224	01077	4.1[+]	100[s]	0.12		SILVER, TOTAL	UG/L	Metal
7440224	01079	4.1[+]	100[s]	0.12		SILVER, TOTAL RECOVERABLE IN WATER AS AG	UG/L	Metal
7440508	01089	0.018[+]	1.3[a]	0.0029		COPPER AS SUSPENDED BLACK OXIDE IN WATER	MG/L	General Inorganic
7440666	01090	120[+]	5000[s]	95		ZINC, DISSOLVED	UG/L	Metal
7440666	01091	120[+]	5000[s]	95		ZINC, SUSPENDED	UG/L	Metal
7440666	01092	120[+]	5000[s]	95		ZINC, TOTAL	UG/L	Metal
7440666	01094	120[+]	5000[s]	95		ZINC, TOTAL RECOVERABLE IN WATER AS ZN	UG/L	Metal
7440360	01095	88[p]	6.0	1500[p]		ANTIMONY, DISSOLVED	UG/L	Metal
7440360	01096	88[p]	6.0	1500[p]		ANTIMONY, SUSPENDED	UG/L	Metal
7440360	01097	88[p]	6.0	1500[p]		ANTIMONY, TOTAL	UG/L	Metal
7440439	01113	3.9[+]	5.0	43		CADMIUM,TOTAL RECOVERABLE IN WATER AS CD	UG/L	Metal
7439921	01114	82[+]	15[a]	220		LEAD, TOTAL RECOVERABLE IN WATER AS PB	UG/L	Metal
7440473	01118		100			CHROMIUM TOTAL RECOVERABLE IN WATER AS CR	UG/L	Metal
7440508	01119	18[+]	1300[a]	2.9		COPPER, TOTAL RECOVERABLE IN WATER AS CU	UG/L	Metal
7440280	01124	1400[*]	2.0	2130[*]		THALLIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
7440280	01128	1400[*]	2.0	2130[*]		THALLIUM, TOTAL RECOVERABLE <95%	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	01145	20	50	300		SELENIUM, DISSOLVED	UG/L	Metal
7782492	01146	20	50	300		SELENIUM, SUSPENDED	UG/L	Metal
7782492	01147	20	50	300		SELENIUM, TOTAL	UG/L	Metal
7782492	01167	20	50	300		SELENIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
18540299	01220	16	100	1100		CHROMIUM, HEXAVALENT, DISSOLVED	UG/L	Metal
7440360	01268	88[p]	6.0	1500[p]		ANTIMONY (SB), WATER, TOTAL RECOVERABLE	UG/L	Metal
57125	01291	22	200	1.0		CYANIDE, FILTERABLE, TOTAL IN WATER	UG/L	General Inorganic
7440666	01303	0.120[+]	5.0[s]	0.095		ZINC, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440224	01304	0.0041[+]	0.1[s]	0.00012		SILVER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440508	01306	0.018[+]	1.3[a]	0.0029		COPPER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
18540299	01307	0.016	0.1	1.1		CHROMIUM, HEXAVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7440382	01309	0.36	0.05	0.069		ARSENIC, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440393	01311		2.0			BARIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440417	01312	0.13[*]	0.004			BERYLLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440439	01313	0.0039[+]	0.005	0.043		CADMIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
16065831	01314	1.7[+]	0.1	10.3[*]		CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7439921	01318	0.082[+]	0.015[a]	0.220		LEAD, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7439976	01321	0.0024	0.002	0.0021		MERCURY, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440020	01322	1.4[+]	0.1	0.075		NICKEL, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7782492	01323	0.020	0.050	0.300		SELENIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440280	01324	1.4*	0.002	2.13*		THALLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440611	01326		0.020c			URANIUM, POTENTIALLY DISSOLVED, WATER	MG/L	Metal
7440224	01523	4.1+	100s	0.12		SILVER, IONIC	UG/L	Metal
50328	03648		0.2			BENZO (A) PYRENE, LIQUID FRACTION, ELUTRIATE	UG/L	General Organic
122349	04035		4.0			SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
10028178	04124		20r			TRITIUM, TOTAL, WATER	PC/ML	Radiological
10028178	07000		20000r			TRITIUM, TOTAL	PC/L	Radiological
10028178	07005		20000r			TRITIUM, DISSOLVED	PC/L	Radiological
10028178	07010		20000r			TRITIUM, SUSPENDED	PC/L	Radiological
	09501		5.0			RADIUM 226, TOTAL	PC/L	Radiological
	09503		5.0			RADIUM 226, DISSOLVED	PC/L	Radiological
	09505		5.0			RADIUM 226, SUSPENDED	PC/L	Radiological
	11500		5.0			RADIUM 226 + RADIUM 228, DISSOLVED	PC/L	Radiological
	11501		5.0			RADIUM 228, TOTAL	PC/L	Radiological
	11503		5.0			RADIUM 226 + RADIUM 228, TOTAL	PC/L	Radiological
10098972	13501		8.0r			STRONTIUM 90, TOTAL	PC/L	Radiological
10098972	13503		8.0r			STRONTIUM 90, DISSOLVED	PC/L	Radiological
10098972	13505		8.0r			STRONTIUM 90, SUSPENDED	PC/L	Radiological
7782492	22675	20	50	300		SELENIUM, DISSOLVED ORGANIC	UG/L	Metal
7782492	22676	20	50	300		SELENIUM, HEXAVALENT, DISSOLVED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	22677	20	50	300		SELENIUM, TETRAVALENT, DISSOLVED	UG/L	Metal
7440382	22678	360	50	69		ARSENIC, DISSOLVED ORGANIC	UG/L	Metal
7440382	22679	850*	50	2319*		ARSENIC, PENTAVALENT,DISSOLVED	UG/L	Metal
7440382	22680	360	50	69		ARSENIC, TRIVALENT, DISSOLVED	UG/L	Metal
7440611	22703		20c			URANIUM, NATURAL DISSOLVED	UG/L	Metal
7440611	22705		20c			URANIUM, NATURAL SUSPENDED	UG/L	Metal
7440611	22706		20c			URANIUM, TOTAL AS U308	UG/L	Metal
7440611	22708		0.020c			URANIUM, NATURAL, TOTAL	MG/L	Radiological
7440611	28011		20c			URANIUM, NATURAL, TOTAL	UG/L	Radiological
88857	30191		7.0			DINOSEB, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
75990	30200		200			DALAPON, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
106934	30203		0.05			ETHANE, 1,2-DIBROMO-, WATER, WHOLE, RECOVERABLE	UG/L	Pesticide
	31501		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	CFU/100ML	Bacteriological
	31503		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, DELAY. M-ENDO	CFU/100ML	Bacteriological
	31504		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED. LES-ENDO	CFU/100ML	Bacteriological
	31505		1.0n		1000b	COLIFORM, TOTAL, MPN, CONF. TEST 35C (TUBE 31506)	MPN/100ML	Bacteriological
	31506		1.0n		1000b	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31507		1.0n		1000b	COLIFORM, TOTAL, MPN, COMP. TEST 35C (TUBE 31508)	MPN/100ML	Bacteriological
	31508		1.0n		1000b	COLIFORM, TOTAL, MPN, COMP. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31613				200^	FECAL COLIFORM, MEMBRANE FILTER, AGAR	CFU/100ML	Bacteriological

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	31614				200^	FECAL COLIFORM, MPN, TUBE CONFIGURATION	MPN/100ML	Bacteriological
	31615				200^	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	MPN/100ML	Bacteriological
	31616				200^	FECAL COLIFORM, MEMBRANE FILTER, BROTH, 44.5C	CFU/100ML	Bacteriological
	31617				200^	FECAL COLIFORM, MPN, EIJKMAN, 44.5C (TUBE 31618)	MPN/100ML	Bacteriological
	31625				200^	FECAL COLIFORM, MF, M-FC, 0.7 UM	CFU/100ML	Bacteriological
	31648				126^	E. COLI, MTEC, MF	CFU/100ML	Bacteriological
	31649				33^	ENTEROCOCCI, ME, MF	CFU/100ML	Bacteriological
67663	32003	28900*	100[t]			CARBON CHLOROFORM AND CARBON ALCOHOL EXTRS.,TOTAL	UG/L	General Organic
67663	32005	28900*	100[t]			CARBON CHLOROFORM EXTRACTABLES	UG/L	General Organic
67663	32021	28900*	100[t]			CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLES OF	UG/L	General Organic
67663	32022	28900*	100[t]			CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES OF	UG/L	General Organic
75274	32101		100[t]			BROMODICHLOROMETHANE, WHOLE WATER	UG/L	General Organic
56235	32102	35200*	5.0	50000*		CARBON TETRACHLORIDE, WHOLE WATER	UG/L	General Organic
107062	32103	118000*	5.0	113000*		1,2-DICHLOROETHANE,WHOLE WATER	UG/L	General Organic
75252	32104		100[t]			BROMOFORM, WHOLE WATER	UG/L	General Organic
124481	32105		100[t]			DIBROMOCHLOROMETHANE, WHOLE WATER	UG/L	General Organic
67663	32106	28900*	100[t]			CHLOROFORM, WHOLE WATER	UG/L	General Organic
56235	32260	35.2*	0.005	50*		CARBON TETRACHLORIDE EXTRACTABLES	MG/L	General Organic
67663	32270	28.9*	0.1[t]			CHLOROFORM EXTRACTABLES TOTAL	MG/L	General Organic
108883	34010	17500*	1000	6300*		TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
1330207	34020		10000			XYLENES IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic
83329	34205	1700*		970*		ACENAPHTHENE, TOTAL	UG/L	General Organic
83329	34206	1700*		970*		ACENAPHTHENE, DISSOLVED	UG/L	General Organic
83329	34207	1700*		970*		ACENAPHTHENE, SUSPENDED	UG/L	General Organic
107028	34210	68*		55*		ACROLEIN, TOTAL	UG/L	Pesticide
107028	34211	68*		55*		ACROLEIN, DISSOLVED	UG/L	Pesticide
107028	34212	68*		55*		ACROLEIN, SUSPENDED	UG/L	Pesticide
107131	34215	7550*				ACRYLONITRILE, TOTAL	UG/L	General Organic
107131	34216	7550*				ACRYLONITRILE, DISSOLVED	UG/L	General Organic
107131	34217	7550*				ACRYLONITRILE, SUSPENDED	UG/L	General Organic
71432	34235	5300*	5.0	5100*		BENZENE, DISSOLVED	UG/L	General Organic
71432	34236	5300*	5.0	5100*		BENZENE, SUSPENDED	UG/L	General Organic
92875	34239	2500*				BENZIDINE, DISSOLVED	UG/L	General Organic
92875	34240	2500*				BENZIDINE, SUSPENDED	UG/L	General Organic
58899	34265	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, DISSOLVED	UG/L	Pesticide
58899	34266	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, SUSPENDED	UG/L	Pesticide
75252	34288		100[t]			BROMOFORM, DISSOLVED	UG/L	General Organic
75252	34289		100[t]			BROMOFORM, SUSPENDED	UG/L	General Organic
56235	34297	35200*	5.0	50000*		CARBON TETRACHLORIDE, DISSOLVED	UG/L	General Organic
56235	34298	35200*	5.0	50000*		CARBON TETRACHLORIDE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108907	34301		100			CHLOROBENZENE, TOTAL	UG/L	General Organic
108907	34302		100			CHLOROBENZENE, DISSOLVED	UG/L	General Organic
108907	34303		100			CHLOROBENZENE, SUSPENDED	UG/L	General Organic
124481	34306		100[t]			CHLORODIBROMOMETHANE, TOTAL	UG/L	General Organic
124481	34307		100[t]			CHLORODIBROMOMETHANE, DISSOLVED	UG/L	General Organic
124481	34308		100[t]			CHLORODIBROMOMETHANE, SUSPENDED	UG/L	General Organic
67663	34316	28900[*]	100[t]			CHLOROFORM, DISSOLVED	UG/L	General Organic
67663	34317	28900[*]	100[t]			CHLOROFORM, SUSPENDED	UG/L	General Organic
57125	34325	0.022	0.2	0.001		CYANIDE, SUSPENDED	MG/L	General Inorganic
75274	34328		100[t]			DICHLOROBROMOMETHANE, DISSOLVED	UG/L	General Organic
75274	34329		100[t]			DICHLOROBROMOMETHANE, SUSPENDED	UG/L	General Organic
122667	34346	270[*]				1,2-DIPHENYLHYDRAZINE, TOTAL	UG/L	General Organic
122667	34347	270[*]				1,2-DIPHENYLHYDRAZINE, DISSOLVED	UG/L	General Organic
122667	34348	270[*]				1,2-DIPHENYLHYDRAZINE, SUSPENDED	UG/L	General Organic
33213659	34356	0.22		0.034		ENDOSULFAN, BETA, TOTAL	UG/L	Pesticide
33213659	34357	0.22		0.034		ENDOSULFAN, BETA, DISSOLVED	UG/L	Pesticide
33213659	34358	0.22		0.034		ENDOSULFAN, BETA, SUSPENDED	UG/L	Pesticide
959988	34361	0.22		0.034		ENDOSULFAN, ALPHA, TOTAL	UG/L	Pesticide
959988	34362	0.22		0.034		ENDOSULFAN, ALPHA, DISSOLVED	UG/L	Pesticide
959988	34363	0.22		0.034		ENDOSULFAN, ALPHA, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
100414	34371	32000*	700	430*		ETHYLBENZENE, TOTAL	UG/L	General Organic
100414	34372	32000*	700	430*		ETHYLBENZENE, DISSOLVED	UG/L	General Organic
100414	34373	32000*	700	430*		ETHYLBENZENE, SUSPENDED	UG/L	General Organic
206440	34376	3980*		40*		FLUORANTHENE, TOTAL	UG/L	General Organic
206440	34377	3980*		40*		FLUORANTHENE, DISSOLVED	UG/L	General Organic
206440	34378	3980*		40*		FLUORANTHENE, SUSPENDED	UG/L	General Organic
77474	34386	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, TOTAL	UG/L	General Organic
77474	34387	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, DISSOLVED	UG/L	General Organic
77474	34388	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, SUSPENDED	UG/L	General Organic
87683	34391	90*		32*		HEXACHLOROBUTADIENE, TOTAL	UG/L	General Organic
87683	34392	90*		32*		HEXACHLOROBUTADIENE, DISSOLVED	UG/L	General Organic
87683	34393	90*		32*		HEXACHLOROBUTADIENE, SUSPENDED	UG/L	General Organic
67721	34396	980*		940*		HEXACHLOROETHANE, TOTAL	UG/L	General Organic
67721	34397	980*		940*		HEXACHLOROETHANE, DISSOLVED	UG/L	General Organic
67721	34398	980*		940*		HEXACHLOROETHANE, SUSPENDED	UG/L	General Organic
118741	34401	6.0[p]	1.0			HEXACHLOROBENZENE, DISSOLVED	UG/L	General Organic
118741	34402	6.0[p]	1.0			HEXACHLOROBENZENE, SUSPENDED	UG/L	General Organic
193395	34403		0.40[c]			INDENO (1,2,3-CD) PYRENE, TOTAL	UG/L	General Organic
193395	34404		0.40[c]			INDENO (1,2,3-CD) PYRENE, DISSOLVED	UG/L	General Organic
193395	34405		0.40[c]			INDENO (1,2,3-CD) PYRENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
78591	34408	117000*		12900*		ISOPHORONE, TOTAL	UG/L	Pesticide
78591	34409	117000*		12900*		ISOPHORONE, DISSOLVED	UG/L	Pesticide
78591	34410	117000*		12900*		ISOPHORONE, SUSPENDED	UG/L	Pesticide
75092	34423		5.0			METHYLENE CHLORIDE, TOTAL	UG/L	General Organic
75092	34424		5.0			METHYLENE CHLORIDE, DISSOLVED	UG/L	General Organic
75092	34425		5.0			METHYLENE CHLORIDE, SUSPENDED	UG/L	General Organic
91203	34443	2300*		2350*		NAPHTHALENE, DISSOLVED	UG/L	General Organic
91203	34444	2300*		2350*		NAPHTHALENE, SUSPENDED	UG/L	General Organic
98953	34447	27000*		6680*		NITROBENZENE, TOTAL	UG/L	General Organic
98953	34448	27000*		6680*		NITROBENZENE, DISSOLVED	UG/L	General Organic
98953	34449	27000*		6680*		NITROBENZENE, SUSPENDED	UG/L	General Organic
59507	34452	30*				PARACHLOROMETA CRESOL, TOTAL	UG/L	General Organic
59507	34453	30*				PARACHLOROMETA CRESOL, DISSOLVED	UG/L	General Organic
59507	34454	30*				PARACHLOROMETA CRESOL, SUSPENDED	UG/L	General Organic
87865	34459	20***	1.0	13		PCP (PENTACHLOROPHENOL), DISSOLVED	UG/L	Pesticide
87865	34460	20***	1.0	13		PCP (PENTACHLOROPHENOL), SUSPENDED	UG/L	Pesticide
85018	34461	30p		7.7p		PHENANTHRENE, TOTAL	UG/L	General Organic
85018	34462	30p		7.7p		PHENANTHRENE, DISSOLVED	UG/L	General Organic
85018	34463	30p		7.7p		PHENANTHRENE, SUSPENDED	UG/L	General Organic
108952	34466	10200*		5800*		PHENOL, DISSOLVED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108952	34467	10200*		5800*		PHENOL, SUSPENDED	UG/L	General Organic
127184	34475	5280*	5.0	10200*		TETRACHLOROETHYLENE, TOTAL	UG/L	General Organic
127184	34476	5280*	5.0	10200*		TETRACHLOROETHYLENE, DISSOLVED	UG/L	General Organic
127184	34477	5280*	5.0	10200*		TETRACHLOROETHYLENE, SUSPENDED	UG/L	General Organic
108883	34481	17500*	1000	6300*		TOLUENE, DISSOLVED	UG/L	General Organic
108883	34482	17500*	1000	6300*		TOLUENE, SUSPENDED	UG/L	General Organic
79016	34485	45000*	5.0	2000*		TRICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
79016	34486	45000*	5.0	2000*		TRICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
75014	34493		2.0			VINYL CHLORIDE, DISSOLVED	UG/L	General Organic
75014	34494		2.0			VINYL CHLORIDE, SUSPENDED	UG/L	General Organic
75354	34501		7.0			1,1-DICHLOROETHYLENE, TOTAL	UG/L	General Organic
75354	34502		7.0			1,1-DICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
75354	34503		7.0			1,1-DICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
71556	34506		200	31200*		1,1,1-TRICHLOROETHANE, TOTAL	UG/L	General Organic
71556	34507		200	31200*		1,1,1-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
71556	34508		200	31200*		1,1,1-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79005	34511		5.0			1,1,2-TRICHLOROETHANE, TOTAL	UG/L	General Organic
79005	34512		5.0			1,1,2-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
79005	34513		5.0			1,1,2-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79345	34516			9020*		1,1,2,2-TETRACHLOROETHANE, TOTAL	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
79345	34517			9020*		1,1,2,2-TETRACHLOROETHANE, DISSOLVED	UG/L	General Organic
79345	34518			9020*		1,1,2,2-TETRACHLOROETHANE, SUSPENDED	UG/L	General Organic
107062	34531	118000*	5.0	113000*		1,2-DICHLOROETHANE, TOTAL	UG/L	General Organic
107062	34532	118000*	5.0	113000*		1,2-DICHLOROETHANE, DISSOLVED	UG/L	General Organic
107062	34533	118000*	5.0	113000*		1,2-DICHLOROETHANE, SUSPENDED	UG/L	General Organic
95501	34536		600			1,2-DICHLOROBENZENE, TOTAL	UG/L	General Organic
95501	34537		600			1,2-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
95501	34538		600			1,2-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
78875	34541		5.0			1,2-DICHLOROPROPANE, TOTAL	UG/L	General Organic
78875	34542		5.0			1,2-DICHLOROPROPANE, DISSOLVED	UG/L	General Organic
78875	34543		5.0			1,2-DICHLOROPROPANE, SUSPENDED	UG/L	General Organic
156605	34546		100			TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	General Organic
156605	34547		100			TRANS-1,2-DICHLOROETHENE, DISSOLVED	UG/L	General Organic
156605	34548		100			TRANS-1,2-DICHLOROETHENE, SUSPENDED	UG/L	General Organic
120821	34551		70			1,2,4-TRICHLOROBENZENE, TOTAL	UG/L	General Organic
120821	34552		70			1,2,4-TRICHLOROBENZENE, DISSOLVED	UG/L	General Organic
120821	34553		70			1,2,4-TRICHLOROBENZENE, SUSPENDED	UG/L	General Organic
541731	34566		600			1,3-DICHLOROBENZENE, TOTAL	UG/L	General Organic
541731	34567		600			1,3-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
541731	34568		600			1,3-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
106467	34571		75			1,4-DICHLOROBENZENE, TOTAL	UG/L	General Organic
106467	34572		75			1,4-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
106467	34573		75			1,4-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
95578	34586	4380*				2-CHLOROPHENOL, TOTAL	UG/L	General Organic
95578	34587	4380*				2-CHLOROPHENOL, DISSOLVED	UG/L	General Organic
95578	34588	4380*				2-CHLOROPHENOL, SUSPENDED	UG/L	General Organic
120832	34601	2020*				2,4-DICHLOROPHENOL, TOTAL	UG/L	General Organic
120832	34602	2020*				2,4-DICHLOROPHENOL, DISSOLVED	UG/L	General Organic
120832	34603	2020*				2,4-DICHLOROPHENOL, SUSPENDED	UG/L	General Organic
105679	34606	2120*				2,4-DIMETHYLPHENOL, TOTAL	UG/L	General Organic
105679	34607	2120*				2,4-DIMETHYLPHENOL, DISSOLVED	UG/L	General Organic
105679	34608	2120*				2,4-DIMETHYLPHENOL, SUSPENDED	UG/L	General Organic
121142	34611	330*		590*		2,4-DINITROTOLUENE, TOTAL	UG/L	General Organic
121142	34612	330*		590*		2,4-DINITROTOLUENE, DISSOLVED	UG/L	General Organic
121142	34613	330*		590*		2,4-DINITROTOLUENE, SUSPENDED	UG/L	General Organic
72548	34651	0.6*		3.6*		P,P'-DDD, DISSOLVED	UG/L	Pesticide
72548	34652	0.6*		3.6*		P,P'-DDD, SUSPENDED	UG/L	Pesticide
72559	34653	1050*		14*		P,P'-DDE, DISSOLVED	UG/L	Pesticide
72559	34654	1050*		14*		P,P'-DDE, SUSPENDED	UG/L	Pesticide
50293	34655	1.1		0.13		P,P'-DDT, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
50293	34656	1.1		0.13		P,P'-DDT, SUSPENDED	UG/L	Pesticide
1746016	34675	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), TOT	UG/L	General Organic
1746016	34676	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), DISS	UG/L	General Organic
1746016	34677	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), SUSP	UG/L	General Organic
108952	34694	10200*		5800*		PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	UG/L	General Organic
91203	34696	2300*		2350*		NAPHTHALENE, TOTAL	UG/L	General Organic
75990	38432		200			DALAPON, WATER, TOTAL	UG/L	Pesticide
75990	38433		200			DALAPON, WATER, DISSOLVED	UG/L	Pesticide
75990	38434		200			DALAPON, WATER, SUSPENDED	UG/L	Pesticide
96128	38437		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL	UG/L	Pesticide
96128	38438		0.2			DIBROMOCHLOROPROPANE, WATER, DISSOLVED	UG/L	Pesticide
96128	38439		0.2			DIBROMOCHLOROPROPANE WATER, SUSPENDED	UG/L	Pesticide
96128	38760		0.2			DBCP, WATER, TOTAL	UG/L	Pesticide
96128	38761		0.2			DBCP, WATER, DISSOLVED	UG/L	Pesticide
96128	38762		0.2			DBCP, WATER, SUSPENDED	UG/L	Pesticide
88857	38779		7.0			DINOSEB, DISSOLVED	UG/L	Pesticide
88857	38780		7.0			DINOSEB, SUSPENDED	UG/L	Pesticide
23135220	38865		200			OXAMYL, TOTAL	UG/L	Pesticide
23135220	38866		200			OXAMYL, DISSOLVED	UG/L	Pesticide
23135220	38867		200			OXAMYL, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
145733	38926		100			ENDOTHALL, WHOLE WATER SAMPLE	UG/L	Pesticide
2921882	38932	0.083		0.011		CHLORPYRIFOS, TOTAL RECOVERABLE	UG/L	Pesticide
2921882	38933	0.083		0.011		CHLORPYRIFOS, DISSOLVED	UG/L	Pesticide
2163806	38935		50			MONOSODIUM METHANEARSONATE (MSMA)	UG/L	Pesticide
2921882	39012	0.083		0.011		DURSBAN, FLAME PHOTOMETRIC, WATER SAMPLE	UG/L	Pesticide
56382	39015	0.065				ETHYLPARATHION, FLAME IONIFATION, WATER SAMPLE	UG/L	Pesticide
122349	39025		4.0			SIMAZINE, COULSON CONDUCTIVITY WATER SAMPLE	UG/L	Pesticide
87865	39032	20***	1.0	13		PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39033		3.0			ATRAZINE IN WHOLE WATER SAMPLE	UG/L	Pesticide
118741	39039	6.0[p]	1.0			HEXACHLOROBENZENE WATER SAMPLE, ELECTRON CPT	UG/L	Pesticide
93721	39045		50			2,4,5-TP INCLUDES ACIDS & SALTS WATER SAMPLE	UG/L	Pesticide
116063	39053		3.0			ALDICARB IN WHOLE WATER	UG/L	Pesticide
122349	39055		4.0			SIMAZINE IN WHOLE WATER	UG/L	Pesticide
117817	39100	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	UG/L	General Organic
117817	39103	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED	UG/L	General Organic
117817	39104	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED	UG/L	General Organic
	39117	0.94*		2.994*		PHTHLATE ESTERS IN WATER	MG/L	General Organic
75014	39175		2.0			VINYL CHLORIDE-WHOLE WATER SAMPLE	UG/L	General Organic
79016	39180	45000*	5.0	2000*		TRICHLOROETHYLENE-WHOLE WATER SAMPLE	UG/L	General Organic
50293	39300	1.1		0.13		P,P' DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
72548	39310	0.6*		3.6*		P,P' DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39320	1050*		14*		P,P' DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39330	3.0		1.3		ALDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39331	3.0		1.3		ALDRIN IN FILT. FRAC. OF WAT. SAMP.	UG/L	Pesticide
309002	39332	3.0		1.3		ALDRIN IN SUSP. FRAC. OF WAT. SAMP.	UG/L	Pesticide
58899	39340	2.0	0.2	0.16		GAMMA-BHC(LINDANE), WHOLE WATER	UG/L	Pesticide
58899	39341	2.0	0.2	0.16		GAMMA-BHC(LINDANE), DISSOLVED	UG/L	Pesticide
58899	39342	2.0	0.2	0.16		GAMMA-BHC(LINDANE), SUSPENDED	UG/L	Pesticide
57749	39350	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), WHOLE WATER	UG/L	Pesticide
57749	39352	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), DISSOLVED	UG/L	Pesticide
57749	39353	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), SUSPENDED	UG/L	Pesticide
72548	39360	0.6*		3.6*		DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72548	39361	0.6*		3.6*		DDD IN FILT. FRAC. OF WATER SMAPLE	UG/L	Pesticide
72548	39362	0.6*		3.6*		DDD IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39365	1050*		14*		DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39366	1050*		14*		DDE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39367	1050*		14*		DDE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39370	1.1		0.13		DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide
50293	39371	1.1		0.13		DDT IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39372	1.1		0.13		DDT IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
60571	39380	2.5		0.71		DIELDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
60571	39381	2.5		0.71		DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
60571	39382	2.5		0.71		DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
115297	39388	0.22		0.034		ENDOSULFAN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39390	0.18	2.0	0.037		ENDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39391	0.18	2.0	0.037		ENDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72208	39392	0.18	2.0	0.037		ENDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39400	0.73	3.0	0.21		TOXAPHENE IN WHOLE WATER SAMPLE	UG/L	Pesticide
8001352	39401	0.73	3.0	0.21		TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39402	0.73	3.0	0.21		TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39410	0.52	0.4	0.053		HEPTACHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	39411	0.52	0.4	0.053		HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39412	0.52	0.4	0.053		HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1024573	39420	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1024573	39421	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN FILT. FRAC. WATER SAMPLE	UG/L	Pesticide
1024573	39422	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN SUSP. FRAC. WATER SAMPLE	UG/L	Pesticide
72435	39478		40			METHOXYCHLOR IN WHOLE WATER DISSOLVED	UG/L	Pesticide
72435	39479		40			METHOXYCHLOR IN WHOLE WATER SUSPENDED	UG/L	Pesticide
72435	39480		40			METHOXYCHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
56382	39540	0.065				PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
56382	39542	0.065				PARATHION IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
56382	39543	0.065				PARATHION IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1912249	39630		3.0			ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39632		3.0			ATRAZINE DISSOLVED IN WATER	PPB	Pesticide
118741	39700	6.0[p]	1.0			HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	UG/L	General Organic
87683	39702	90[*]		32[*]		HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE	UG/L	General Organic
1918021	39720		500			PICLORAM IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39730		70			2,4-D IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39732		70			2,4-D IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
94757	39733		70			2,4-D IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39760		50			SILVEX IN WHOLE WATER SAMPLE	UG/L	Pesticide
93721	39762		50			SILVEX IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39763		50			SILVEX IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
58899	39782	2.0	0.2	0.16		LINDANE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1071836	39941		700			ROUNDUP IN WHOLE WATER SAMPLE (GLYPHOSATE)	UG/L	Pesticide
7782505	45650	0.019		0.013		CHLORINE, IN ORGANIC COMPOUNDS, WATER, WHOLE	MG/L	General Inorganic
56382	46315	0.065				ETHYL PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
58899	46322	2.0	0.2	0.16		LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	46326	0.52	0.4	0.053		HEPTACHLOR AND METABOLITES IN WHOLE H2O SAMPLE	UG/L	Pesticide
15972608	46342		2.0			ALACHLOR (LASSO), WATER, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782505	46472	0.019		0.013		CHLORINE, TOTAL RESIDUAL, AVERAGE VALUE, WATER	MG/L	General Inorganic
7782505	46473	0.019		0.013		CHLORINE, FREE AVAILABLE, AVERAGE VALUE, WATER	MG/L	General Inorganic
57125	46479	22	200	1.0		CYANIDE, DISSOLVED, WATER	UG/L	General Inorganic
7440382	46551	360	50	69		ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILTERED	UG/L	Metal
7440393	46558		2000			BARIUM, FIELD ACIDIFIED W/HNO3-LAB FILT	UG/L	Metal
7440439	46559	3.9[+]	5.0	43		CADMIUM,FIELD ACIDIFIED-HNO3-LAB FILTER	UG/L	Metal
7440473	46560		100			CHROMIUM, FIELD ACIDIFIED-HNO3-LAB FILT.	UG/L	Metal
7440508	46562	18[+]	1300[a]	2.9		COPPER, FIELD ACIDIFIED-HNO3- LAB FILTER.	UG/L	Metal
7439921	46564	82[+]	15[a]	220		LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED	UG/L	Metal
7440224	46566	4.1[+]	100[s]	0.12		SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.	UG/L	Metal
7440666	46567	120[+]	5000[s]	95		ZINC, EXTRACTABLE, FIELD ACID W/HNO3,LAB FILTR	UG/L	Metal
56382	49011	0.065				UNKNOWNS AS PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
7782505	50058	0.019		0.013		CHLORINE DOSE	MG/L	General Inorganic
7782505	50060	0.019		0.013		CHLORINE, TOTAL RESIDUAL	MG/L	General Inorganic
7782505	50064	0.019		0.013		CHLORINE, FREE AVAILABLE	MG/L	General Inorganic
7782505	50066	0.019		0.013		CHLORINE, COMBINED AVAILABLE	MG/L	General Inorganic
7782505	50074	0.019		0.013		CHLORITE, WHOLE WATER	MG/L	General Inorganic
	61215				200[^]	FECAL COLIFORM, GENERAL #/100ML	#/100ML	Bacteriological
16887006	70352	860	250[s]			CHLORIDE, ORGANIC	MG/L	General Organic
14797558	71850		44			NITRATE NITROGEN, TOTAL (AS NO3)	MG/L	Nitrogen

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
14797558	71851		44			NITRATE NITROGEN, DISSOLVED (AS NO3)	MG/L	Nitrogen
14797650	71855		3.3			NITRITE NITROGEN, TOTAL (AS NO2)	MG/L	Nitrogen
14797650	71856		3.3			NITRITE NITROGEN, DISSOLVED (AS NO2)	MG/L	Nitrogen
7439976	71890	2.4	2.0	2.1		MERCURY, DISSOLVED	UG/L	Metal
7439976	71895	2.4	2.0	2.1		MERCURY, SUSPENDED	UG/L	Metal
7439976	71900	2.4	2.0	2.1		MERCURY, TOTAL	UG/L	Metal
7439976	71901	2.4	2.0	2.1		MERCURY,TOTAL RECOVERABLE IN WATER AS HG	UG/L	Metal
7440439	71946	3.9[+]	5.0	43		CADMIUM, EXTRACTABLE	UG/L	Metal
7440473	71947		100			CHROMIUM, EXTRACTABLE	UG/L	Metal
7439921	71949	82[+]	15[a]	220		LEAD, EXTRACTABLE	UG/L	Metal
7440666	71950	120[+]	5000[s]	95		ZINC, EXTRACTABLE	UG/L	Metal
7440508	71951	18[+]	1300[a]	2.9		COPPER, EXTRACTABLE	UG/L	Metal
1336363	76011	2000	500	10000		PCBS, SUSPENDED, WATER	NG/L	General Organic
1336363	76012	2000	500	10000		PCBS, TOTAL RECOVERABLE, WATER	NG/L	General Organic
156592	77093		70			CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	UG/L	General Organic
100425	77128		100			STYRENE, WHOLE WATER	UG/L	General Organic
106489	77296			29700[*]		P-CHLOROPHENOL, WHOLE WATER	UG/L	General Organic
106934	77651		0.05			1,2-DIBROMOETHANE, WHOLE WATER	UG/L	General Organic
95954	77687	100[p]		240[p]		2,4,5-TRICHLOROPHENOL, WHOLE WATER	UG/L	General Organic
935955	77769			440[*]		2,3,5,6-TETRACHLOROPHENOL, WHOLE WATER	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
103231	77903		400			BIS (2-ETHYLHEXYL) ADIPATE, WHOLE WATER	UG/L	General Organic
18540299	78247	16	100	1100		CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE	UG/L	Metal
57125	78248	22	200	1.0		CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE	UG/L	Metal
	78456	11*		12*		HALOMETHANES, SUMMATION, WHOLE WATER	MG/L	General Organic
14808798	78462		250s			SULFATE, WATER, DISSOLVED AS S	MG/L	Metal
85007	78885		20			DIQUAT DIBROMIDE (REGLONE) WHOLE WATER SAMPLE	UG/L	Pesticide
7440611	80020		20c			URANIUM, DISS. BY EXTRACTION FLUOROMETRIC	UG/L	Radiological
16065831	80357	1700	100	10300*		CHROMIUM, TRIVALENT, DISSOLVED	UG/L	Metal
57125	81208	0.022	0.2	0.001		CYANIDE,FREE (NOT AMENABLE TO CHLORINATION)	MG/L	General Inorganic
608731	81283	100*		0.34*		BENZENEHEXACHLORIDE, WHOLE WATER	UG/L	Pesticide
88857	81287		7.0			DNBP(C10H12N2O5), WHOLE WATER SAMPLE	UG/L	Pesticide
26638197	81327	23000*	5.0	10300*		DICHLOROPROPANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81333	1120*		1970*		DICHLOROBENZENE ISOMER, WHOLE WATER SAMPLE	UG/L	General Organic
2921882	81403	0.083		0.011		DURSBAN (CHLOROPYRIFOS) WHOLE WATER SAMPLE	UG/L	Pesticide
1563662	81405		40			CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	UG/L	Pesticide
76017	81501	7240*		390*		PENTACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81524	1120*		1970*		DICHLOROBENZENE, WHOLE WATER SAMPLE	UG/L	General Organic
25322207	81549	9320*				TETRACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
26638197	81703	23*	0.005*	10.3*		DICHLOROPROPANE, WHOLE WATER SAMPLE	MG/L	General Organic
7440508	81750	18+	1300a	2.9		COPPER, INTERSTITIAL WATERFROM SEDIMENTS	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	81752	1400[+]	100	75		NICKEL, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
7440666	81754	120[+]	5000[s]	95		ZINC, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
25323891	81853	18000[*]				TRICHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
7439976	81931	2.4	2.0	2.1		MERCURY (HG) SUSPENDED FRACTION OF WATER	UG/G	Metal
7440666	81933	120[+]	5000[s]	95		ZINC (ZN) SUSPENDED FRACTION OF WATER	UG/G	Metal
7439921	81936	82[+]	15[a]	220		LEAD (PB) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440439	81937	3.9[+]	5.0	43		CADMIUM (CD) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81938		100			CHROMIUM (CR) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440508	81939	18[+]	1300[a]	2.9		COPPER (CU) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440666	81940	120[+]	5000[s]	95		ZINC (ZN) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81941		100			CHROMIUM (CR) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440508	81942	18[+]	1300[a]	2.9		COPPER (CU) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440666	81943	120[+]	5000[s]	95		ZINC (ZN) DISSOLVED ANIONIC SPECIES	UG/L	Metal
	82078				50[l]	TURBIDITY, FIELD	NTU	Physical
	82079				50[l]	TURBIDITY, LAB	NTU	Physical
88857	82226		7.0			2 SECONDARY BUTYL 4,6-DINITROPHENOL	UG/L	Pesticide
16887006	82295	860000	250000[s]			CHLORIDE DISSOLVED AS CL IN WATER	UG/L	General Inorganic
72435	82350		40			METHOXYCHLOR, DISSOLVED IN WATER	UG/L	Pesticide
72435	82351		40			METHOXYCHLOR, SUSPENDED IN WATER	UG/L	Pesticide
115297	82354	0.22		0.034		ENDOSULFAN, DISSOLVED IN WATER	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
115297	82355	0.22		0.034		ENDOSULFAN, SUSPENDED IN WATER	UG/L	Pesticide
57125	82573	0.022	0.2	0.001		CYANIDE/CHLORINATION IN WATER	MG/L	General Inorganic
1646873	82586		4.0			ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE	UG/L	General Organic
1646884	82587		2.0			ALDICARB SULFONE, WHOLE WATER, TOTAL RECOVERABLE	UG/L	General Organic
23135220	82613		200			OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
1563662	82615		40			CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
116063	82619		3.0			ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
33213659	82624	0.22		0.034		ENDOSULFAN, BETA, WH WATER, TOTAL RECOVERABLE	UG/L	Pesticide
96128	82625		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
7440382	82702	360	50	69		ARSENIC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440393	82703		2			BARIUM, FIELD ACIDIFIED, DECANTED, WATER	MG/L	Metal
7440417	82704	130*	4.0			BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440439	82705	3.9+	5.0	43		CADMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440473	82706		100			CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440508	82708	18+	1300[a]	2.9		COPPER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439921	82711	82+	15[a]	220		LEAD, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439976	82713	2.4	2.0	2.1		MERCURY, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440020	82715	1400+	100	75		NICKEL, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440224	82716	4.1+	100[s]	0.12		SILVER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440666	82719	120+	5000[s]	95		ZINC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal

Footnote Key:

*Insufficient Data to Develop Criteria. Value Presented is the L.O.E.L. - Lowest Observed Effect Level.

+Hardness Dependent Criteria (100 mg/L $CaCO_3$ Used).

***pH Dependent Criteria (7.8 pH Used).

=Rule of thumb criterion used by the NPS Air Quality Division for determining sensitivity to acid deposition.

^Freshwater bathing criterion, EPA geometric mean based on at least 5 samples equally spaced over a 30-day period; Enterococci marine water bathing criterion 35 CFU/100 ml.

#EPA freshwater aquatic life chronic criterion; marine criterion is ≤6.5, ≥8.5.

!Arizona state standard.

[a]EPA action level, 40 CFR 141.80.

[b]California and Florida state bathing water standards.

[c]A Compilation of Water Quality Goals, California Regional Water Quality Control Board Central Valley Region, Sacramento, California, September, 1991.

[n]Total coliform drinking water maximum contaminant level (1 cfu/100ml or 1 mpn/100ml) was not used in water quality criteria comparisons.

[p]Proposed Criterion.

[r]Average annual concentration assumed to produce a total body or organ dose of 4 mrem/year, 40 CFR 141.16.

[s]EPA National Secondary Drinking Water Regulation, 40 CFR 143.

[t]The maximum contaminant level for the sum of the concentrations of trihalomethanes is 100 µg/L, 40 CFR 141.12.

[u]Coldwater criterion one day minimum; warmwater criterion seven day mean minimum.

Appendix G

Inventory Data Evaluation and Analysis (IDEA)
Servicewide Inventory and Monitoring Program "Level I"
Parameter Groups

The following table provides the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameter groups (National Park Service 1993). In order to determine the presence and/or absence of data for each of these parameter groups in the park, the parameter groups had to be defined by STORET parameter codes. This table provides the STORET codes and parameter descriptions for each parameter comprising one of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameter groups. Additional parameters could have been incorporated into each group, but an effort was made to represent each group with the parameters deemed to most likely occur in STORET and parks. The Toxic Elements Parameter Group was defined as the EPA's Clean Water Act Section 304(a) Priority Toxic Pollutants (40 CFR 131.36). Parameters are listed in ascending order of STORET code within each parameter group. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to find all the parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

STORET Code	Water Temperature Parameter Group	C.A.S. Number
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	-
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	-
STORET Code	**Flow Parameter Group[1]**	**C.A.S. Number**
00056	FLOW RATE, GALLONS/DAY	-
00058	FLOW RATE, GALLONS/MIN.	-
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	-
00060	FLOW, STREAM, MEAN DAILY CFS	-
00061	FLOW, STREAM, INSTANTANEOUS CFS	-
00065	STAGE, STREAM (FEET)	-
00067	TIDE STAGE CODE	-
00072	STAGE, STREAM (METERS)	-

[1]Tide stage is included in the Flow Parameter Group for coastal parks.

STORET Code	Clarity/Turbidity Parameter Group	C.A.S. Number
00070	TURBIDITY, (JACKSON CANDLE UNITS)	-
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	-
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	-
00077	TRANSPARENCY, SECCHI DISC (INCHES)	-
00078	TRANSPARENCY, SECCHI DISC (METERS)	-
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	-
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	-
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	-
STORET Code	**Conductivity Parameter Group**	**C.A.S. Number**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	-
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	-
00096	SALINITY AT 25 DEGREES C (MG/ML)	-
00480	SALINITY - PARTS PER THOUSAND	-
STORET Code	**Dissolved Oxygen Parameter Group**	**C.A.S. Number**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	7782447
00300	OXYGEN, DISSOLVED (MG/L)	7782447
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	7782447
00389	OXYGEN, DISSOLVED, LAB ANAL. BY PROBE OF FIELD SAMPLE (MG/L)	7782447
STORET Code	**pH Parameter Group**	**C.A.S. Number**
00400	PH (STANDARD UNITS)	-
00403	PH, LAB (STANDARD UNITS)	-
00406	PH, FIELD (STANDARD UNITS)	-

STORET Code	Alkalinity Parameter Group	C.A.S. Number
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (µEQ/L)	471341
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	471341
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	77098
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	471341
00435	ACIDITY, TOTAL (MG/L AS CACO3)	471341
00440	BICARBONATE ION (MG/L AS HCO3)	71523
00445	CARBONATE ION (MG/L AS CO3)	3812326

STORET Code	Nitrate/Nitrogen Parameter Group	C.A.S. Number
00600	NITROGEN, TOTAL (MG/L AS N)	17778880
00602	NITROGEN, DISSOLVED (MG/L AS N)	17778880
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	17778880
00607	NITROGEN, ORGANIC, DISSOLVED (MG/L AS N)	17778880
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	17778880
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17778880
00612	AMMONIA, UNIONZED (MG/L AS N)	7664417
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	17778880
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17778880
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	17778880
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	17778880
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	17778880
00631	NITRITE PLUS NITRATE, DISSOLVED 1 DET. (MG/L AS N)	17778880
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	14798039
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	14798039
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	14797558
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	14797558
71855	NITRITE NITROGEN, TOTAL (MG/L AS NO2)	14797650
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	14797650

STORET Code	Phosphate/Phosphorus Parameter Group	C.A.S. Number
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	14265442
00655	PHOSPHATE, POLY (MG/L AS PO4)	14265442
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	14265442
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7723140
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	7723140
00670	PHOSPHORUS, TOTAL ORGANIC (MG/L AS P)	7723140
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7723140
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7723140
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7723140

STORET Code	Sulfates/Total Dissolved Solids/Hardness Parameter Group	C.A.S. Number
00900	HARDNESS, TOTAL (MG/L AS CACO3)	471341
00945	SULFATE, TOTAL (MG/L AS SO4)	14808798
00946	SULFATE, DISSOLVED (MG/L AS SO4)	14808798
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	-

STORET Code	Chlorophyll Parameter Group	C.A.S. Number
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	479618
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	479618
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	479618
32217	CHLOROPHYLL A (UG/L) FLUOROMETRIC UNCORRECTED	479618
32223	CHLOROPHYLL A (MG/M2) SPECTROPHOTOMETRIC CORRECTED	479618
32228	CHLOROPHYLL A (MG/M2) PERIPHYTON SPECTRO.	479618
32229	CHLOROPHYLL A (MG/M2) FLUOR. CORRECTED, SUBSTRATER	479618
32230	CHLOROPHYLL A (MG/L)	479618

STORET Code	Bacteria Parameter Group	C.A.S. Number
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI	-
31501	COLIFORM, TOT, MEMBRANE FILTER, IMMED., M-ENDO MED,35C	-
31503	COLIFORM, TOT, MEMBRANE FILTER, DELAY, M-ENDO MED, 35C	-
31504	COLIFORM, TOT, MEMBRANE FILTER, IMMED., LES-ENDO AGAR, 35C	-
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	-
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	-
31507	COLIFORM, TOT, MPN, COMPLETED TEST,35C(TUBE 31508)	-
31508	COLIFORM, TOT, MPN, COMPLETED TEST, TUBE CONFIG.	-
31613	FECAL COLIFORM, MEMBR, FILTER,M-FC AGAR,44.5C,24HR	-
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	-
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	-
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	-
31617	FECAL COLIFORM, MPN,EIJKMAN TEST,44.5C(TUBE 31618)	-
31625	FECAL COLIFORM, MF, M-FC, 0.7 UM	-
31648	E. COLI - MTEC-MF	-
31649	ENTEROCOCCI- ME-MF	-
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	-
31676	FECAL STREPTOCOCCI, MPN, KF BROTH, TUBE CONFIG.	-
31677	FECAL STREPTOCOCCI, MPN, AD-EVA, 35C (TUBE 31678)	-
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	-
61214	FECAL STREPTOCOCCI, GENERAL #/100ML	-
61215	FECAL COLIFORM, GENERAL #/100ML	-

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants)	C.A.S. Number
00718	CYANIDE, WEAK ACID, DISSOC. WATER, WHOLE (UG/L)	57125
00719	CYANIDE, FREE, IN WATER & WASTEWATERS, HBG (UG/L)	57125
00720	CYANIDE, TOTAL (MG/L AS CN)	57125
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) (MG/L)	57125

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	57125
00724	CYANIDE COMPLEXED TO A RANGE OF COMPNDS (UG/L)	57125
00969	CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00973	AMPHIBOLE ASBESTOS FIBERS/LITER	1332214
00976	AMBIGUOUS ASBESTOS FIBERS/LITER	1332214
00977	NON-AMPHIBOLE NON-CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00978	ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	7440382
00981	SELENIUM, TOTAL RECOVERABLE IN WATER AS SE (UG/L)	7782492
00982	THALLIUM, TOTAL RECOVERABLE IN WATER AS (UG/L)	7440280
00990	SELENITE, TOTAL RECOVERABLE INORGANIC (UG/L)	7782492
00991	ARSENIC, TOTAL RECOVER. TRIVALENT INORGANIC (UG/L)	7440382
00995	ARSENIC, INORGANIC DISSOLVED (UG/L AS AS)	7440382
00996	ARSENIC, INORGANIC SUSPENDED (UG/L AS AS)	7440382
00997	ARSENIC, INORGANIC TOTAL (UG/L AS AS)	7440382
00998	BERYLLIUM, TOTAL RECOVERABLE IN WATER AS BE (UG/L)	7440417
01000	ARSENIC, DISSOLVED (UG/L AS AS)	7440382
01001	ARSENIC, SUSPENDED (UG/L AS AS)	7440382
01002	ARSENIC, TOTAL (UG/L AS AS)	7440382
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	7440417
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)	7440417
01012	BERYLLIUM, TOTAL (UG/L AS BE)	7440417
01025	CADMIUM, DISSOLVED (UG/L AS CD)	7440439
01026	CADMIUM, SUSPENDED (UG/L AS CD)	7440439
01027	CADMIUM, TOTAL (UG/L AS CD)	7440439
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	7440473
01031	CHROMIUM, SUSPENDED (UG/L AS CR)	7440473
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	7440473
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	16065831
01034	CHROMIUM, TOTAL (UG/L AS CR)	7440473

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01040	COPPER, DISSOLVED (UG/L AS CU)	7440508
01041	COPPER, SUSPENDED (UG/L AS CU)	7440508
01042	COPPER, TOTAL (UG/L AS CU)	7440508
01049	LEAD, DISSOLVED (UG/L AS PB)	7439921
01050	LEAD, SUSPENDED (UG/L AS PB)	7439921
01051	LEAD, TOTAL (UG/L AS PB)	7439921
01057	THALLIUM, DISSOLVED (UG/L AS TL)	7440280
01058	THALLIUM, SUSPENDED (UG/L AS TL)	7440280
01059	THALLIUM, TOTAL (UG/L AS TL)	7440280
01065	NICKEL, DISSOLVED (UG/L AS NI)	7440020
01066	NICKEL, SUSPENDED (UG/L AS NI)	7440020
01067	NICKEL, TOTAL (UG/L AS NI)	7440020
01074	NICKEL, TOTAL RECOVERABLE IN WATER AS NI (UG/L)	7440020
01075	SILVER, DISSOLVED (UG/L AS AG)	7440224
01076	SILVER, SUSPENDED (UG/L AS AG)	7440224
01077	SILVER, TOTAL (UG/L AS AG)	7440224
01079	SILVER, TOTAL RECOVERABLE IN WATER AS AG (UG/L)	7440224
01089	COPPER AS SUSPENDED BLACK OXIDE IN WATER (MG/L)	7440508
01090	ZINC, DISSOLVED (UG/L AS ZN)	7440666
01091	ZINC, SUSPENDED (UG/L ZN)	7440666
01092	ZINC, TOTAL (UG/L AS ZN)	7440666
01094	ZINC, TOTAL RECOVERABLE IN WATER AS ZN (UG/L)	7440666
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	7440360
01096	ANTIMONY, SUSPENDED (UG/L AS SB)	7440360
01097	ANTIMONY, TOTAL (UG/L AS SB)	7440360
01113	CADMIUM, TOTAL RECOVERABLE IN WATER AS CD (UG/L)	7440439
01114	LEAD, TOTAL RECOVERABLE IN WATER AS PB (UG/L)	7439921
01118	CHROMIUM, TOTAL RECOVERABLE IN WATER AS CR (UG/L)	7440473
01119	COPPER,TOTAL RECOVERABLE IN WATER AS CU (UG/L)	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01124	THALLIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7440280
01128	THALLIUM,TOTAL RECOVERABLE <95%, UG/L AS TL	7440280
01138	SELENIUM, IN WATER, LBS/DAY	7782492
01145	SELENIUM, DISSOLVED (UG/L AS SE)	7782492
01146	SELENIUM, SUSPENDED (UG/L AS SE)	7782492
01147	SELENIUM, TOTAL (UG/L AS SE)	7782492
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7782492
01220	CHROMIUM, HEXAVALENT, DISSOLVED IN (UG/L AS CR)	18540299
01252	ARSENIC, LB/DAY/CFS STREAM FLOW	7440382
01253	CADMIUM, LB/DAY/CFS STREAM FLOW	7440439
01254	CHROMIUM, TOTAL (LBS/DAY/CFS STREAM FLOW)	7740473
01255	CHROMIUM, HEXAVALENT, LB/DAY/CFS STREAM FLOW	18540299
01256	COPPER, LB/DAY/CFS STREAM FLOW	7440508
01257	CYANIDE LB/DAY/CFS STREAM FLOW	57125
01259	LEAD, LB/DAY/CFS STREAM FLOW	7439921
01260	MERCURY, LB/DAY/CFS STREAM FLOW	7439976
01261	NICKEL, LB/DAY/CFS STREAM FLOW	7440020
01263	SILVER, LB/DAY/CFS STREAM FLOW	7440224
01264	ZINC LB/DAY/CFS STREAM FLOW	7440666
01268	ANTIMONY, (SB), WATER, TOTAL RECOVERABLE (UG/L)	7440360
01291	CYANIDE, FILTERABLE, TOTAL IN WATER (UG/L)	57125
01303	ZINC, POTENTIALLY DISSOLVED WATER (MG/L)	7440666
01304	SILVER, POTENTIALLY DISSOLVED WATER (MG/L)	7440224
01306	COPPER, POTENTIALLY DISSOLVED WATER (MG/L)	7440508
01307	CHROMIUM, HEXAVALENT, POTENT. DISS. WATER (MG/L)	18540299
01309	ARSENIC, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440382
01312	BERYLLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440417
01313	CADMIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440439

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01314	CHROMIUM, TRIVALENT, POTENT., DISS., WATER (MG/L)	16065831
01318	LEAD, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439921
01321	MERCURY, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439976
01322	NICKEL, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440020
01323	SELENIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7782492
01324	THALLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440280
01523	SILVER, IONIC (UG/L)	7440224
22675	SELENIUM, DISSOLVED ORGANIC (UG/L)	7782492
22676	SELENIUM, HEXAVALENT, DISSOLVED (UG/L)	7782492
22677	SELENIUM, TETRAVALENT, DISSOLVED	7782492
22678	ARSENIC, DISSOLVED ORGANIC (UG/L)	7440382
22679	ARSENIC, PENTAVALENT, DISSOLVED (UG/L)	7440382
22680	ARSENIC, TRIVALENT, DISSOLVED (UG/L)	7440382
30197	2-CHLOROETHYLVINYL ETHER,WATER,WHL,RECOVER (UG/L)	110758
30201	CHLOROMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74873
30202	BROMOMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74839
32003	CARBON CHLOROFORM AND CARBON ALCOHOL EXT. (UG/L)	67663
32005	CARBON CHLOROFORM EXTRACTABLES (UG/L)	67663
32021	CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLE (UG/L)	67663
32022	CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES (UG/L)	67663
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	75274
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	56235
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	107062
32104	BROMOFORM, WHOLE WATER, (UG/L)	75252
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	124481
32106	CHLOROFORM, WHOLE WATER (UG/L)	67663
32260	CARBON TETRACHLORIDE EXTRACTABLES (MG/L)	56235
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	67663

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	108883
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	71432
34198	BHC-DELTA, WATER, WHOLE (LBS/DAY)	319868
34200	ACENAPHTHYLENE, TOTAL (UG/L)	208968
34201	ACENAPHTHYLENE, DISSOLVED (UG/L)	208968
34202	ACENAPHTHYLENE, SUSPENDED (UG/L)	208968
34205	ACENAPHTHENE, TOTAL (UG/L)	83329
34206	ACENAPHTHENE, DISSOLVED (UG/L)	83329
34207	ACENAPHTHENE, SUSPENDED (UG/L)	83329
34210	ACROLEIN, TOTAL (UG/L)	107028
34211	ACROLEIN, DISSOLVED (UG/L)	107028
34212	ACROLEIN, SUSPENDED (UG/L)	107028
34215	ACRYLONITRILE, TOTAL (UG/L)	107131
34216	ACRYLONITRILE, DISSOLVED (UG/L)	107131
34217	ACRYLONITRILE, SUSPENDED (UG/L)	107131
34220	ANTHRACENE, TOTAL (UG/L)	120127
34221	ANTHRACENE, DISSOLVED (UG/L)	120127
34222	ANTHRACENE, SUSPENDED (UG/L)	120127
34225	ASBESTOS (FIBROUS) TOTAL (UG/L)	1332214
34226	ASBESTOS (FIBROUS) DISSOLVED (UG/L)	1332214
34227	ASBESTOS (FIBROUS) SUSPENDED (UG/L)	1332214
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	205992
34231	BENZO(B)FLUORANTHENE, DISSOLVED (UG/L)	205992
34232	BENZO(B)FLUORANTHENE, SUSPENDED (UG/L)	205992
34235	BENZENE, DISSOLVED (UG/L)	71432
34236	BENZENE, SUSPENDED (UG/L)	71432
34239	BENZIDINE, DISSOLVED (UG/L)	92875
34240	BENZIDINE, SUSPENDED (UG/L)	92875

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	207089
34243	BENZO(K)FLUORANTHENE, DISSOLVED (UG/L)	207089
34244	BENZO(K)FLUORANTHENE, SUSPENDED (UG/L)	207089
34247	BENZO-A-PYRENE, TOTAL (UG/L)	50328
34248	BENZO-A-PYRENE, DISSOLVED (UG/L)	50328
34249	BENZO-A-PYRENE, SUSPENDED (UG/L)	50328
34253	A-BHC-ALPHA, DISSOLVED (UG/L)	319846
34254	A-BHC-ALPHA, SUSPENDED (UG/L)	319846
34255	B-BHC-BETA, DISSOLVED (UG/L)	319857
34256	B-BHC-BETA, SUSPENDED (UG/L)	319857
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	319868
34260	DELTA BENZENE HEXACHLORIDE, DISSOLVED (UG/L)	319868
34261	DELTA BENZENE HEXACHLORIDE, SUSPENDED (UG/L)	319868
34265	R-BHC (LINDANE) GAMMA, DISSOLVED (UG/L)	58899
34266	R-BHC (LINDANE) GAMMA, SUSPENDED (UG/L)	58899
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	111444
34274	BIS (2-CHLOROETHYL) ETHER, DISSOLVED (UG/L)	111444
34275	BIS (2-CHLOROETHYL) ETHER, SUSPENDED (UG/L)	111444
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	111911
34279	BIS (2-CHLOROETHOXY) METHANE, DISSOLVED (UG/L)	111911
34280	BIS (2-CHLOROETHOXY) METHANE, SUSPENDED (UG/L)	111911
34288	BROMOFORM, DISSOLVED (UG/L)	75252
34289	BROMOFORM, SUSPENDED (UG/L)	75252
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	85687
34293	N-BUTYL BENZYL PHTHALATE, DISSOLVED (UG/L)	85687
34294	N-BUTYL BENZYL PHTHALATE, SUSPENDED (UG/L)	85687
34297	CARBON TETRACHLORIDE, DISSOLVED (UG/L)	56235
34298	CARBON TETRACHLORIDE, SUSPENDED (UG/L)	56235

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34301	CHLOROBENZENE, TOTAL (UG/L)	108907
34302	CHLOROBENZENE, DISSOLVED (UG/L)	108907
34303	CHLOROBENZENE, SUSPENDED (UG/L)	108907
34306	CHLORODIBROMOMETHANE, TOTAL (UG/L)	124481
34307	CHLORODIBROMOMETHANE, DISSOLVED (UG/L)	124481
34308	CHLORODIBROMOMETHANE, SUSPENDED (UG/L)	124481
34311	CHLOROETHANE, TOTAL (UG/L)	75003
34312	CHLOROETHANE, DISSOLVED (UG/L)	75003
34313	CHLOROETHANE, SUSPENDED (UG/L)	75003
34316	CHLOROFORM, DISSOLVED (UG/L)	67663
34317	CHLOROFORM, SUSPENDED (UG/L)	67663
34320	CHRYSENE, TOTAL (UG/L)	218019
34321	CHRYSENE, DISSOLVED (UG/L)	218019
34322	CHRYSENE, SUSPENDED (UG/L)	218019
34325	CYANIDE, SUSPENDED (MG/L)	57125
34327	DI-N-BUTYL PHTHALATE, DISSOLVED (UG/L)	84742
34328	DICHLOROBROMOMETHANE, DISSOLVED (UG/L)	75274
34329	DICHLOROBROMOMETHANE, SUSPENDED (UG/L)	75274
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	84662
34337	DIETHYL PHTHALATE, DISSOLVED (UG/L)	84662
34338	DIETHYL PHTHALATE, SUSPENDED (UG/L)	84662
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	131113
34342	DIMETHYL PHTHALATE, DISSOLVED (UG/L)	131113
34343	DIMETHYL PHTHALATE, SUSPENDED (UG/L)	131113
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	122667
34347	1,2-DIPHENYLHYDRAZINE, DISSOLVED (UG/L)	122667
34348	1,2-DIPHENYLHYDRAZINE, SUSPENDED (UG/L)	122667
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	1031078

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34352	ENDOSULFAN SULFATE, DISSOLVED (UG/L)	1031078
34353	ENDOSULFAN SULFATE, SUSPENDED (UG/L)	1031078
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	33213659
34357	ENDOSULFAN, BETA, DISSOLVED (UG/L)	33213659
34358	ENDOSULFAN, BETA, SUSPENDED (UG/L)	33213659
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	959988
34362	ENDOSULFAN, ALPHA, DISSOLVED (UG/L)	959988
34363	ENDOSULFAN, ALPHA, SUSPENDED (UG/L)	959988
34371	ETHYLBENZENE, TOTAL (UG/L)	100414
34372	ETHYLBENZENE, DISSOLVED (UG/L)	100414
34373	ETHYLBENZENE, SUSPENDED (UG/L)	100414
34376	FLUORANTHENE, TOTAL (UG/L)	206440
34377	FLUORANTHENE, DISSOLVED (UG/L)	206440
34378	FLUORANTHENE, SUSPENDED (UG/L)	206440
34381	FLUORENE, TOTAL (UG/L)	86737
34382	FLUORENE, DISSOLVED (UG/L)	86737
34383	FLUORENE, SUSPENDED (UG/L)	86737
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	77474
34387	HEXACHLOROCYCLOPENTADIENE, DISSOLVED (UG/L)	77474
34388	HEXACHLOROCYCLOPENTADIENE, SUSPENDED (UG/L)	77474
34391	HEXACHLOROBUTADIENE, TOTAL (UG/L)	87683
34392	HEXACHLOROBUTADIENE, DISSOLVED (UG/L)	87683
34393	HEXACHLOROBUTADIENE, SUSPENDED (UG/L)	87683
34396	HEXACHLOROETHANE, TOTAL (UG/L)	67721
34397	HEXACHLOROETHANE, DISSOLVED (UG/L)	67721
34398	HEXACHLOROETHANE, SUSPENDED (UG/L)	67721
34401	HEXACHLOROBENZENE, DISSOLVED (UG/L)	118741
34402	HEXACHLOROBENZENE, SUSPENDED (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	193395
34404	INDENO (1,2,3-CD) PYRENE, DISSOLVED (UG/L)	193395
34405	INDENO (1,2,3-CD) PYRENE, SUSPENDED (UG/L)	193395
34408	ISOPHORONE, TOTAL (UG/L)	78591
34409	ISOPHORONE, DISSOLVED (UG/L)	78591
34410	ISOPHORONE, SUSPENDED (UG/L)	78591
34413	METHYL BROMIDE, TOTAL (UG/L)	74839
34414	METHYL BROMIDE, DISSOLVED (UG/L)	74839
34415	METHYL BROMIDE, SUSPENDED (UG/L)	74839
34418	METHYL CHLORIDE, TOTAL (UG/L)	74873
34419	METHYL CHLORIDE, DISSOLVED (UG/L)	74873
34420	METHYL CHLORIDE, SUSPENDED (UG/L)	74873
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	75092
34424	METHYLENE CHLORIDE, DISSOLVED (UG/L)	75092
34425	METHYLENE CHLORIDE, SUSPENDED (UG/L)	75092
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	621647
34429	N-NITROSODI-N-PROPYLAMINE, DISSOLVED (UG/L)	621647
34430	N-NITROSODI-N-PROPYLAMINE, SUSPENDED (UG/L)	621647
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	86306
34434	N-NITROSODIPHENYLAMINE, DISSOLVED (UG/L)	86306
34435	N-NITROSODIPHENYLAMINE, SUSPENDED (UG/L)	86306
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	62759
34439	N-NITROSODIMETHYLAMINE, DISSOLVED (UG/L)	62759
34440	N-NITROSODIMETHYLAMINE, SUSPENDED (UG/L)	62759
34443	NAPHTHALENE, DISSOLVED (UG/L)	91203
34444	NAPHTHALENE, SUSPENDED (UG/L)	91203
34447	NITROBENZENE, TOTAL (UG/L)	98953
34448	NITROBENZENE, DISSOLVED (UG/L)	98953

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34449	NITROBENZENE, SUSPENDED (UG/L)	98953
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	59507
34453	PARACHLOROMETA CRESOL, DISSOLVED (UG/L)	59507
34454	PARACHLOROMETA CRESOL, SUSPENDED (UG/L)	59507
34457	PCB - 1242, DISSOLVED (UG/L)	53469219
34458	PCB - 1242, SUSPENDED (UG/L)	53469219
34459	PCP (PENTACHLOROPHENOL), DISSOLVED (UG/L)	87865
34460	PCP (PENTACHLOROPHENOL), SUSPENDED (UG/L)	87865
34461	PHENANTHRENE, TOTAL (UG/L)	85018
34462	PHENANTHRENE, DISSOLVED (UG/L)	85018
34463	PHENANTHRENE, SUSPENDED (UG/L)	85018
34466	PHENOL, DISSOLVED (UG/L)	108952
34467	PHENOL, SUSPENDED (UG/L)	108952
34469	PYRENE, TOTAL (UG/L)	129000
34470	PYRENE, DISSOLVED (UG/L)	129000
34471	PYRENE, SUSPENDED (UG/L)	129000
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	127184
34476	TETRACHLOROETHYLENE, DISSOLVED (UG/L)	127184
34477	TETRACHLOROETHYLENE, SUSPENDED (UG/L)	127184
34481	TOLUENE, DISSOLVED (UG/L)	108883
34482	TOLUENE, SUSPENDED (UG/L)	108883
34485	TRICHLOROETHYLENE, DISSOLVED (UG/L)	79016
34486	TRICHLOROETHYLENE, SUSPENDED (UG/L)	79016
34493	VINYL CHLORIDE, DISSOLVED (UG/L)	75014
34494	VINYL CHLORIDE, SUSPENDED (UG/L)	75014
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	75343
34497	1,1-DICHLOROETHANE, DISSOLVED (UG/L)	75343
34498	1,1-DICHLOROETHANE, SUSPENDED (UG/L)	75343

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	75354
34502	1,1-DICHLOROETHYLENE, DISSOLVED (UG/L)	75354
34503	1,1-DICHLOROETHYLENE, SUSPENDED (UG/L)	75354
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	71556
34507	1,1,1-TRICHLOROETHANE, DISSOLVED (UG/L)	71556
34508	1,1,1-TRICHLOROETHANE, SUSPENDED (UG/L)	71556
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	79005
34512	1,1,2-TRICHLOROETHANE, DISSOLVED (UG/L)	79005
34513	1,1,2-TRICHLOROETHANE, SUSPENDED (UG/L)	79005
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	79345
34517	1,1,2,2-TETRACHLOROETHANE, DISSOLVED (UG/L)	79345
34518	1,1,2,2-TETRACHLOROETHANE, SUSPENDED (UG/L)	79345
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	191242
34522	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, DISS. (UG/L)	191242
34523	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, SUSP. (UG/L)	191242
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	56553
34527	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, DISS. (UG/L)	56553
34528	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, SUSP. (UG/L)	56553
34531	1,2-DICHLOROETHANE, TOTAL (UG/L)	107062
34532	1,2-DICHLOROETHANE, DISSOLVED (UG/L)	107062
34533	1,2-DICHLOROETHANE, SUSPENDED (UG/L)	107062
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	95501
34537	1,2-DICHLOROBENZENE, DISSOLVED (UG/L)	95501
34538	1,2-DICHLOROBENZENE, SUSPENDED (UG/L)	95501
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	78875
34542	1,2-DICHLOROPROPANE, DISSOLVED (UG/L)	78875
34543	1,2-DICHLOROPROPANE, SUSPENDED (UG/L)	78875
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	156605

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34547	TRANS-1,2-DICHLOROETHENE, DISSOLVED (UG/L)	156605
34548	TRANS-1,2-DICHLOROETHENE, SUSPENDED (UG/L)	156605
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	120821
34552	1,2,4-TRICHLOROBENZENE, DISSOLVED (UG/L)	120821
34553	1,2,4-TRICHLOROBENZENE, SUSPENDED (UG/L)	120821
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	53703
34557	1,2,5,6-DIBENZANTHRACENE, DISSOLVED (UG/L)	53703
34558	1,2,5,6-DIBENZANTHRACENE, SUSPENDED (UG/L)	53703
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	542756
34562	1,3-DICHLOROPROPENE, DISSOLVED (UG/L)	542756
34563	1,3-DICHLOROPROPENE, SUSPENDED (UG/L)	542756
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	541731
34567	1,3-DICHLOROBENZENE, DISSOLVED (UG/L)	541731
34568	1,3-DICHLOROBENZENE, SUSPENDED (UG/L)	541731
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	106467
34572	1,4-DICHLOROBENZENE, DISSOLVED (UG/L)	106467
34573	1,4-DICHLOROBENZENE, SUSPENDED (UG/L)	106467
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	110758
34577	2-CHLOROETHYL VINYL ETHER, DISSOLVED (UG/L)	110758
34578	2-CHLOROETHYL VINYL ETHER, SUSPENDED (UG/L)	110758
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	91587
34582	2-CHLORONAPHTHALENE, DISSOLVED (UG/L)	91587
34583	2-CHLORONAPHTHALENE, SUSPENDED (UG/L)	91587
34586	2-CHLOROPHENOL, TOTAL (UG/L)	95578
34587	2-CHLOROPHENOL, DISSOLVED (UG/L)	95578
34588	2-CHLOROPHENOL, SUSPENDED (UG/L)	95578
34591	2-NITROPHENOL, TOTAL (UG/L)	88755
34592	2-NITROPHENOL, DISSOLVED (UG/L)	88755

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34593	2-NITROPHENOL, SUSPENDED (UG/L)	88755
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	117840
34597	DI-N-OCTYL PHTHALATE, DISSOLVED (UG/L)	117840
34598	DI-N-OCTYL PHTHALATE, SUSPENDED (UG/L)	117840
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	120832
34602	2,4-DICHLOROPHENOL, DISSOLVED (UG/L)	120832
34603	2,4-DICHLOROPHENOL, SUSPENDED (UG/L)	120832
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	105679
34607	2,4-DIMETHYLPHENOL, DISSOLVED (UG/L)	105679
34608	2,4-DIMETHYLPHENOL, SUSPENDED (UG/L)	105679
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	121142
34612	2,4-DINITROTOLUENE, DISSOLVED (UG/L)	121142
34613	2,4-DINITROTOLUENE, SUSPENDED (UG/L)	121142
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	51285
34617	2,4-DINITROPHENOL, DISSOLVED (UG/L)	51285
34618	2,4-DINITROPHENOL, SUSPENDED (UG/L)	51285
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	88062
34622	2,4,6-TRICHLOROPHENOL, DISSOLVED (UG/L)	88062
34623	2,4,6-TRICHLOROPHENOL, SUSPENDED (UG/L)	88062
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	606202
34627	2,6-DINITROTOLUENE, DISSOLVED (UG/L)	606202
34628	2,6-DINITROTOLUENE, SUSPENDED (UG/L)	606202
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	91941
34632	3,3'-DICHLOROBENZIDINE, DISSOLVED (UG/L)	91941
34633	3,3'-DICHLOROBENZIDINE, SUSPENDED (UG/L)	91941
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	101553
34637	4-BROMOPHENYL PHENYL ETHER, DISSOLVED (UG/L)	101553
34638	4-BROMOPHENYL PHENYL ETHER, SUSPENDED (UG/L)	101553

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	7005723
34642	4-CHLOROPHENYL PHENYL ETHER, DISSOLVED (UG/L)	7005723
34643	4-CHLOROPHENYL PHENYL ETHER, SUSPENDED (UG/L)	7005723
34646	4-NITROPHENOL, TOTAL (UG/L)	100027
34647	4-NITROPHENOL, DISSOLVED (UG/L)	100027
34648	4-NITROPHENOL, SUSPENDED (UG/L)	100027
34651	P,P'-DDD, DISSOLVED (UG/L)	72548
34652	P,P'-DDD, SUSPENDED (UG/L)	72548
34653	P,P'-DDE, DISSOLVED (UG/L)	72559
34654	P,P'-DDE, SUSPENDED (UG/L)	72559
34655	P,P'-DDT, DISSOLVED (UG/L)	50293
34656	P,P'-DDT, SUSPENDED (UG/L)	50293
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	534521
34658	DNOC (4,6-DINITRO-ORTHO-CRESOL), DISSOLVED (UG/L)	534521
34659	DNOC (4,6-DINITRO-ORTHO-CRESOL), SUSPENDED (UG/L)	534521
34662	PCB - 1221, DISSOLVED (UG/L)	11104282
34663	PCB - 1221, SUSPENDED (UG/L)	11104282
34665	PCB - 1232, DISSOLVED (UG/L)	11141165
34666	PCB - 1232, SUSPENDED (UG/L)	11141165
34671	PCB - 1016, TOTAL (UG/L)	12674112
34672	PCB - 1016, DISSOLVED (UG/L)	12674112
34673	PCB - 1016, SUSPENDED (UG/L)	12674112
34675	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD),TOT(UG/L)	1746016
34676	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(UG/L)	1746016
34677	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(UG/L)	1746016
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	108952
34696	NAPHTHALENE, TOTAL (UG/L)	91203
34750	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)TOT(PG/L)	1746016

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34751	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(PG/L)	1746016
34752	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(PG/L)	1746016
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	87865
39039	HEXACHLOROBENZENE WATER SAMPLE,ELECTRON CPT (UG/L)	118741
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	117817
39103	BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED, (UG/L)	117817
39104	BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED, (UG/L)	117817
39107	PHTHALATES,DIETHYLHEXYL SUS.FRAC.WTR DWT (MG/KG)	117817
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	84742
39114	DI-N-BUTYL PHTHALATE, SUSPENDED (UG/L)	84742
39115	PHTHALATES,DIBUTYL SUS.FRAC.WATER DWT (UG/KG)	84742
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	92875
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	75014
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	79016
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	309002
39331	ALDRIN IN FILT. FRAC. OF WAT. SAMP. (UG/L)	309002
39332	ALDRIN IN SUSP. FRAC. OF WAT. SAMP. (UG/L)	309002
39336	BHC-ALPHA, WATER, WHOLE (LBS/DAY)	319846
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319846
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319857
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	58899
39341	GAMMA-BHC(LINDANE), DISSOLVED (UG/L)	58899
39342	GAMMA-BHC(LINDANE), SUSPENDED (UG/L)	58899
39344	BHC-GAMMA, WATER, WHOLE (LBS/DAY)	58899
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	57749

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39352	CHLORDANE(TECH MIX & METABS), DISSOLVED (UG/L)	57749
39353	CHLORDANE(TECH MIX & METABS), SUSPENDED (UG/L)	57749
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39361	DDD IN FILT. FRAC. OF WATER SMAPLE (UG/L)	72548
39362	DDD IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72548
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39366	DDE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72559
39367	DDE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72559
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39371	DDT IN FILT. FRAC. OF WATER SAMPLE (UG/L)	50293
39372	DDT IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	50293
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	60571
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	60571
39382	DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	60571
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	72208
39391	ENDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72208
39392	ENDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72208
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	8001352
39401	TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	8001352
39402	TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	8001352
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	76448
39411	HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE (UG/L)	76448
39412	HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	76448
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	1024573
39421	HEPTACHLOR EPOXIDE IN FILT. FRAC. WAT. SAM. (UG/L)	1024573
39422	HEPTACHLOR EPOXIDE IN SUSP. FRAC. WAT. SAM. (UG/L)	1024573
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	11104282
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11141165

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	53469219
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12672296
39501	PCB - 1248 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	12672296
39502	PCB - 1248 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	12672296
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11097691
39505	PCB - 1254 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11097691
39506	PCB - 1254 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11097691
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11096825
39509	PCB - 1260 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11096825
39510	PCB - 1260 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11096825
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	118741
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	87683
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	58899
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	534521
46322	LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE (UG/L)	58899
46323	DELTA-BHC IN WHOLE WATER SAMPLE (UG/L)	319868
46326	HEPTACHLOR AND METABOLITES IN WH. H2O SAMP. (UG/L)	76448
46479	CYANIDE, DISSOLVED, WATER (UG/L)	57125
46551	ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILT. (UG/L)	7440382
46559	CADMIUM, FIELD ACIDIFIED-HNO3-LAB FILTER (UG/L-CD)	7440439
46560	CHROMIUM, FIELD ACIDIFIED-HN03-LAB FILT. (UG/L-CR)	7440473
46562	COPPER, FIELD ACIDIFIED-HNO3-LAB FILTER. (UG/L-CU)	7440508
46564	LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED (UG/L-PB)	7439921
46566	SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.(UG/L-AG)	7440224
46567	ZINC, EXTRACT. FIELD ACID W/HNO3, LAB FILT. (UG/L)	7440666
70012	PARACHLOROMETA CRESOL, WATER, WHOLE (LBS/DAY)	59507
70017	HEXACHLOROCYCLOPENTADIENE, WATER, WHOLE (LBS/DAY)	77474
70021	LEAD, (TCLP), WATER, TOTAL (MG/L)	7439921

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
71890	MERCURY, DISSOLVED (UG/L AS HG)	7439976
71895	MERCURY, SUSPENDED (UG/L AS HG)	7439976
71900	MERCURY, TOTAL (UG/L AS HG)	7439976
71901	MERCURY, TOTAL RECOVERABLE IN WATER AS HG (UG/L)	7439976
71946	CADMIUM, EXTRACTABLE (UG/L AS CD)	7440439
71947	CHROMIUM, EXTRACTABLE (UG/L AS CR)	7440473
71949	LEAD, EXTRACTABLE (UG/L AS PB)	7439921
71950	ZINC, EXTRACTABLE (UG/L AS ZN)	7440666
71951	COPPER, EXTRACTABLE (UG/L AS CU)	7440508
73063	CHLOROGUAIACOL,4-, TOTAL, WATER (UG/L)	16766306
73522	PROPANE, 2,2'-OXYBIS(1-CHLORO)- TOTAL (UG/L)	108601
77163	1,3-DICHLOROPROPENE-1, WHOLE WATER (UG/L)	542756
77354	1,1-DICHLORO-2,2-DIFLUOROETHANE WHOLE WATER (UG/L)	471432
77771	3-CHLORO-4-HYDROXYBENZOPHENONE, WHOLE WATER (UG/L)	55191203
78113	ETHYL BENZENE WHOLE WATER SAMPLE (UG/L)	100414
78124	BENZENE IN WATER (VOLATILE ANALYSIS) (UG/L)	71432
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) (UG/L)	108883
78208	2,4-DINITRO-O-CRESOL IN WHOLE WATER SAMPLE (UG/L)	534521
78247	CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE, WT (UG/L)	18540299
78248	CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE (UG/L)	57125
80357	CHROMIUM, TRIVALENT, DISSOLVED, AS CR	16065831
81208	CYANIDE, FREE (NOT AMEN. TO CHLORINATION) (MG/L)	57125
81210	CYANIDE - STATE OF ILLINOIS (MG/L)	57125
81214	CADMIUM - STATE OF ILLINOIS (MG/L)-COLD	7440439
81215	CHROMIUM - STATE OF ILLINOIS (MG/L), COLD DIGEST	18540299
81216	CHROMIUM(TRI)-STATE OF ILLINOIS (MG/L)-COLD DIGEST	16065831
81217	CHROMIUM, TOTAL - STATE OF ILLINOIS (MG/L) COLD DIGEST	7440473
81218	COPPER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
81220	LEAD, STATE OF ILLINOIS, MG/L, COLD DIGEST	7439921
81222	NICKEL - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440020
81223	SILVER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440224
81224	ZINC - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440666
81642	SILVER (AG) IN WATER POUNDS PER DAY (LBS/DAY)	7440224
81750	COPPER, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440508
81751	LEAD, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7439921
81752	NICKEL, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440020
81753	CADMIUM, INTERSTITIAL WATER FROM SEDIMENT	7440439
81754	ZINC, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440666
81766	HEPTACHLOR EPOXIDE IN EPILITHIC ALGAE SED. (UG/KG)	1024573
81931	MERCURY (HG) SUSPENDED FRACTION OF WATER (UG/G)	7439976
81932	CADMIUM (CD) SUSPENDED FRACTION OF WATER (UG/G)	7440439
81933	ZINC (ZN) SUSPENDED FRACTION OF WATER (UG/G)	7440666
81934	LEAD (PB) SUSPENDED FRACTION OF WATER (UG/G)	7439921
81936	LEAD (PB) DISSOLVED CATIONIC SPECIES (UG/L)	7439921
81937	CADMIUM (CD) DISSOLVED CATIONIC SPECIES (UG/L)	7440439
81938	CHROMIUM, DISSOLVED CATIONIC SPECIES (UG/L)	7440473
81939	COPPER (CU) DISSOLVED CATIONIC SPECIES (UG/L)	7440508
81940	ZINC (ZN) DISSOLVED CATIONIC SPECIES (UG/L)	7440666
81941	CHROMIUM, DISSOLVED ANIONIC SPECIES (UG/L)	7440473
81942	COPPER (CU) DISSOLVED ANIONIC SPECIES (UG/L)	7440508
81943	ZINC (ZN) DISSOLVED ANIONIC SPECIES (UG/L)	7440666
82058	CHROMIUM, TOTAL, PERCENT REMOVAL	7440473
82399	CHROMIUM, HEXAVALENT (KG/BATCH)	18540299
82512	M,P-DICHLOROBENZENE (MEASURES 1,3&1,4) TOT. (UG/L)	541731
82573	CYANIDE/CHLORINATION IN WATER (MG/L)	57125
82621	HEXACHLOROBENZENE, WATER, TOTAL RECOVER. (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
82622	ENDRIN ALDEHYDE, WH. WATER, TOTAL RECOVER. (UG/L)	7421934
82623	ENDOSULFAN SULFATE, WATER, TOTAL RECOVER. (UG/L)	1031078
82624	ENDOSULFAN, BETA, WH. WATER, TOTAL RECOVER. (UG/L)	33213659
82626	1,2-DIPHENYLHYDRAZINE, WATER, TOTAL RECOVER. (UG/L)	122667
82627	PARACHLOROMETA CRESOL, WATER, TOTAL RECOVER. (UG/L)	59507
82702	ARSENIC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440382
82704	BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440417
82705	CADMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440439
82706	CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440473
82708	COPPER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440508
82711	LEAD, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439921
82713	MERCURY, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439976
82715	NICKEL, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440020
82716	SILVER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440224
82719	ZINC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440666
85006	ZINC, TOTAL - (#/DAY)	7440666
85007	CHROMIUM, TOTAL (#/DAY)	7440473
85010	NICKEL, TOTAL - (#/DAY)	7440020
85013	MERCURY, TOTAL - (#/DAY)	7439976

Appendix H

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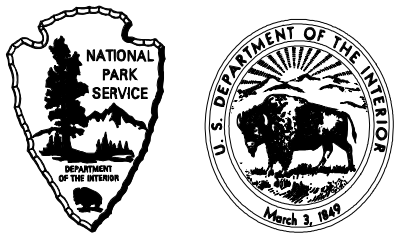
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As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The Department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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