BASELINE WATER QUALITY DATA

INVENTORY AND ANALYSIS

RICHMOND NATIONAL BATTLEFIELD PARK

VOLUME I OF II

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EXECUTIVE SUMMARY

This document presents the results of surface-water-quality data retrievals for Richmond National Battlefield Park (RICH) 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 32 industrial/municipal dischargers; four drinking water intakes; 14 active or inactive U. S. Geological Survey (USGS), U. S. National Weather Service, and U. S. National Oceanic Survey water gages (including stream, estuary, well, and climate); and 23 water impoundments. The results of the STORET retrieval for the study area yielded 144,291 observations for 695 separate parameters collected by the NPS, USGS, EPA, Virginia Department of Environmental Quality (VDEQ), and Maryland Department of Natural Resources (MDNR) at 149 monitoring stations from 1945 through 1998. Approximately 89 percent of the 144,291 observations within the study area were collected by the VDEQ from 1967 through 1998. Of the 149 monitoring stations, 17 stations were located within the park boundaries (see Station Period of Record Tabulation). Sixteen of these 17 stations were located within the Drewry's Bluff (Fort Darling) Unit and one station was within the Beaver Dam Creek Unit. Of the 149 monitoring stations in the study area, one station (RICH 0009) contained data locked by the MDNR[†]. These locked data are not included in the 144,291 total observations retrieved from STORET for the study area. Thirteen stations within the study area (none within park boundaries) were established but contained no data.

Most of the monitoring stations represent either one-time or intensive single-year sampling efforts by the collecting agencies. Forty-nine stations within the study area (one within park boundaries) yielded longer-term records consisting of multiple observations for several important water quality parameters (see Station Period of Record Tabulation). The station yielding the longer-term record within park boundaries is Beaverdam Creek at the State Route 156 Bridge at Mechanicsville (RICH 0136). The stations yielding the longest-term records within the study area, but outside of park boundaries, are: (1) James River at the U. S. Route 360 Bridge (RICH 0116); (2) Almond Creek at the State Route 5 Bridge (RICH 0094); (3) Chickahominy River at the U. S. Route 360 Bridge (RICH 0134); (4) Falling Creek at the U. S. Route 1 Bridge (RICH 0065); (5) James River at Buoy 157 (RICH 0032); (6) Chickahominy River at the State Route 156 Bridge (RICH 0130); (7) and James River at Buoy 166 (RICH 0069)[††].

[†]When data are entered into STORET and locked by the controlling agency (MDNR), 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 (MDNR).

[††]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 RICH water quality criteria screen found 21 groups of parameters that exceeded screening criteria at least once within the study area. Dissolved oxygen, pH, chloride, chlorine, cadmium, copper, lead, mercury, selenium, and zinc exceeded their EPA criteria for the protection of freshwater aquatic life. The pH exceeded the EPA criterion for the protection of marine aquatic life. Nitrite, nitrate, nitrite plus nitrate, chloride, barium, beryllium, cadmium, chromium, lead, mercury, nickel, and bis (2-ethylhexyl) phthlate exceeded their respective EPA criteria for drinking water. Fecal-indicator bacteria concentrations (total coliform and fecal coliform) and turbidity exceeded the WRD screening limits for freshwater and marine bathing and aquatic life, respectively.

Dissolved oxygen concentrations were measured 12,314 times at 104 monitoring stations from 1967 through 1998. Of the 11,924 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 352 observations at 44 non-marine stations were less than or equal to the 4 milligrams per liter (mg/L) EPA criterion for the protection of aquatic life from 1968 through 1998.

The pH was measured 7,875 times at 106 monitoring stations from 1945 through 1998. Of the 7,535 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 1,591 observations at 93 stations were outside the pH range of 6.5 to 9.0 standard units (SU) (EPA chronic criteria for freshwater aquatic life) or 6.5 to 8.5 SU (EPA chronic criteria for marine aquatic life) from 1945 through 1998. One-thousand-four-hundred-twenty-nine observations at 89 stations were less than or equal to pH 6.5 from 1945 through 1998. One-hundred-sixty observations at 26 non-marine stations were greater than or equal to pH 9.0 from 1967 through 1994. Two observations at a marine (estuary) station in the James River near Dutch Gap (RICH 0027) were greater than pH 8.5 in 1976. The lowest pH of 1.0 SU was reported at two stations, Chickahominy River at the U. S. Route 360 Bridge (RICH 0134) and Upham Brook at the U. S. Route 1 Bridge (RICH 0146), in March 1975 and September 1988, respectively. The highest pH of 12.3 SU was reported in Almond Creek at the State Route 5 Bridge (RICH 0094) in September 1972.

Turbidity was measured 1,370 times at 41 monitoring stations from 1971 through 1998. Of the 1,216 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 45 observations at 18 stations exceeded the WRD screening criterion of 50 Jackson Candle/Formazin/Nephelometric Turbidity Units from 1974 through 1998. The highest value of 390 JTU was reported in Almond Creek at the State Route 5 Bridge (RICH 0094) in March 1994.

Total coliform concentrations were measured 451 times at 25 monitoring stations from 1967 through 1986. Of the 423 observations used in the criteria analysis (see Remark Code Screen and Media Type Screen in the Methodology for explanation), 206 observations at 24 stations 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 1986. The highest value of 9,300,000 MPN/100 ml was reported in the James River near Richmond at Buoy No. 168 (RICH 0089) in July 1968. Fecal coliform concentrations were measured 5,496 times at 71 monitoring stations from 1970 through 1998. Of the 5,453 observations used in the criteria analysis (see Remark Code Screen and Media Type Screen in the Methodology and EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 2,657 observations at 69 stations exceeded the WRD bathing water screening criterion of 200 CFU/MPN/100 ml from 1970 through 1998. The highest value of at least 240,000 CFU/MPN/100 ml was reported four times at two stations in the James River, below Hatcher Island (RICH 0018) and near Bensley below a deepwater terminal (RICH 0070), during November and October 1971, respectively.

Chloride concentrations (including dissolved and total) were measured 1,564 times at 60 monitoring stations from

1945 through 1998. Of the 1,544 observations used in the criteria analysis[†††], seven total observations, ranging from 317 mg/L to 8,957 mg/L at five stream stations, in the James River (RICH 0018, RICH 0070, RICH 0092), Chickahominy River at the U. S. Route 360 Bridge (RICH 0134), and Upham Brook at the U. S. Route 1 Bridge (RICH 0146), exceeded the drinking water criterion of 250 mg/L from 1970 through 1995. Four of these seven concentrations also exceeded the acute freshwater criterion of 860 mg/L during 1970. The highest value of 8,957 mg/L was reported in the James River below Goode Creek (RICH 0092) in May 1970.

Total residual chlorine concentrations were measured 55 times at 27 stream stations from 1973 through 1983. Of the 54 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 19 observations at ten stations, in the James River (RICH 0011, RICH 0023, RICH 0032, RICH 0060, RICH 0064, RICH 0069, RICH 0089, RICH 0113), near Ashton Creek at the Sunoco tertiary treatment operation (RICH 0001), and Grindall Creek approximately 100 yards from the mouth of the creek (RICH 0066), exceeded the acute freshwater criterion of 0.019 mg/L from 1973 through 1983. The highest concentration of at least 3.0 mg/L was reported four times near Ashton Creek at the Sunoco tertiary treatment operation (RICH 0001) during 1973 and 1974.

Nitrate concentrations (including dissolved and total as N and dissolved as NO_3) were measured 4,569 times at 58 non-marine stations from 1945 through 1998. Of the 4,214 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), four total as N concentrations, ranging from 32.87 mg/L to 48.19 mg/L at two stations, near Ashton Creek at the Sunoco tertiary treatment operation (RICH 0001) and Upham Brook at the U. S. Route 1 Bridge (RICH 0146), exceeded the drinking water criterion of 10 mg/L for nitrate as N from 1974 through 1980. The highest concentration of 48.19 mg/L was reported near Ashton Creek at the Sunoco tertiary treatment operation (RICH 0001) in May 1974.

Nitrite concentrations (including dissolved and total as N and dissolved as NO_2) were measured 4,889 times at 56 non-marine stations from 1968 through 1998. Of the 4,531 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), seven total as N concentrations, ranging from 1.1 mg/L to 3.5 mg/L at five stream stations, in Grindall Creek (RICH 0066, RICH 0067, RICH 0080) and Proctors Creek (RICH 0019, RICH 0029), exceeded the drinking water criterion of 1 mg/L for nitrite as N from 1976 through 1979. The highest concentration of 3.5 mg/L was reported in Grindall Creek approximately 100 yards from the mouth of the creek (RICH 0066) in October 1978.

Nitrite plus nitrate concentrations (including dissolved and total) were measured 867 times at 51 monitoring stations from 1969 through 1998. Of the 679 observations used in the criteria analysis[†††] (see Media Type Screen in the Methodology for explanation), two total concentrations, 35 mg/L in Gillie Creek at the Government Road Bridge (RICH 0102) and 12.19 mg/L in Grindall Creek approximately 100 yards from the mouth of the creek (RICH 0066), exceeded the drinking water criterion of 10 mg/L in April 1982 and June 1977, respectively.

Barium concentrations (including dissolved and total) were measured 14 times at nine non-marine stations within the park in Drewry's Bluff (Fort Darling) Unit from 1989 through 1996. One total concentration of 4,540 micrograms per liter (μg/L) at a leachate seep at the Fort Darling Landfill (RICH 0039) exceeded the drinking water criterion of 2,000 μg/L in May 1996.

Total beryllium concentrations were measured 14 times at eight non-marine stations from 1992 through 1996. One concentration of 36 μg/L at a leachate seep at the Fort Darling Landfill (RICH 0039) within the park's Drewry's Bluff (Fort Darling) Unit exceeded the drinking water criterion of 4 μg/L in May 1996.

[†††]Water quality observations collected at marine stations were excluded from the criteria analysis due to the absence of applicable marine criteria for this parameter; however, observations collected at tidally influenced riverine stations may have been included. Depending on tidal conditions at the time of measurement, comparisons of data from tidally influenced riverine stations against the chloride and nitrite plus nitrate freshwater or drinking water criteria may not be appropriate.

Cadmium concentrations (including dissolved and total) were measured 448 times at 55 non-marine stations from 1970 through 1996. Of the 193 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 17 concentrations at 14 stations exceeded the acute freshwater criterion of 3.9 μg/L from 1972 through 1996. Sixteen of these 17 concentrations also equaled or exceeded the drinking water criterion of 5 μg/L from 1972 through 1996. The highest value of 10 μg/L was reported ten times at nine monitoring stations (RICH 0002, RICH 0019, RICH 0035, RICH 0053, RICH 0094, RICH 0096, RICH 0105, RICH 0130, RICH 0145) from 1972 through 1991.

Chromium concentrations (including dissolved and total) were measured 626 times at 56 non-marine stations from 1969 through 1996. Of the 625 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), one total concentration of 715 μg/L at a leachate seep at the Fort Darling Landfill (RICH 0039) within the park's Drewry's Bluff (Fort Darling) Unit exceeded the drinking water criterion of 100 μg/L in May 1996.

Copper concentrations (including dissolved and total) were also measured 626 times at 56 non-marine stations from 1969 through 1996. Fifty concentrations at 28 stations equaled or exceeded the acute freshwater criterion of 18 μg/L from 1969 through 1996. The highest value of 615 μg/L was reported at a leachate seep at the Fort Darling Landfill (RICH 0039) within the park's Drewry's Bluff (Fort Darling) Unit in May 1996.

Lead concentrations (including dissolved and total) were measured 584 times at 56 non-marine stations from 1970 through 1996. Seventy-four total concentrations at 27 stations equaled or exceeded the drinking water criterion of 15 μg/L from 1970 through 1991. Three of these 74 concentrations also exceeded the acute freshwater criterion of 82 μg/L during May 1976. The highest value of 414 μg/L was reported in Almond Creek at the State Route 5 Bridge (RICH 0094) during May 1976.

Mercury concentrations (including dissolved and total) were measured 603 times at 56 non-marine stations from 1970 through 1996. Of the 600 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), eight concentrations, ranging from 2 μg/L to 7.6 μg/L at seven stations, within the park in Drewry's Bluff (Fort Darling) Unit (RICH 0044, RICH 0047, RICH 0051, RICH 0054) and in the James River (RICH 0069, RICH 0089, RICH 0116), equaled or exceeded the drinking water criterion of 2 μg/L during 1970 and 1991. Six of these eight concentrations also exceeded the acute freshwater criterion of 2.4 μg/L during 1970 and 1991. The highest value of 7.6 μg/L was reported in the James River at Buoy No. 168 (RICH 0089) in September 1970.

Nickel concentrations (including dissolved and total) were measured 454 times at 56 non-marine stations from 1973 through 1996. One total concentration of 634 μg/L at a leachate seep at the Fort Darling Landfill (RICH 0039) within the park's Drewry's Bluff (Fort Darling) Unit exceeded the drinking water criterion of 100 μg/L in May 1996.

Selenium concentrations (including dissolved and total) were measured 92 times at 21 non-marine stations from 1988 through 1996. One total concentration of 26 μg/L in the Chickahominy River at the U. S. Route 360 Bridge (RICH 0134) exceeded the acute freshwater criterion of 20 μg/L in September 1991.

Zinc concentrations (including dissolved and total) were measured 635 times at 56 non-marine stations from 1969 through 1996. Eleven concentrations at eight stations (RICH 0028, RICH 0039, RICH 0069, RICH 0084, RICH 0121, RICH 0131, RICH 0132, RICH 0143) exceeded the acute freshwater criterion of 120 μg/L from 1970 through 1996. The highest value of 3,850 μg/L was reported at a leachate seep at the Fort Darling Landfill (RICH 0039) within the park's Drewry's Bluff (Fort Darling) Unit in May 1996.

Bis (2-ethylhexyl) phthalate concentrations were measured six times at five non-marine stations (RICH 0011, RICH 0039, RICH 0041, RICH 0042, RICH 0049) during 1996 and 1997. Five concentrations, ranging from 8 μg/L to 28 μg/L at four stations, within the park in Drewry's Bluff (Fort Darling) Unit (RICH 0039, RICH 0042, RICH 0049) and in the James River (RICH 0011), exceeded the drinking water criterion of 6 μg/L during 1996 and 1997. The highest value of 28 μg/L was reported at a leachate seep at the Fort Darling Landfill (RICH 0039) within the

park's Drewry's Bluff (Fort Darling) Unit in May 1996.

The IDEA conducted for RICH indicates that STORET data exist for all 13 Level I parameter groups in the study area. For the group Chlorophyll, less than 5 percent of the observations were recorded since 1985. Overall, approximately 50 percent of the observations for Level I parameter groups were recorded since 1985. Data for six groups (Alkalinity, Flow, Clarity/Turbidity, Chlorophyll, Sulfates/Total Dissolved Solids/Hardness, and Toxic Elements) were recorded at less than half of the 135 monitoring stations with data. Relative to other parameter groups, data were limited for the group Chlorophyll. Results for 107 of the 126 EPA priority toxic pollutants (consisting of inorganic and organic parameters, metals, pesticides, and PCB's) were retrieved from STORET.

Surface water resources in the study area include the James, Chickahominy, and other rivers; Falling, Beaver Dam, Ashton, Upham, Boatswain, and numerous other creeks and brooks; Falling Creek and many other reservoirs; some lakes and ponds; springs and seeps; and marshes and wetlands. 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; landfill operations; stormwater runoff; urban development; agricultural activities; quarrying operations; recreational use; 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 characterizebaseline 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

[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.

national EPA water quality criteria for appropriate designated uses[2] and with the Servicewide Inventory and 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.

Gary Smillie provided hydrologic expertise in the determination of hydrologic seasons.

Greg Harp, Clint Bassett, and Amy Benton helped prepare reports and write the Executive Summaries.

Elizabeth Eisenhauer, Bill Folsom, Dana Griffin, Scott Ratchford, Jeff Ketcham, and Valdete Celaj provided digital cartographic support, both in determining retrieval/query areas and producing maps and graphics.

Kelli O'Connor, J. Chris Echohawk, Curtis Cooper, Adam Henson, Shawndra Mawhorter, Lisa Smith, Ryan Shy,

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[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.

Lisa Dummer, Eric Lord, Adriane Petersen, Margaret Matter, Richard Henderson, Ronda Burns, Aria Brissette, Nancy O'Keeffe, Melanie Schnier, Brett Atkinson, Paul Sorek, and Cara Ellis 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.

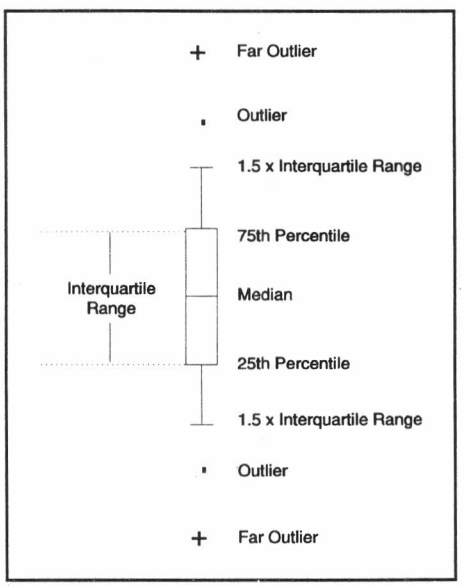
Table H. Definition of Descriptive Statistics Contained in Inventory, Annual, and Seasonal Tables

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 labelling 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, $\mu eq/l\ H^+$ 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 labelled 1 through the number of seasons defined for the park through hydrograph separation. The actual calendar dates that correspond to these numerically labelled seasons exist in the Overview section and the Seasonal Analysis tables in the Water Quality Results chapter. The axis labelling 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 RICH

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:	222655	815
# STORET Stations:	149	17
# Stations With No Data:	13	0
# Stations With No Stat. Analysis:	0	0
# Longer Term Stations:	49	1
Date of STORET Retrieval:	08/04/99	08/04/99
Period of Record:	07/30/45-12/15/98	11/30/76-09/02/97
# Parameters Measured:	695	452
# Water Quality Observations:	144291	2603
# Industrial/Municipal Facilities:	32	0
# Drinking Water Intakes:	4	0
# Water Gages:	14	0
# Water Impoundments:	23	0
# Total Plots:	224	0
# Time Series:	51	0
# Annual:	53	0
# Seasonal:	120	0

Hydrologic Definition of Seasons:

1. July 1 - October 14
2. October 15 - March 15
3. March 16 - June 30

Time Series Plot Criteria:

To be included in the time series plots, a station/parameter combination must have at least 25 years and at least 160 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 15 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.

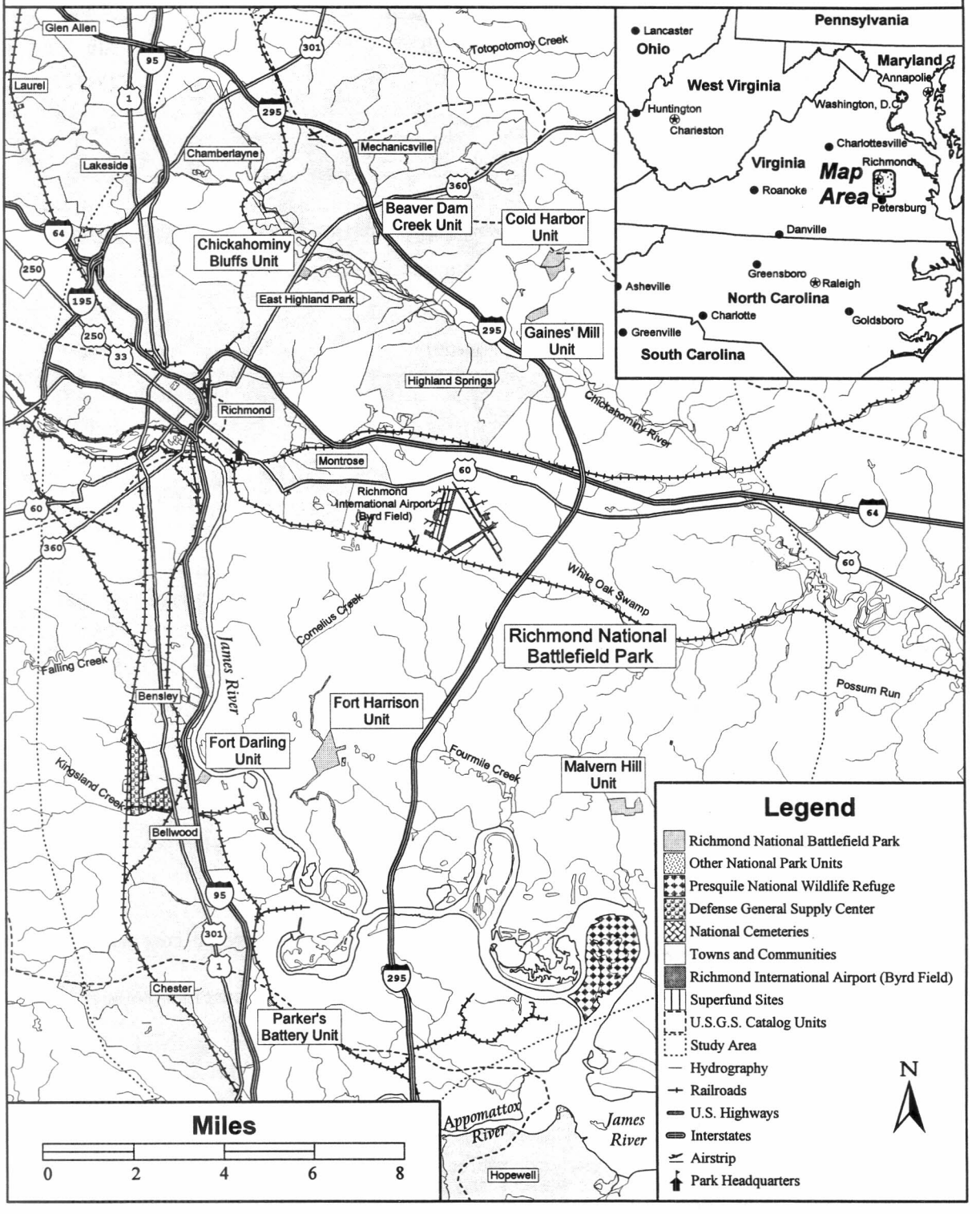
Seasonal Analysis Criteria:

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 25 years and observations in at least 4 of the 25 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.

Richmond National Battlefield Park

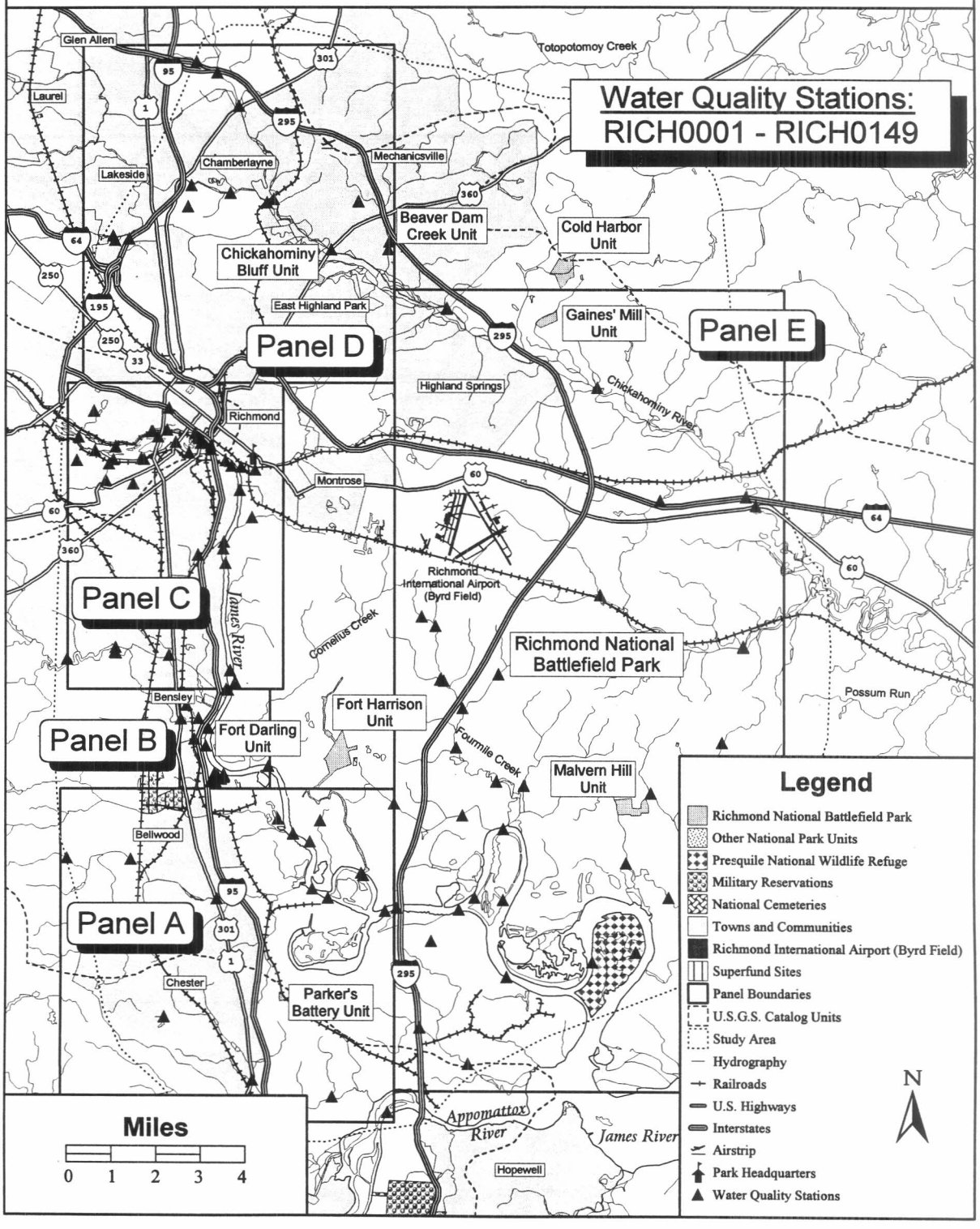
Regional Location Map

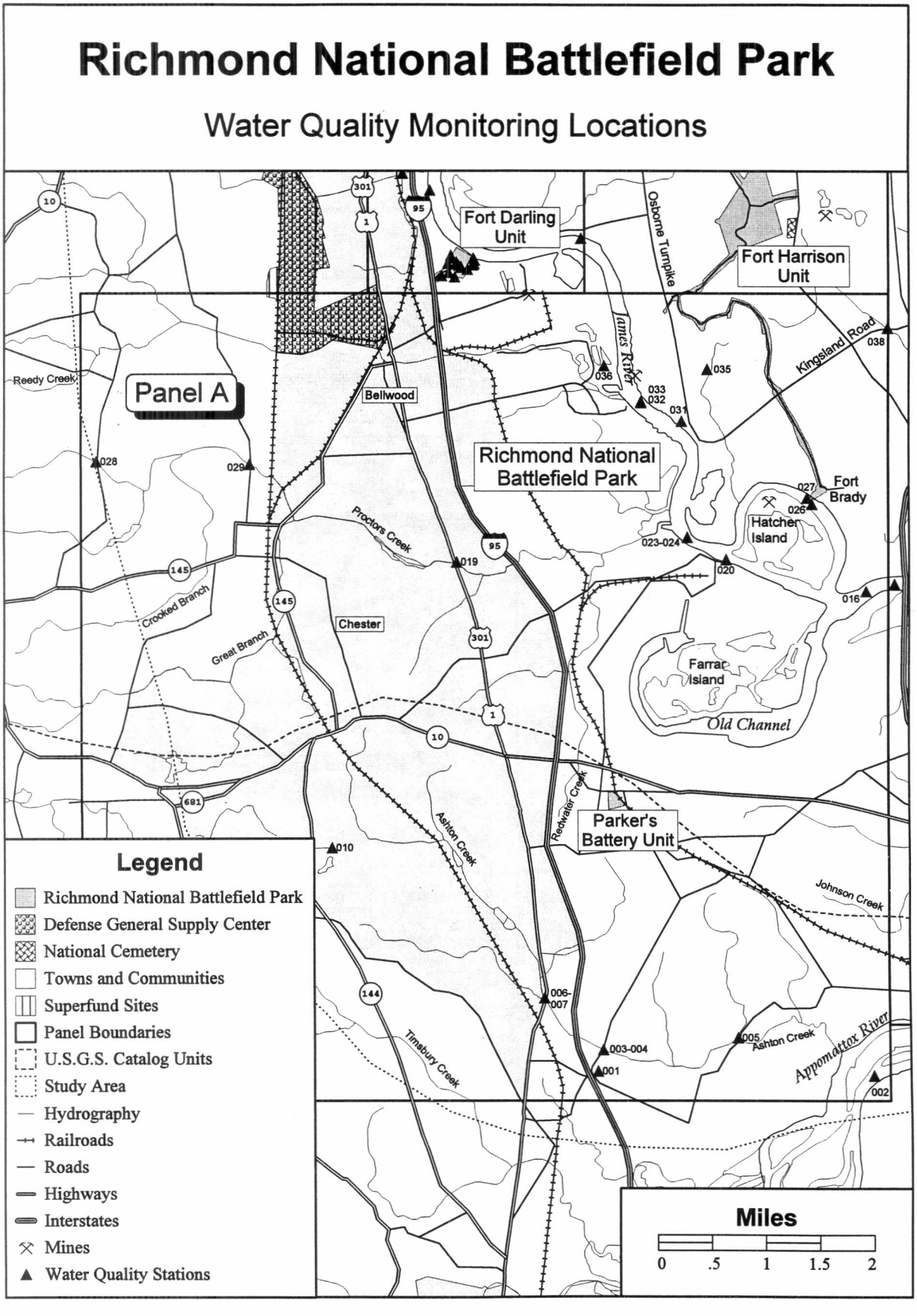


Richmond National Battlefield Park

Water Quality Monitoring Locations

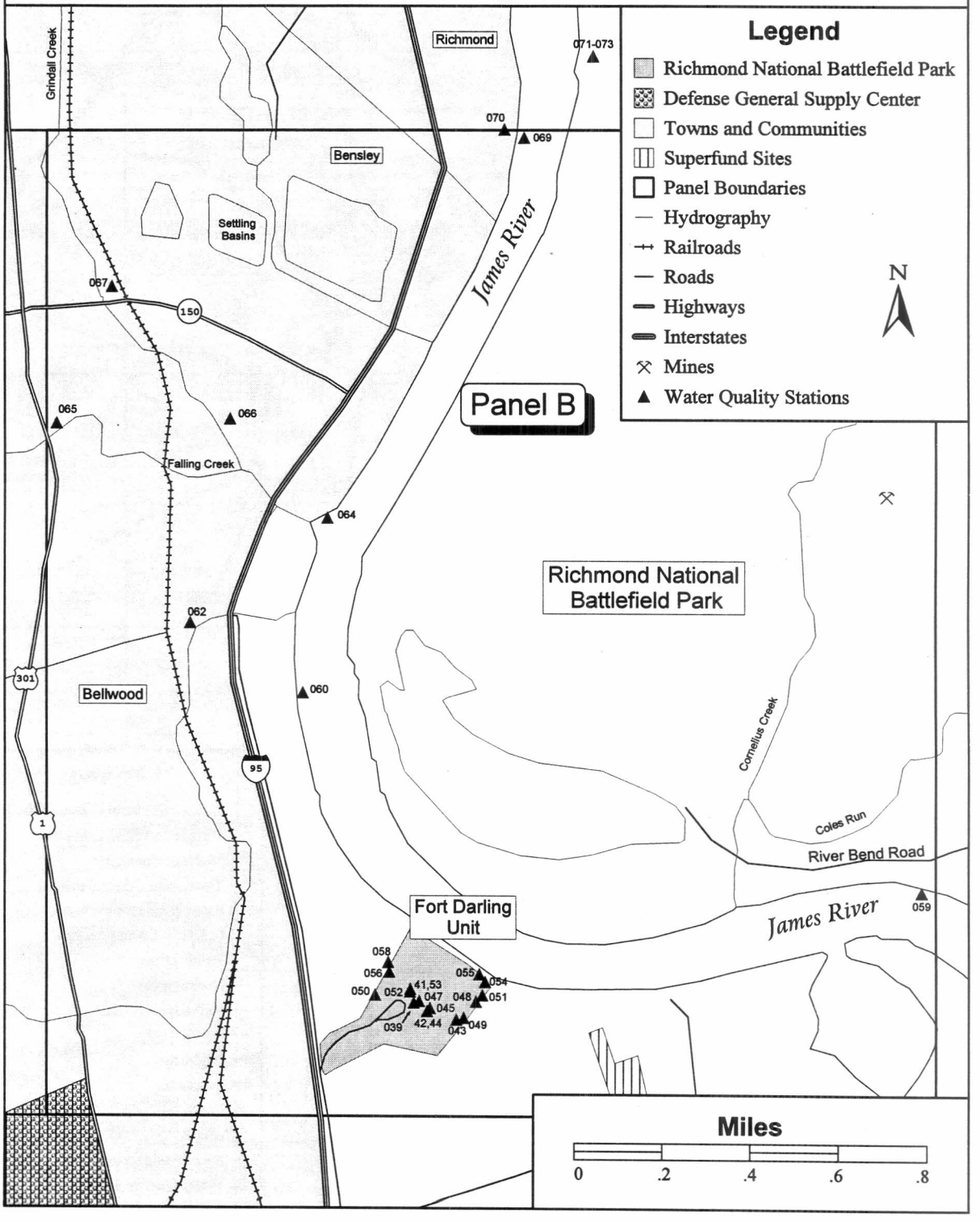
Graphic Panel Index

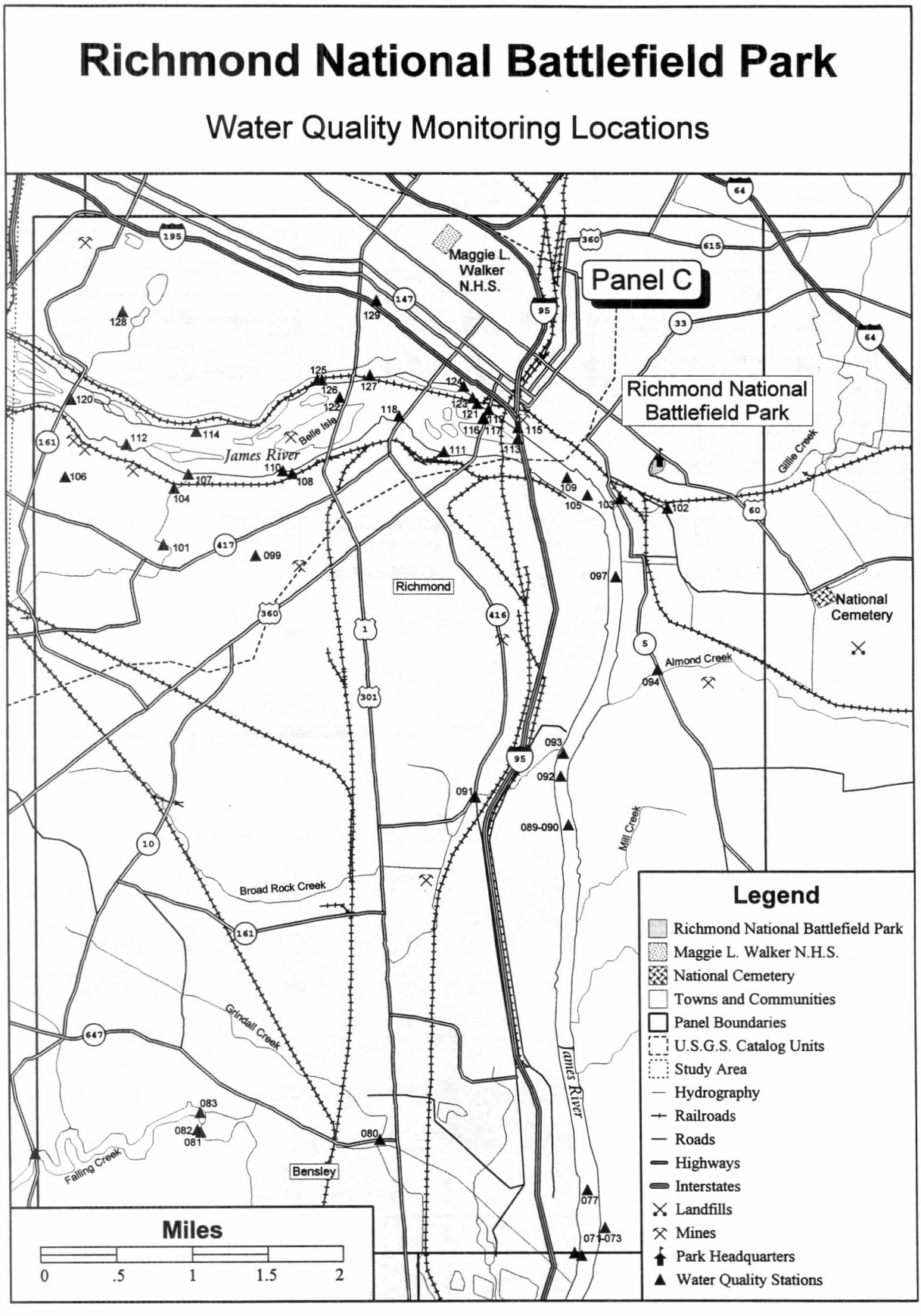


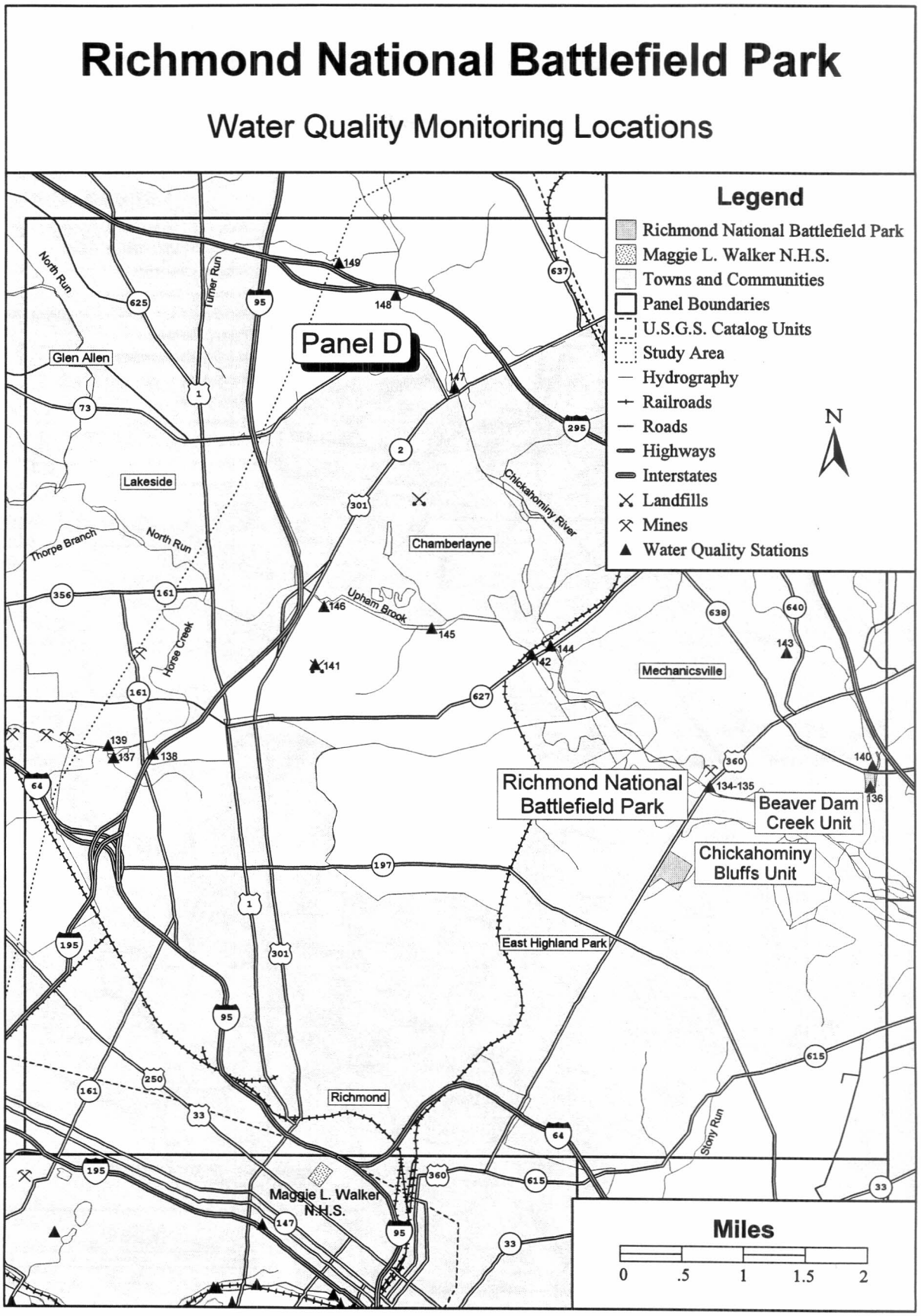

Richmond National Battlefield Park
Water Quality Monitoring Locations
Panel A
Fort Darling Unit
Fort Harrison Unit
Richmond National Battlefield Park
Parker's Battery Unit
Bellwood
Chester
Farrar Island
Old Channel
Hatcher Island
Fort Brady
Osborne Turnpike
Kingsland Road
James River
Appomattox River
Proctors Creek
Crooked Branch
Great Branch
Ashton Creek
Redwater Creek
Timsbury Creek
Johnson Creek
Reedy Creek
Legend
Richmond National Battlefield Park
Defense General Supply Center
National Cemetery
Towns and Communities
Superfund Sites
Panel Boundaries
U.S.G.S. Catalog Units
Study Area
Hydrography
Railroads
Roads
Highways
Interstates
Mines
Water Quality Stations
Miles
0 .5 1 1.5 2

Richmond National Battlefield Park

Water Quality Monitoring Locations

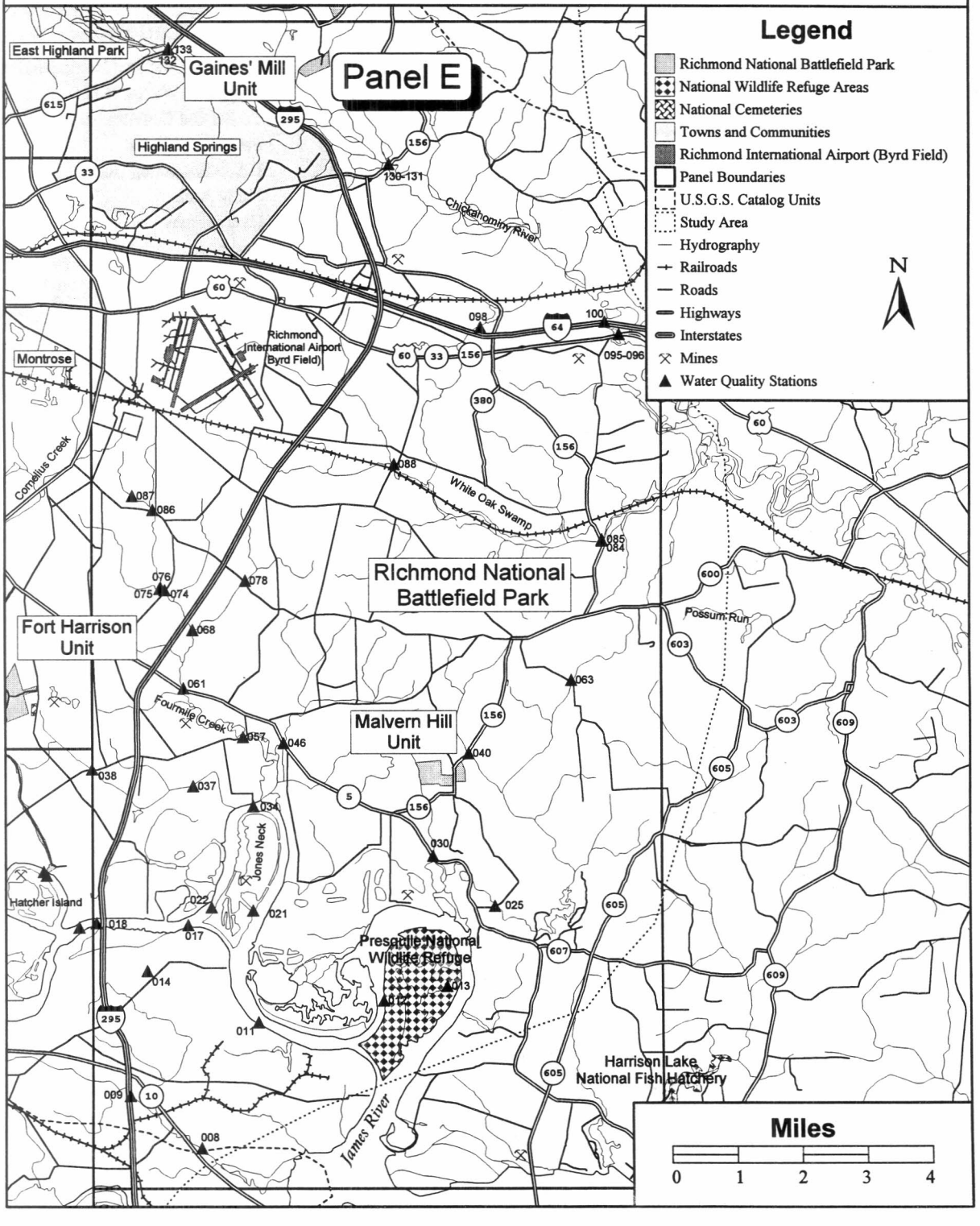



Richmond National Battlefield Park
Water Quality Monitoring Locations
Panel C
Maggie L. Walker N.H.S.
Richmond National Battlefield Park
James River
Belle Isle
Gillie Creek
Richmond
National Cemetery
Almond Creek
Broad Rock Creek
Mill Creek
Grindall Creek
Falling Creek
Bensley
Legend
Richmond National Battlefield Park
Maggie L. Walker N.H.S.
National Cemetery
Towns and Communities
Panel Boundaries
U.S.G.S. Catalog Units
Study Area
Hydrography
Railroads
Roads
Highways
Interstates
Landfills
Mines
Park Headquarters
Water Quality Stations
Miles
0 .5 1 1.5 2


Richmond National Battlefield Park
Water Quality Monitoring Locations
Legend
Richmond National Battlefield Park
Maggie L. Walker N.H.S.
Towns and Communities
Panel Boundaries
U.S.G.S. Catalog Units
Study Area
Hydrography
Railroads
Roads
Highways
Interstates
Landfills
Mines
Water Quality Stations
N
Panel D
Glen Allen
Lakeside
Chamberlayne
Mechanicsville
Richmond National Battlefield Park
Beaver Dam Creek Unit
Chickahominy Bluffs Unit
East Highland Park
Richmond
Maggie L. Walker N.H.S.
North Run
Turner Run
Thorpe Branch
Horse Creek
Upham Brook
Chickahominy River
Stony Run
Miles
0 .5 1 1.5 2

Richmond National Battlefield Park

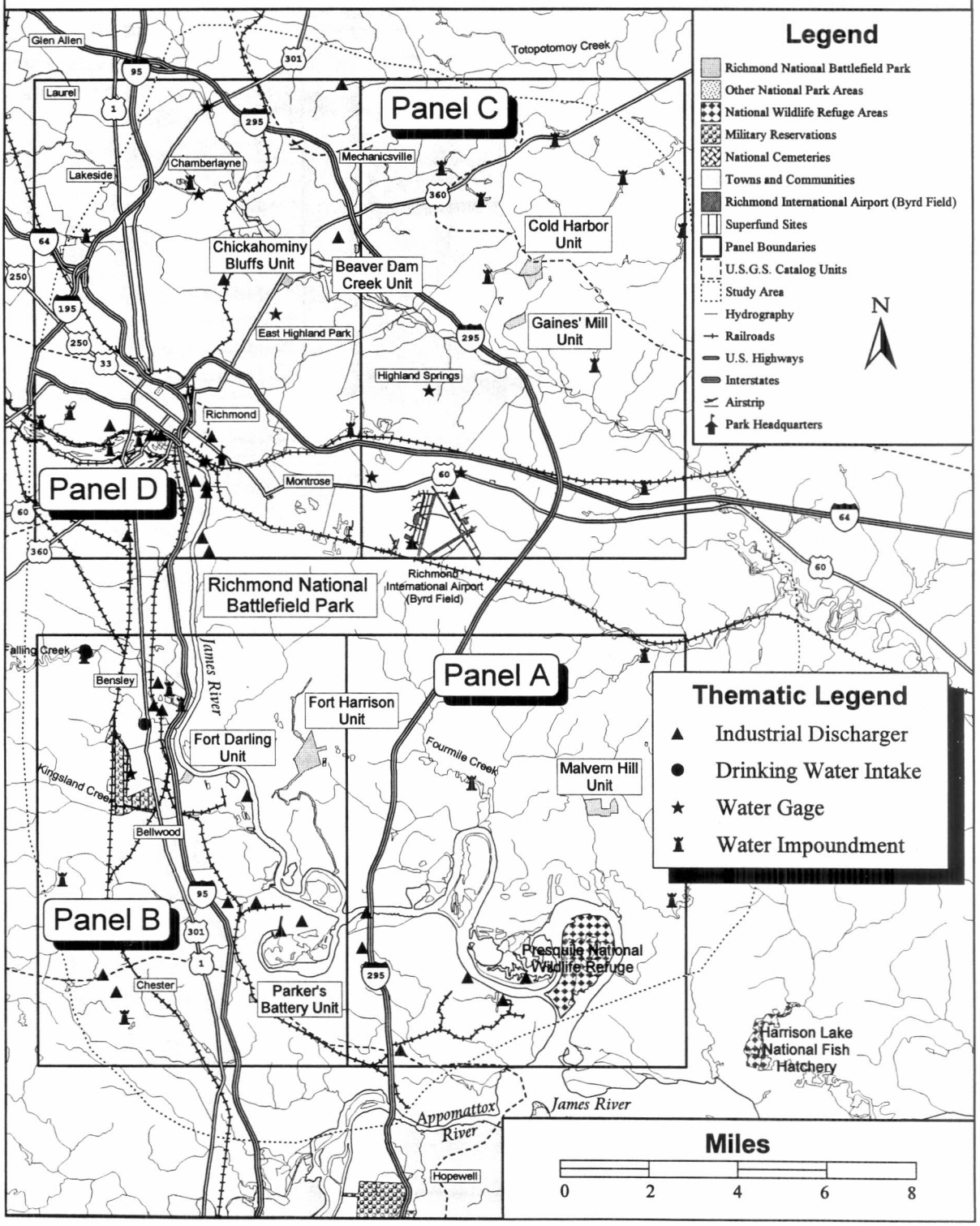
Water Quality Monitoring Locations



Richmond National Battlefield Park

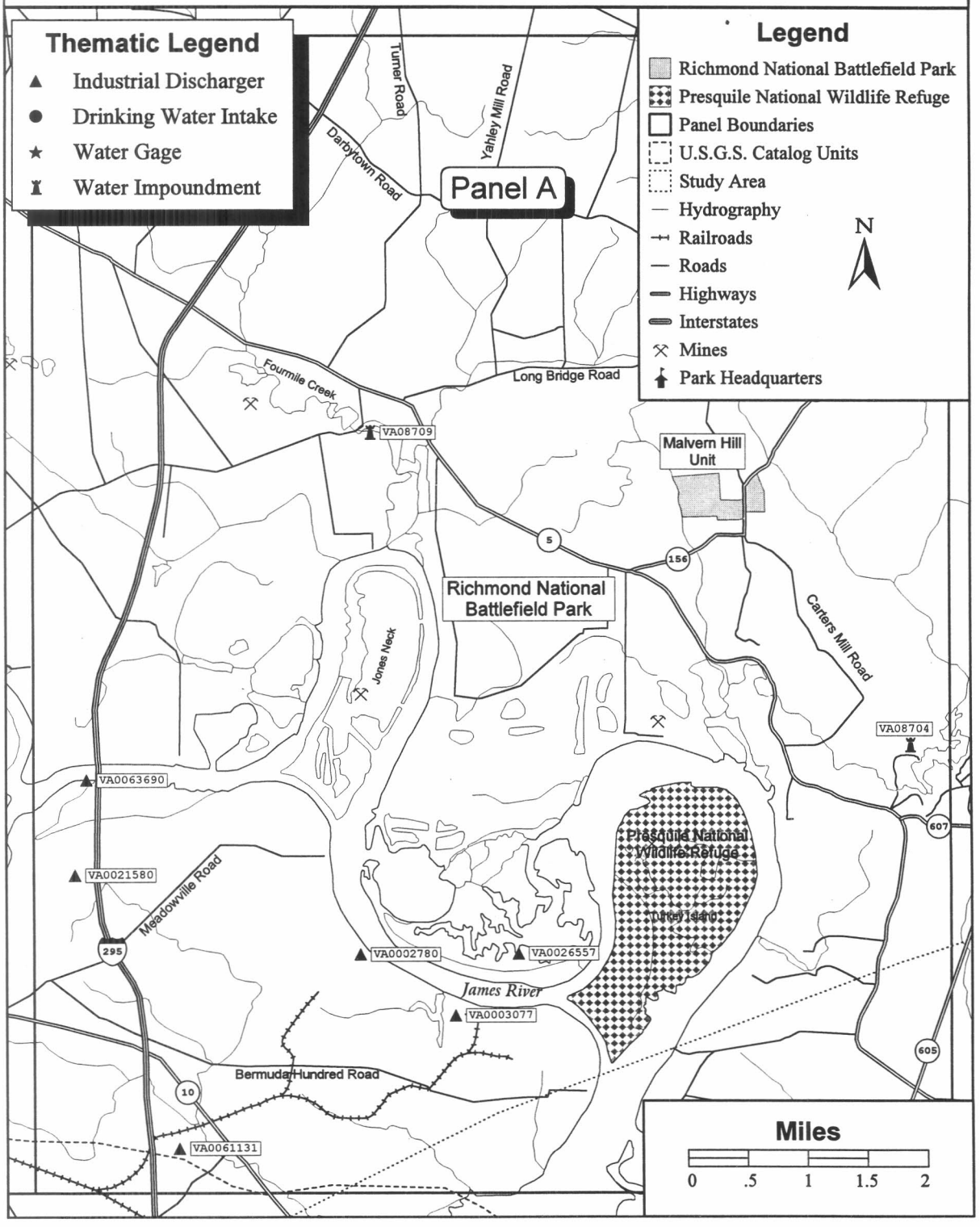
Dischargers, Drinking Intakes, Water Gages, & Impoundments

Graphic Panel Index



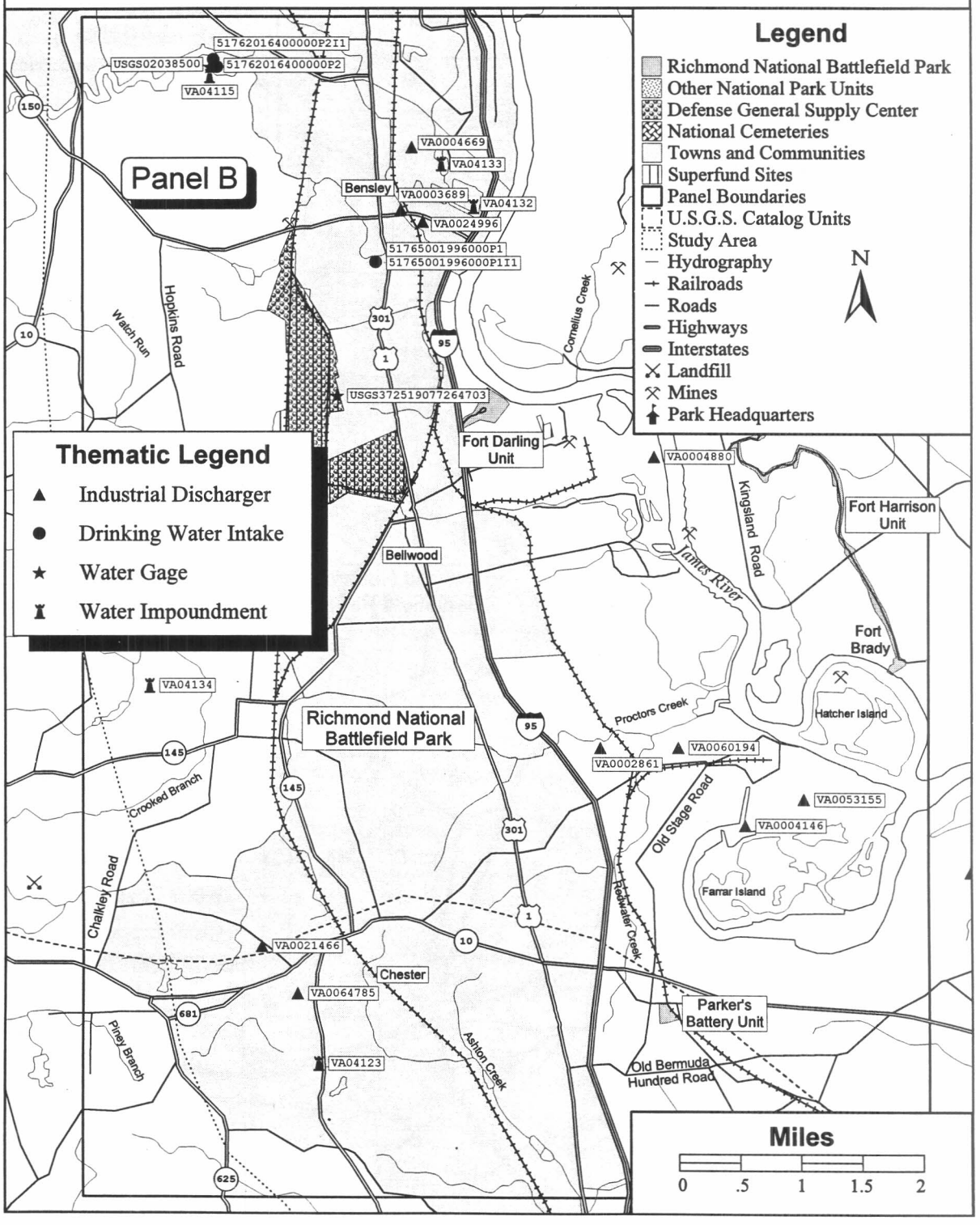
Richmond National Battlefield Park

Dischargers, Drinking Intakes, Water Gages, & Impoundments



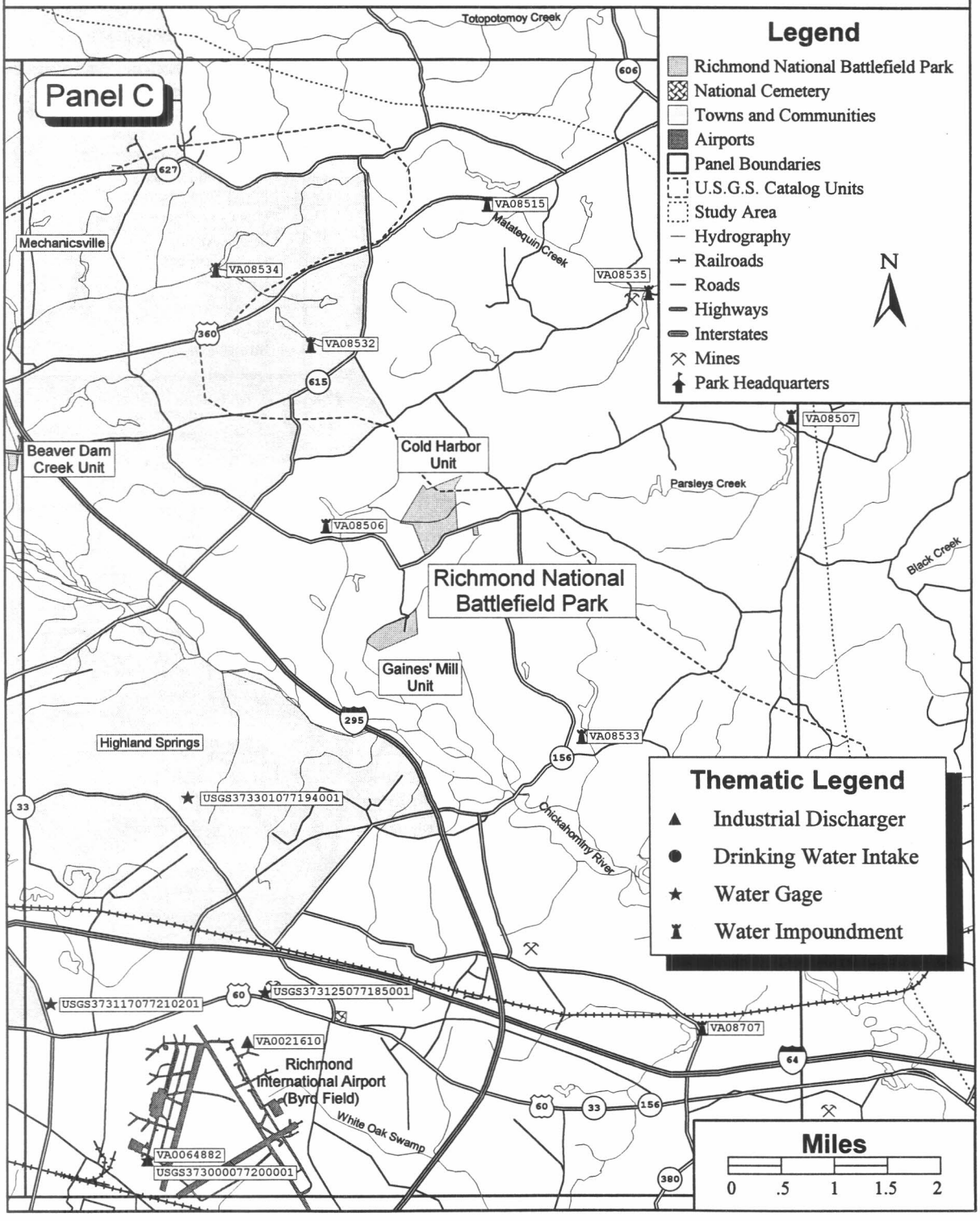
Richmond National Battlefield Park

Dischargers, Drinking Intakes, Water Gages, & Impoundments



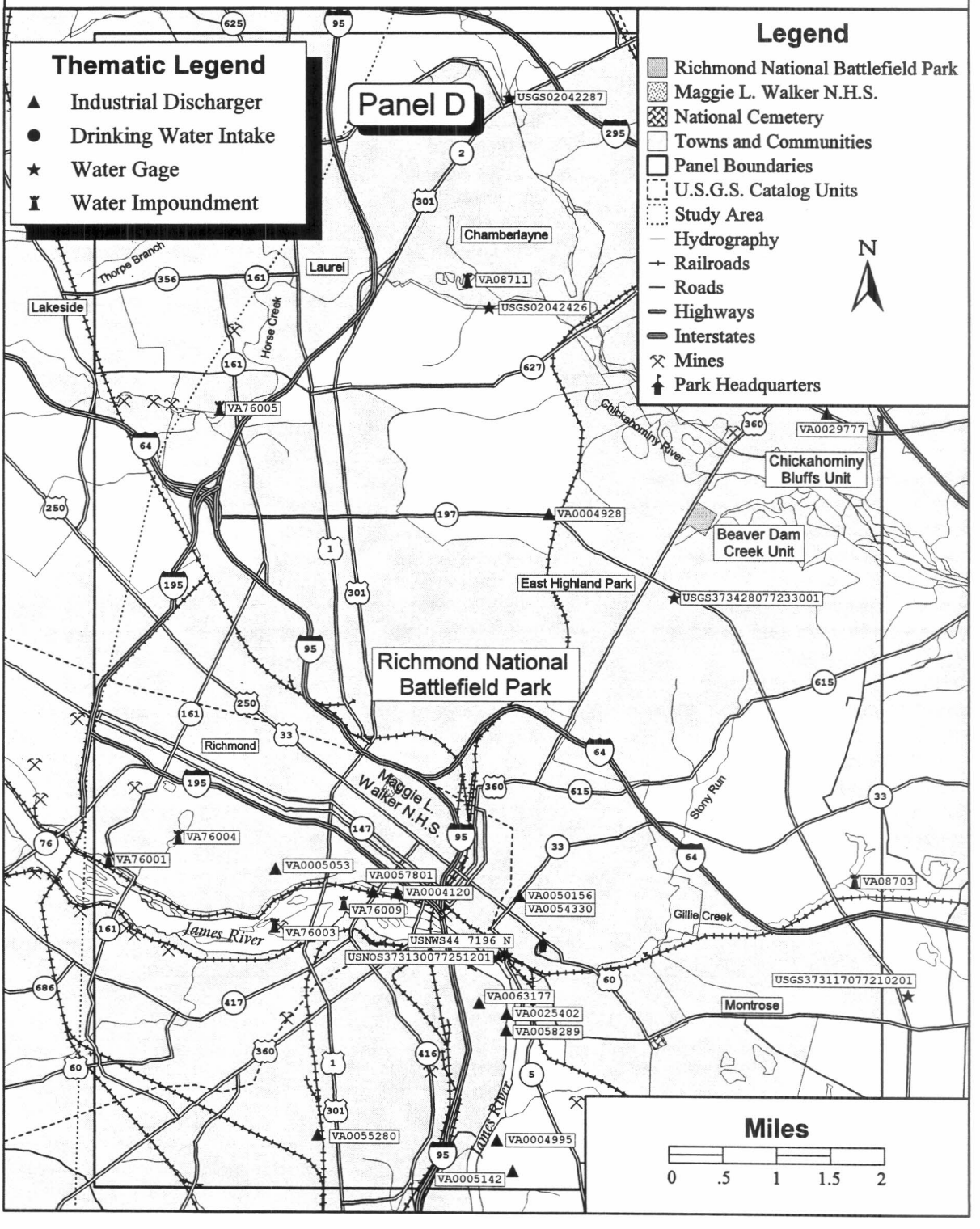
Richmond National Battlefield Park

Dischargers, Drinking Intakes, Water Gages, & Impoundments



Richmond National Battlefield Park

Dischargers, Drinking Intakes, Water Gages, & Impoundments



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

Industrial Facility Discharges

Site ID	Station/Facility Name	Address	City	Facility Receiving Water Name
VA0002780	THE AMERICAN TOBACCO CO. HANME	DIVISION/PO BOX 899	HOPEWELL	JAMES RIVER
VA0002861	REYNOLDS METALS RICHMOND	1711 REYMET RD	RICHMOND	PROCTOR'S CREEK
VA0003077	ICI AMERICA INC	P O BOX 620	HOPEWELL	JAMES RIVER
VA0003689	NATIONAL CYLINDER GAS RICHMOND	5901 JEFFERSON DAVIS HWY	RICHMOND	GRANDALL CK
VA0004120	VEPCO 12TH ST RICHMOND	BOX 26666	RICHMOND	JAMES RIVER
VA0004146	VEPCO CHESTERFIELD POWER STATI	P.O. BOX 26666	RICHMOND	JAMES RIVER
VA0004669	E.I. DUPONT DE NEMOURS & CO	1007 MARKET STREET	WILMINGTON	JAMES
VA0004880	VALLEY PLATING CO RICHMOND	P O BOX 3438	RICHMOND	JAMES RIVER
VA0004928	STANDARD PAPER MFG CO RICHMOND	920 E LABURNUM AVE	RICHMOND	CHICKAHOMINY R
VA0004995	JAMES RIVER PAPER CO RICHMOND	P O BOX 1554	RICHMOND	..
VA0005053	FEDERAL PAPER BOARD CO	TREDEGAR ST PO BOX 2218	RICHMOND	JAMES RIVER
VA0005142	CHESTERFIELD,COUNTY OF,CHESTER	PO BOX 1155	RICHMOND	JAMES
VA0021466	HENRICO COUNTY DEPT OF PUBLIC	.....	.....	TR TO ASHTON C
VA0021580	HEARICO. CO. OF. DPU. SAADSTOA	GAY AVE AND MULFORD RD	.....	TR TO GILLIES C
VA0021610	FALLING CK STP CHEST. CO. BD.	.....	.....	BROADWATER C
VA0024996	RICHMOND DIV. OF WWTR TRTMT,DE	CHESTERFIELD COURTHOUSE	CHESTERFIELD	GRINDALL CREEK
VA0025402	PHILIP MORRIS. BERMUDA HUNDRED	900 EAST BROAD ST	RICHMOND	JAMES R
VA0026557	BEECHWOOD SERVICE CORPORATION	.....	.....	JAMES R
VA0029777	REYNOLDS METAL COMPANY SOUTH P	ST RT 637	MECHANICSVILLE	TR TO CHICKAHOMINY R
VA0050156	HON COMPANY	11TH & BYRD STREET	CHMOND	CITY OF RICHMOND
VA0053155	CENTRAL OIL ASPHALT CORP	11200 OLD STAGE RD	CHESTER	PROCTORS C
VA0054330	INTA ROTO. INC	7700 FORT DARLING RD	RICHMOND	TR TO JAMES R
VA0055280	TWIN OAKS SUBDIVISION	LEWIS RD	.....	TR TO CHICKAHOMINY R
VA0056758	MANCHESTER BOARD & PAPER CO	.....	MECHANICSVILLE	TOTOPOTOMOY C
VA0057801	RASCHIG CO	P O BOX 24410	RICHMOND	JAMES RIVER
VA0058289	COUNTY OF CHESTERFIELD	P O BOX 7656	RICHMOND	JAMES RIVER
VA0060194	CYRUS TAMADDON,PRIVATE RESIDEN	1200 COXENDALE RD	.....	JAMES R
VA0061131	RICHMOND CITY OF	MT BLANCO RD	.....	LW JAMES R
VA0063177	RICHMOND CITY OF	P O BOX 26505	RICHMOND	JAMES RIVER
VA0063690	HENRICO COUNTY WASTEWATER TMNT	.....	.....	JAMES R
VA0064785	SIMMONS BARBARA E	2704 FOREST LK RD	CHESTER	TR TO ASHTON C
VA0064882	LASSITER HERBERT H	.....	OAK HILL	MILL B

Drinking Water Intakes

Site ID	Station/Facility Name	City	Population Served	Avg. Daily Production (Gal./Day)
51762016400000P2	FALLING CK TRMT PLT	CHESTERFIELD	150000	0.00
51762016400000P2I1	FALLING CREEK RESER	CHESTERFIELD	150000	0.00
51765001996000P1	TREATMENT PLANT	RICHMOND	3500	0000.00
51765001996000P1I1	FALLING CREEK	RICHMOND	3500	0000.00

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

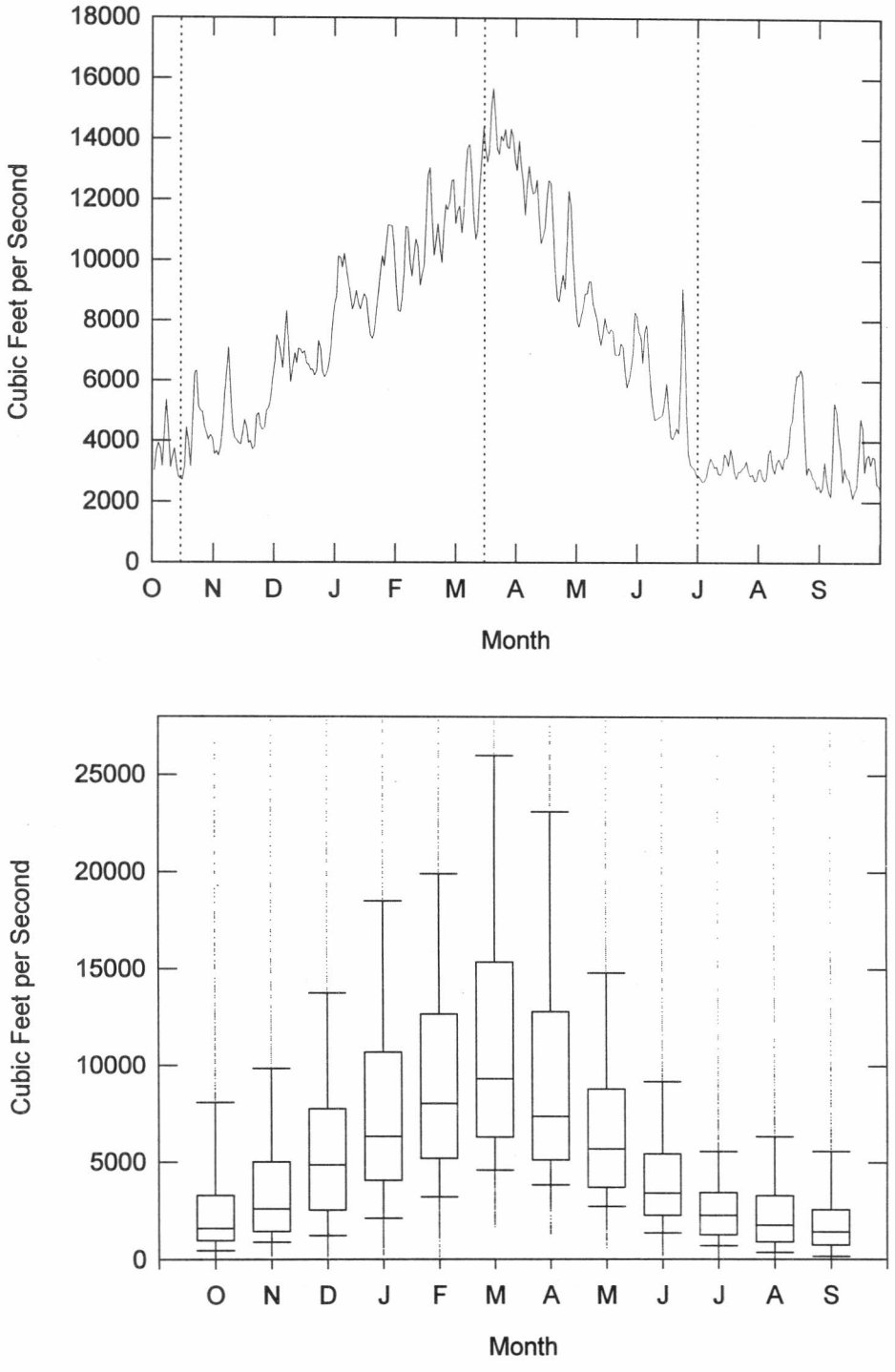
Water Gages

Site ID	Station Name		Site Type	Drainage Area (Square Miles)	Begin Year	End Year
USGS02038500	FALLING CREEK NEAR DREWRYS BLUFF, VA			54.00	1943	1964
USNOS373130077251201	RICHMOND JAMES RIVER		Estuary			
USNWS44 7196 N	RICHMOND VA ON JAMES		Estuary	6792.00		
USGS02042287	CHICKAHOMINY RIVER NEAR ATLEE, VA		Stream	62.20	1990	1994
USGS02042426	UPHAM BROOK NEAR RICHMOND, VA		Stream	38.60	1990	1994
USGS372519077264701	51H 92		Well			
USGS372519077264702	51H 93		Well			
USGS372519077264703	51H 94		Well			
USGS372519077264704	51H 95		Well			
USGS373117077210201	52J 35		Well			
USGS373125077185001	52J 34		Well			
USGS373301077194001	52J 1		Well			
USGS373428077233001	51J 13		Well			
USGS373000077200001	RICHMOND, VA WBAP	W13780	Climate			

Water Impoundments

Site ID	Impoundment Name	Owner	Primary Purpose	Type of Dam	Downstream Hazard	Year Completed
VA04115	FALLING CREEK FILTRATION PLANT	CHESTERFIELD COUNTY	Supply	Buttress	Significant	1952
VA04123	RIEVES DAM	FRANK RIEVES	Rec.	Earth	Low	1956
VA04132	POLISHING DAM	DUPONT	Other	Earth	Low	1962
VA04133	SPRAY DAM	DUPONT	Supply	Earth	Low	1929
VA04134	SALEM WOODS DAM	SALEM WOODS HOMEOWNERS A	Rec.	Earth	Low	1960
VA08506	GAINES MILL DAM	J.T.SICHOL&O.T.HANSON	Other	Earth	High	1850
VA08507	PARSLEYS MILL DAM	M.S.PARSLEY ET ALL	Rec.	Earth	Low	1930
VA08515	TALLEYS DAM	A.B.CARTER	Supply	Earth	Low	1900
VA08532	WESTHAVEN LAKE DAM	PRESTON W.WEST	Rec.	Earth	Low	1962
VA08533	BARKERS MILLPOND DAM	PAUL PARSLEY	Rec.	Earth	Significant	1900
VA08534	CHERRYDALE DAM	CHERRYDALE LOT OWNERS	Rec.	Earth	Low	1955
VA08535	BEATIES MILLPOND DAM	MRS.JOHN BEATIE	Rec.	Earth	Significant	1921
VA08703	GILLIES CREEK DAM	HIGHLAND SPRINGS CORP.	Rec.	Earth	Low	1956
VA08704	SHIRLEY MILL DAM	MR.NUNLEY JR.	Rec.	Gravity	Low	1932
VA08707	EBERHARD DAM	CHRIS TISIGARDIS	Rec.	Earth	Low	1900
VA08708	UKROP DAM	JOSEPH UKROP	Rec.	Earth	Low	1957
VA08709	GRIGGS DAM	FOREST LAKE FISHING CLUB	Rec.	Earth	Low	1900
VA08711	THREE CHOPT ESTATE DAM	THREE CHOPT ESTATE CORP.	Rec.	Earth	Low	1950
VA76001	BYRD PARK CANAL DAM	CITY OF RICHMOND	Hydro	Buttress	Low	1924
VA76003	HOLLYWOOD POWER PLANT	CITY OF RICHMOND	Hydro	Gravity	Low	1920
VA76004	UPPER SHEILDS LAKE DAM	CITY OF RICHMOND	Rec.	Earth	Low	1912
VA76005	YOUNGS POND DAM	CITY OF RICHMOND	Rec.	Buttress	Significant	1960
VA76009	VEPCO FLASH BOARD DAM	CITY OF RICHMOND	Hydro	Gravity	Low	1900

RICHMOND NATIONAL BATTLEFIELD PARK
James River near Richmond, VA
02037500, 60 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 Richmond National Battlefield Park are: Oct. 15 to Mar. 15, Mar. 16 to Jun. 30, and Jul. 1 to Oct. 14.

CONTACTS FOR AGENCY CODES RETRIEVED FOR RICH

AGENCY	PRIMARY CONTACT NAME	ORGANIZATION	PHONE NUMBER(S)	
21VASWCB	POLLOCK, VERA	VA DEPT OF ENVIRONMENTAL	(804)698-4566	(804)698-4473
21MDEXP	BOSTATER, CHARLES	MARYLAND DEPT OF NAT RES	(301)269-3767	
CHESBAY	BOSTATER, CHARLES	MARYLAND DEPT OF NAT RES	(301)269-3767	
1113JAWQ	KANETSKY, CHARLES	USEPA REGION 3	(215)597-8176	
112WRD	BRIGGS, JOHN	US GEOLOGICAL SURVEY	(703)648-5624	
11NPSWRD	TUCKER, DEAN	NATIONAL PARK SERVICE	(970)225-3516	(970)225-3518
11FWS	HOELMAN, LOUIS	USEPA HQ	(202)260-7050	
12NSS	LANDERS, DIXON H.	EPA ENVIRONMENTAL RES LAB	(541)754-4427	

QUANTITY OF DATA RETRIEVED FOR RICH BY AGENCY CODE

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

Agency	Organization	Period of Record Study Area	Park Only	Water Quality Stations S.A./Park		Longer Term[1] Stations S.A./Park		No Data Stations S.A./Park		Water Quality Observations S.A./Park		Water Quality Parameters S.A./Park	
21VASWCB	VA DEPT OF ENVIRONMENTAL	09/20/67-12/15/98	No Data in Park	96	0	38	0	5	0	129102	0	237	0
21MDEXP	MARYLAND DEPT OF NAT RES	No Data in S.A.	No Data in Park	1^	0	0	0	0	0	0	0	0	0
CHESBAY	MARYLAND DEPT OF NAT RES	08/19/64-08/11/71	No Data in Park	10	0	0	0	8	0	1074	0	5	0
1113JAWQ	USEPA REGION 3	07/22/68-11/04/71	No Data in Park	4	0	1	0	0	0	665	0	18	0
112WRD	US GEOLOGICAL SURVEY	07/30/45-09/04/91	11/30/76-09/12/89	20	2	9	1	0	0	10418	326	119	67
11NPSWRD	NATIONAL PARK SERVICE	06/15/89-09/02/97	06/16/89-09/02/97	16	15	0	0	0	0	2282	2277	407	407
11FWS	USEPA HQ	10/01/70-10/01/86	No Data in Park	1	0	1	0	0	0	723	0	38	0
12NSS	EPA ENVIRONMENTAL RES LAB	04/03/86-04/03/86	No Data in Park	1	0	0	0	0	0	27	0	27	0
Totals		07/30/45-12/15/98	11/30/76-09/02/97	149	17	49	1	13	0	144291	2603	695	452

[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.

^This station contains data entered into STORET and locked by the controlling agency, Maryland Department of Natural Resources (MDNR). 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 (MDNR).

Station Period of Record Tabulation
From 07/30/45 To 12/15/98

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75
RICH0001	AER-O-FLOW TERTIARY TREATMENT PACKAGE AT SUNOCO	No	187	0	0	187
RICH0002!	BUOY 9	No	520	0	218	302
RICH0003!	RT. 620 BRIDGE NEAR WALTHALL	No	904	0	622	282
RICH0004	SHTON CK. NEAR RT 620 BRIDGE	No	34	0	34	0
RICH0005!	RT. 746 BRIDGE, CONF. WITH APPOMATTOX RIVER	No	3489	1399	1807	283
RICH0006!	AT RT. 1/301 BRIDGE	No	936	0	845	91
RICH0007	ASHTON CK. NEAR RT1/301 BRIDGE	No	22	0	22	0
RICH0008!	RT. 724 BRIDGE	No	568	0	515	53
RICH0009	J-76 KINGSLAND CREEK / JAMES RIVER	No	0	0	0	0
RICH0010	RT. 616 BRIDGE S OF CHESTER	No	52	0	0	52
RICH0011!	BUOY 137	No	3015	2002	890	123
RICH0012	JAMES RIVER AVOBE GRAVELLY RUN (HPA 1)	No	131	131	0	0
RICH0013	VIMS STATION J71 - JAMES RIVER	No	0	0	0	0
RICH0014	VIMS STATION B54 - JAMES RIVER	No	808	0	0	808
RICH0015!	DUTCH GAP, BUOY 150	No	1111	393	25	693
RICH0016	JAMES RIVER, DUTCH GAP BUOY 150	No	160	0	0	160
RICH0017	JAMES RIVER, BUOY 147 (OLD BUOY 145)	No	393	393	0	0
RICH0018!	BELOW HATCHER ISLAND R"150" J06	No	214	0	0	214
RICH0019!	RT. 1 BRIDGE	No	4001	1350	1867	784
RICH0020	JAMES RIVER, OFF DUTCH GAP LANDING	No	394	394	0	0
RICH0021	JAMES RIVER, MOUTH OF JONES NECK QUARRY CHANNEL	No	393	393	0	0
RICH0022	VIMS STATION J70 - JAMES RIVER	No	0	0	0	0
RICH0023!	DUTCH GAP, BUOY 155	No	5468	21	4727	720
RICH0024	JAMES RIVER AT BUOY 155	No	54	0	54	0
RICH0025	TURKEY ISLAND CREEK	No	13	13	0	0
RICH0026	JAMES RIVER, OFFF RICHMOND YATCH BASIN	No	393	393	0	0
RICH0027!	JAMES RIVER NEAR DUTCH GAP, VA	No	3284	0	2749	535
RICH0028	SALEM RD. ABOVE CENTRALIA STP	No	124	0	0	124
RICH0029!	CENTRALIA RD. BRIDGE BELOW STP	No	818	0	556	262
RICH0030	CREWES CHANNEL, RT. 5 BRIDGE	No	4	4	0	0
RICH0031	VIMS STATION J76 - JAMES RIVER	No	0	0	0	0
RICH0032!	BUOY 157	No	14084	12297	1160	627
RICH0033	BUOY 157 JRWQMP STA.8	No	0	0	0	0
RICH0034	JAMES RIVER, OFF DEEP BOTTOM LANDING	No	392	392	0	0
RICH0035	AT MOUTH OF PETERSBURG BOAT HARBOR BELOW STP	No	170	0	0	170
RICH0036!	100 YDS FROM MOUTH, ON LONE STAR CEMENT CO.LAND	No	3013	1308	1663	42
RICH0037	ROUNDABOUT CREEK AT WRVA RD	No	4	4	0	0
RICH0038	ROUNDABOUT CREEK, AT KINGSLAND RD	No	9	9	0	0
RICH0039	LEACHATE SEEP AT FORT DARLING LANDFILL	Yes	167	167	0	0
RICH0040	WESTERN RUN, RT. 156 BRIDGE	No	4	4	0	0
RICH0041	UNNAMED STREAM UPSTREAM OF LEACHATE SEEPS	Yes	167	167	0	0
RICH0042	UNNAMED STREAM DOWNSTREAM OF LARGEST SEEP	Yes	167	167	0	0
RICH0043	UNNAMED TRIBUTARY OF JAMES RIVER	Yes	183	183	0	0
RICH0044	LANDFILL ASSESSMENT FOR RICH STATION FD-04	Yes	84	84	0	0
RICH0045	UNNAMED TRIBUTARY OF JAMES RIVER	Yes	211	211	0	0
RICH0046	BAILEY CREEK,, RT. 5 BRIDGE	No	9	9	0	0
RICH0047	LANDFILL ASSESSMENT FOR RICH STATION FD-03	Yes	84	84	0	0
RICH0048	UNNAMED TRIBUTARY OF JAMES RIVER	Yes	191	191	0	0
RICH0049	UNNAMED STREAM DOWNSTREAM OF ALL SEEPS	Yes	167	167	0	0
RICH0050	51H 6	Yes	67	0	67	0
RICH0051	LANDFILL ASSESSMENT FOR RICH STATION FD-05	Yes	29	29	0	0
RICH0052	UNNAMED TRIBUTARY OF JAMES RIVER	Yes	191	191	0	0
RICH0053	LANDFILL ASSESSMENT FOR RICH STATION FD-02	Yes	29	29	0	0
RICH0054	LANDFILL ASSESSMENT FOR RICH STATION FD-06	Yes	53	53	0	0
RICH0055	MOUTH OF AN UNNAMED TRIBUTARY AT JAMES RIVER	Yes	316	316	0	0
RICH0056	POINT WHERE UNNAMED TRIB OF JAMES R. ENTERS PARK	Yes	238	238	0	0
RICH0057	FOURMILE CREEK, KINGSLAND ROAD	No	11	11	0	0
RICH0058	LANDFILL ASSESSMENT FOR RICH STATION FD-01	No	5	5	0	0
RICH0059	JAMES RIVER, BUOY 160	No	603	603	0	0
RICH0060!	BUOY 163	No	760	0	760	0
RICH0061!	RT. 5 BRIDGE	No	1282	1282	0	0
RICH0062	VIMS STATION J81 - JAMES RIVER	No	0	0	0	0
RICH0063	TURKEY ISLAND CREEK, WARRINER ROAD	No	4	4	0	0
RICH0064!	BUOY 165-AT FALLING CREEK-(CHESTERFIELD COUNTY)	No	665	599	66	0
RICH0065!	RT. 1 BRIDGE	No	5317	2819	1688	810
RICH0066!	APPROX 100 YDS FROM MOUTH OF CREEK	No	1377	0	928	449
RICH0067!	FALLING CREEK EXIT OFF I-95	No	3738	1337	1971	430
RICH0068	FOURMILE CREEK, I-295 BRIDGE	No	4	4	0	0
RICH0069!	BUOY 166	No	9197	7617	865	715
RICH0070	BELOW DEEPWATER TERM R"166" J04	No	188	0	0	188
RICH0071	VIMS STATION A55 -JAMES RIVER	No	0	0	0	0

Station Period of Record Tabulation
From 07/30/45 To 12/15/98

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75
RICH0072	VIMS STATION J89 - JAMES RIVER	No	0	0	0	0
RICH0073	VIMS STATION A55-JAMES RIVER	No	266	0	0	266
RICH0074	FOURMILE CREEK, DORAN RD	No	13	13	0	0
RICH0075	UNNAMED TRIB TO FOURMILE CR. BELOW DOREY PARK	No	4	4	0	0
RICH0076	ABOVE UT CONFLUENCE, 160M ABOVE DORAN RD.	No	4	4	0	0
RICH0077	JAMES RIVER, OFF DEEPWATER TERMINAL	No	597	597	0	0
RICH0078	DEERLICK BRANCH, DARBYTOWN ROAD	No	13	13	0	0
RICH0079!	RT. 10 BRIDGE	No	852	0	562	290
RICH0080!	WALMSLEY BLVD.	No	1296	0	825	471
RICH0081!	HOPKINS ROAD BRIDGE	No	860	0	568	292
RICH0082!	FALLING CREEK NEAR DREWRYS BLUFF, VA	No	778	0	0	778
RICH0083!	NEAR DAM-FALLING CREEK RESEVOIR CHESTERFIELD CO.	No	353	150	203	0
RICH0084!	WHITE OAK SWAMP AT RT 156 AT ELKO, VA	No	292	280	12	0
RICH0085!	WHITE OAK SWAMP, RT. 156 BRIDGE	No	967	967	0	0
RICH0086	FOURMILE CREEK, DARBYTOWN RD	No	13	13	0	0
RICH0087	FOUR MILE CK, LOST COUNTRY DR.ABOVE DARBYTOWN RD	No	8	8	0	0
RICH0088	WHITE OAK SWAMP NEAR WHITE OAK SWAMP, VA	No	20	0	20	0
RICH0089!	BUOY 168	No	1534	0	817	717
RICH0090	JAMES RIVER, BUOY 168	No	130	0	0	130
RICH0091	GOODE CREEK, COMMERCE ROAD	No	261	261	0	0
RICH0092	BELOW GOODE CREEK N"172" J03	No	207	0	0	207
RICH0093	JAMES RIVER, BUOY 173 OFF GOODE CREEK	No	601	601	0	0
RICH0094!	RT. 5 BRIDGE	No	5881	3281	2093	507
RICH0095	CHICKAHOMINY RIV AT RT 60 NR WHITE OAK SWAMP, VA	No	3	0	3	0
RICH0096!	RT. 60 BRIDGE	No	2197	19	870	1308
RICH0097!	JAMES RIVER, TERMINAL BOUY 175	No	260	0	121	139
RICH0098	JAMES RIVER, ABOVE BAILEY BAY	No	200	0	0	200
RICH0099	FONTICELLO SPRING AT RICHMOND, VA	No	458	258	200	0
RICH0100!	CHICKAHOMINY RIV AT I64 NR WHITE OAK SWAMP, VA	No	244	244	0	0
RICH0101!	FOREST HILL AVENUE BRIDGE	No	3723	1288	2008	427
RICH0102!	GOVERNMENT RD. BRIDGE	No	2904	807	1987	110
RICH0103	RT. 5 BRIDGE WILLIAMSBURG RD.	No	299	0	0	299
RICH0104!	REEDY CREEK, RIVERSIDE DRIVE, RICHMOND	No	616	616	0	0
RICH0105!	ROCK OFF LONE STAR CEMENT CO., DOCK ST.RICHMOND	No	2028	600	737	691
RICH0106	WAYSIDE SPRING AT RICHMOND, VA	No	575	258	317	0
RICH0107	JAMES RIVER AT MOUTH OF REEDY CREEK	No	278	278	0	0
RICH0108	JAMES RIVER,DOWNSTREAM CANOE RUN CSO,SOUTH BANK	No	658	658	0	0
RICH0109	JAMES RIVER, BELOW I95	No	537	0	537	0
RICH0110	JAMES RIVER,UPSTREAM OCANOE RIN CSO, SOUTH BANK	No	636	636	0	0
RICH0111	SOUTH BANK OF THE JAMES RIVER BELOW FALL ZONE	No	0	0	0	0
RICH0112	JAMES RI, 676M ABOVE MOUTH OF REEDY CREEK	No	277	277	0	0
RICH0113	I 95 BRIDGE (CITY OF RICHMOND)	No	138	0	138	0
RICH0114	JAMES RIVER AT TEXAS AVENUE BEACH	No	270	270	0	0
RICH0115	JAMES RIVER,I-95 BR.AT NORTH BANK, DS SHOCKOE	No	659	659	0	0
RICH0116!	RT. 360 BRIDGE	No	14819	7667	6160	992
RICH0117	MAYO'S BRIDGE JRWQMP STA.2 VIMS SLACK WATER STA.	No	0	0	0	0
RICH0118	JAMES RIVER, MANCHERSTER BR. NEAR SOUTH BANK	No	494	494	0	0
RICH0119	JAMES RIVER,MAYOS BR., NORTH CHANNEL US SHOCKOE	No	635	635	0	0
RICH0120!	BOULEVARD BRIDGE	No	1365	0	598	767
RICH0121	JAMES RIVER AT RICHMOND, VA	No	663	0	663	0
RICH0122	JEFFERDON DAVIS HIGHWAY BR J02	No	56	0	0	56
RICH0123	NORTH BANK JAMES RIVER BELOW FALL ZONE RICHMOND	No	0	0	0	0
RICH0124	JAMES RIVER AT DOWNSTREAM END OF HAXALL CANAL	No	270	270	0	0
RICH0125	JAMES RIVER,DOWNSTREAM PARKHYDRO CSO, NORTH BANK	No	658	658	0	0
RICH0126	JAMES RIVER,UPSTREAM PARKHYDRO CSO, NORTH BANK	No	631	631	0	0
RICH0127	JAMES RIVER, AT TREDEGAR IRON WORKS	No	278	278	0	0
RICH0128	BYRD PARK SPRING AT RICHMOND, VA	No	450	256	194	0
RICH0129!	JAMES RIVER AT RICHMOND	No	723	102	363	258
RICH0130!	RT. 156 BRIDGE	No	3854	1650	881	1323
RICH0131!	CHICKAHOMINY RIVER AT RT 156 NR SEVEN PINES, VA	No	1040	1028	12	0
RICH0132!	CHICKAHOMINY RIV AT RT 615 NR HIGHLAND SPGS, VA	No	272	264	8	0
RICH0133	CHICKAHOMINY RIVER, RT. 615 BRIDGE	No	16	16	0	0
RICH0134!	RT. 360 BRIDGE	No	5789	2548	1956	1285
RICH0135	CHICKAHOMINY R AT RT 360 NR MECHANICSVILLE, VA	No	4	4	0	0
RICH0136!	BEAVERDAM CREEK AT RT 156 AT MECHANICSVILLE, VA	Yes	259	247	12	0
RICH0137	YOUGS POND CENTER (HENRICO CO)	No	0	0	0	0
RICH0138	YOUNGS POND INFLOW (HENRICO CO)	No	0	0	0	0
RICH0139	YOUNGS POND OUTFALL	No	0	0	0	0
RICH0140	BEAVERDAM CREEK, RT 156 BRIDGE	No	9	9	0	0
RICH0141	THREE LAKES PARK LAKE CENTER (HENRICO CO)	No	6	6	0	0
RICH0142	UPHAM BROOK AT RT 627 NEAR RICHMOND, VA	No	24	12	12	0

Station Period of Record Tabulation
From 07/30/45 To 12/15/98

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75
RICH0143[!]	RT. 627 BRIDGE	No	2113	0	859	1254
RICH0144[!]	CHICKAHOMINY RIVER AT RT 627 NEAR RICHMOND, VA	No	258	246	12	0
RICH0145[!]	UPHAM BROOK NEAR RICHMOND, VA	No	903	903	0	0
RICH0146[!]	RT. 1 BRIDGE (BROOK ROAD)	No	5271	3554	1717	0
RICH0147	CHICKAHOMINY RIVER NEAR ATLEE, VA	No	805	805	0	0
RICH0148	CHICKAHOMINY RIVER AT I-295 NEAR ATLEE, VA	No	19	16	3	0
RICH0149	TURNER RUN	No	27	27	0	0

[!]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 07/30/45 To 12/15/98

Parameter Code	Name		Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)		1	0	1	0	1	0
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)		5135	2473	1581	1081	62	0
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)		1986	0	904	1082	37	0
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		12618	4782	6162	1674	114	7
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)		488	305	181	2	17	1
00023	SAMPLE WEIGHT IN POUNDS		49	0	27	22	4	0
00024	SAMPLE LENGTH IN INCHES		49	0	27	22	4	0
00025	BAROMETRIC PRESSURE (MM OF HG)		109	109	0	0	8	1
00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.		127	118	9	0	12	1
00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)		167	118	49	0	14	2
00041	WEATHER (WMO CODE 4501)		6085	3013	1995	1077	64	0
00059	FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	367	196	171	0	3	0
00060	FLOW, STREAM, MEAN DAILY	CFS	113	0	46	67	2	0
00061	FLOW, STREAM, INSTANTANEOUS	CFS	301	153	148	0	29	6
00062	ELEVATION, RESERVOIR SURFACE WATER IN FEET		1	0	1	0	1	0
00064	DEPTH OF STREAM, MEAN (FT)		1	1	0	0	1	0
00065	STAGE, STREAM (FEET)		3	3	0	0	3	0
00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		1932	1467	230	235	35	0
00070	TURBIDITY, (JACKSON CANDLE UNITS)		490	309	131	50	26	1
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		838	838	0	0	25	0
00077	TRANSPARENCY, SECCHI DISC (INCHES)		14	0	0	14	4	0
00078	TRANSPARENCY, SECCHI DISC (METERS)		415	331	84	0	12	0
00080	COLOR (PLATINUM-COBALT UNITS)		229	182	2	45	17	2
00091	FLOW, MINIMUM OF FLOW RANGE	CFS	1	0	1	0	1	0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		4784	4036	748	0	65	0
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		1716	1372	318	26	58	7
00096	SALINITY AT 25 DEGREES C (MG/ML)		1932	1904	28	0	24	0
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	3749	3702	47	0	62	5
00300	OXYGEN, DISSOLVED	MG/L	8565	969	5948	1648	57	1
00310	BOD, 5 DAY, 20 DEG C	MG/L	2689	1441	979	269	50	0
00335	COD, .025N K2CR2O7	MG/L	14	2	1	11	2	0
00340	COD, .25N K2CR2O7	MG/L	2138	1303	825	10	27	0
00400	PH (STANDARD UNITS)		6610	3408	2023	1179	97	2
00403	PH, LAB, STANDARD UNITS	SU	1259	1012	95	152	53	1
00405	CARBON DIOXIDE (MG/L AS CO2)		22	0	19	3	3	1
00406	PH, FIELD, STANDARD UNITS	SU	6	6	0	0	6	5
00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS	UEQ/L	1	1	0	0	1	0
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		1253	965	131	157	47	1
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		27	0	24	3	12	0
00435	ACIDITY, TOTAL (MG/L AS CACO3)		4	0	3	1	1	0
00440	BICARBONATE ION (MG/L AS HCO3)		68	1	19	48	4	1
00445	CARBONATE ION (MG/L AS CO3)		21	0	17	4	3	1
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L		3	3	0	0	3	0
00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L		3	3	0	0	3	0
00480	SALINITY - PARTS PER THOUSAND		12	0	12	0	8	0
00500	RESIDUE, TOTAL (MG/L)		1900	768	681	451	43	0
00505	RESIDUE, TOTAL VOLATILE (MG/L)		1901	763	679	459	42	0
00510	RESIDUE, TOTAL FIXED (MG/L)		1880	765	677	438	43	0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		35	0	33	2	13	0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		3928	1979	1417	532	47	0
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		3920	1971	1396	553	46	0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		3860	1977	1355	528	45	0
00545	RESIDUE, SETTLEABLE (ML/L)		37	0	33	4	4	0
00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L		56	56	0	0	4	0
00572	BIOMASS, PERIPHYTON (GRAMS PER SQUARE METER)		3	0	1	2	1	0
00573	BIOMASS, PERIPHYTON,DRY WEIGHT TOTAL (G/M2)		1	0	1	0	1	0
00600	NITROGEN, TOTAL (MG/L AS N)		143	0	123	20	2	0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)		114	0	100	14	1	0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		943	906	37	0	11	1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		4226	1303	1966	957	64	0
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)		916	883	33	0	4	1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		3971	1223	1856	892	55	0
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		908	884	24	0	4	1
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		3613	1221	1502	890	55	0
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		24	0	24	0	9	0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		4862	1895	2003	964	69	1
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		622	70	478	74	35	0
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)		245	211	34	0	20	2
00650	PHOSPHATE, TOTAL (MG/L AS PO4)		51	0	0	51	5	0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)		76	0	2	74	10	1
00665	PHOSPHORUS, TOTAL (MG/L AS P)		2802	1905	877	20	49	1

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	756	723	33	0	11	1
00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	32	0	32	0	9	0
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	2378	1626	752	0	33	2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	2751	1646	1073	32	51	1
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	1	1	0	0	1	0
00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	5	5	0	0	4	0
00690	CARBON, TOTAL (MG/L AS C)	15	0	0	15	4	0
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	1	1	0	0	1	0
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	68	44	24	0	4	0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	890	834	4	52	26	1
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10	0	2	8	2	1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	93	43	5	45	12	2
00916	CALCIUM, TOTAL (MG/L AS CA)	1	0	0	1	1	0
00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	7	7	0	0	6	6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	93	43	5	45	12	2
00927	MAGNESIUM, TOTAL (MG/L AS MG)	12	11	0	1	6	0
00929	SODIUM, TOTAL (MG/L AS NA)	1	0	0	1	1	0
00930	SODIUM, DISSOLVED (MG/L AS NA)	94	43	5	46	13	2
00931	SODIUM ADSORPTION RATIO	3	0	2	1	2	1
00932	SODIUM, PERCENT	3	0	2	1	2	1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	58	43	5	10	12	2
00937	POTASSIUM, TOTAL MG/L AS K)	2	0	0	2	1	0
00940	CHLORIDE,TOTAL IN WATER MG/L	1563	1041	293	229	59	2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	1	1	0	0	1	0
00945	SULFATE, TOTAL (MG/L AS SO4)	1102	1029	23	50	44	2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	1	1	0	0	1	0
00950	FLUORIDE, DISSOLVED (MG/L AS F)	93	46	2	45	11	2
00951	FLUORIDE, TOTAL (MG/L AS F)	268	268	0	0	12	0
00955	SILICA, DISSOLVED (MG/L AS SI02)	965	917	3	45	23	2
00997	ARSENIC, INORGANIC TOT (UG/L AS AS)	4	4	0	0	4	4
01000	ARSENIC, DISSOLVED (UG/L AS AS)	2	2	0	0	2	2
01002	ARSENIC, TOTAL (UG/L AS AS)	372	164	148	60	46	3
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	46	21	25	0	24	6
01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	18	6	12	0	2	0
01005	BARIUM, DISSOLVED (UG/L AS BA)	8	8	0	0	5	5
01007	BARIUM, TOTAL (UG/L AS BA)	6	6	0	0	6	6
01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	7	7	0	0	6	6
01012	BERYLLIUM, TOTAL (UG/L AS BE)	14	14	0	0	8	4
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	18	18	0	0	15	6
01018	IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	7	7	0	0	6	6
01020	BORON, DISSOLVED (UG/L AS B)	2	2	0	0	2	2
01022	BORON, TOTAL (UG/L AS B)	2	2	0	0	2	2
01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	7	7	0	0	6	6
01025	CADMIUM, DISSOLVED (UG/L AS CD)	22	22	0	0	12	6
01027	CADMIUM, TOTAL (UG/L AS CD)	426	171	161	94	52	7
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	46	21	25	0	24	6
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	47	22	25	0	25	6
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	9	9	0	0	6	5
01034	CHROMIUM, TOTAL (UG/L AS CR)	617	172	234	211	53	7
01037	COBALT, TOTAL (UG/L AS CO)	35	35	0	0	12	5
01040	COPPER, DISSOLVED (UG/L AS CU)	22	22	0	0	12	6
01042	COPPER, TOTAL (UG/L AS CU)	604	168	232	204	53	7
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	46	21	25	0	24	6
01045	IRON, TOTAL (UG/L AS FE)	214	167	25	22	28	3
01046	IRON, DISSOLVED (UG/L AS FE)	122	119	2	1	15	7
01049	LEAD, DISSOLVED (UG/L AS PB)	22	22	0	0	12	6
01051	LEAD, TOTAL (UG/L AS PB)	562	168	230	164	53	7
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	46	21	25	0	24	6
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	12	12	0	0	10	6
01055	MANGANESE, TOTAL (UG/L AS MN)	220	167	24	29	33	3
01056	MANGANESE, DISSOLVED (UG/L AS MN)	82	82	0	0	14	6
01059	THALLIUM, TOTAL (UG/L AS TL)	14	14	0	0	8	4
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	8	8	0	0	5	5
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	2	2	0	0	2	2
01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	7	7	0	0	6	6
01065	NICKEL, DISSOLVED (UG/L AS NI)	224	8	167	49	41	5
01067	NICKEL, TOTAL (UG/L AS NI)	230	167	63	0	35	7
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	46	21	25	0	24	6
01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	3	3	0	0	1	0
01073	THALLIUM,TISSUE,WET WEIGHT,MG/KG	3	3	0	0	1	0
01077	SILVER, TOTAL (UG/L AS AG)	28	4	24	0	5	4

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01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	9	9	0	0	7	0
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	2	2	0	0	2	2
01082	STRONTIUM, TOTAL (UG/L AS SR)	2	2	0	0	2	2
01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	7	7	0	0	6	6
01085	VANADIUM, DISSOLVED (UG/L AS V)	2	2	0	0	2	2
01087	VANADIUM, TOTAL (UG/L AS V)	6	6	0	0	6	6
01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	7	7	0	0	6	6
01090	ZINC, DISSOLVED (UG/L AS ZN)	22	22	0	0	12	6
01092	ZINC, TOTAL (UG/L AS ZN)	613	168	234	211	53	7
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	39	14	25	0	18	0
01097	ANTIMONY, TOTAL (UG/L AS SB)	4	4	0	0	4	4
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	5	5	0	0	4	0
01102	TIN, TOTAL (UG/L AS SN)	4	4	0	0	4	4
01105	ALUMINUM, TOTAL (UG/L AS AL)	3	3	0	0	3	2
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	8	8	0	0	5	5
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	12	12	0	0	10	6
01130	LITHIUM, DISSOLVED (UG/L AS LI)	2	0	2	0	2	0
01140	SILICON, DISSOLVED (UG/L AS SI)	267	242	25	0	5	2
01142	SILICON, TOTAL (UG/L AS SI)	2	2	0	0	2	2
01145	SELENIUM, DISSOLVED (UG/L AS SE)	2	2	0	0	2	2
01147	SELENIUM, TOTAL (UG/L AS SE)	90	90	0	0	21	7
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	19	19	0	0	16	6
01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	18	6	12	0	2	0
01150	TITANIUM, DISSOLVED (UG/L AS TI)	2	2	0	0	2	2
01152	TITANIUM, TOTAL (UG/L AS TI)	2	2	0	0	2	2
01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	7	7	0	0	6	6
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	5	5	0	0	4	0
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	917	917	0	0	50	0
02152	INVALID PARAMETER	1	0	1	0	1	0
05053	INVALID PARAMETER	1	0	1	0	1	0
05109	INVALID PARAMETER	1	0	1	0	1	0
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	60	0	46	14	1	0
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	1	0	0	1	1	0
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	290	0	6	284	20	0
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	100	75	25	0	9	0
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	13	13	0	0	3	0
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	1816	1786	0	30	40	0
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	3612	888	1864	860	47	0
31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	55	0	55	0	2	0
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	143	0	124	19	2	0
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	2	0	1	1	1	0
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	4	4	0	0	4	4
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	4	4	0	0	4	4
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	4	4	0	0	4	4
32104	BROMOFORM,WHOLE WATER,UG/L	4	4	0	0	4	4
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	4	4	0	0	4	4
32106	CHLOROFORM,WHOLE WATER,UG/L	4	4	0	0	4	4
32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	70	6	64	0	12	0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	21	2	7	12	5	0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	1	1	0	0	1	0
32213	PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	6	6	0	0	3	0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	65	1	64	0	10	0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	1	1	0	0	1	0
32226	CHLOROPHYLL B, PERIPHYTON, SPECTRO, MG/M2	1	0	0	1	1	0
32228	CHLOROPHYLL A, PERIPHYTON, SPECTRO, MG/M2	1	0	0	1	1	0
32230	CHLOROPHYLL A (MG/L)	95	0	79	16	1	0
32231	CHLOROPHYLL B (MG/L)	95	0	79	16	1	0
32240	TANNIN AND LIGNIN (MG/L)	23	23	0	0	6	0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	71	66	0	5	5	0
34200	ACENAPHTHYLENE TOTWUG/L	4	4	0	0	4	4
34203	ACENAPHTHYLENE DRY WGTBOTUG/KG	7	7	0	0	6	6
34205	ACENAPHTHENE TOTWUG/L	4	4	0	0	4	4
34208	ACENAPHTHENE DRY WGTBOTUG/KG	7	7	0	0	6	6
34210	ACROLEIN TOTWUG/L	4	4	0	0	4	4
34215	ACRYLONITRILE TOTWUG/L	4	4	0	0	4	4
34220	ANTHRACENE TOTWUG/L	4	4	0	0	4	4
34223	ANTHRACENE DRY WGTBOTUG/KG	7	7	0	0	6	6
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	7	7	0	0	6	6
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	7	7	0	0	6	6
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	7	7	0	0	6	6
34252	BERYLLIUM WET WGTTISMG/KG	3	3	0	0	1	0

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34257	B-BHC-BETA	DRY WGTBOTUG/KG	7	7	0	0	6	6
34258	B-BHC-BETA	WET WGTTISMG/KG	2	2	0	0	1	0
34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	12	12	0	0	11	0
34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34263	DELTA BENZENE HEXACHLORIDE	WET WGTTISMG/KG	2	2	0	0	1	0
34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	4	4	0	0	4	4
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		4	4	0	0	4	4
34301	CHLOROBENZENE	TOTWUG/L	4	4	0	0	4	4
34311	CHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34320	CHRYSENE	TOTWUG/L	4	4	0	0	4	4
34323	CHRYSENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34336	DIETHYL PHTHALATE	TOTWUG/L	4	4	0	0	4	4
34341	DIMETHYL PHTHALATE	TOTWUG/L	4	4	0	0	4	4
34351	ENDOSULFAN SULFATE	TOTWUG/L	12	12	0	0	11	0
34356	ENDOSULFAN, BETA	TOTWUG/L	12	12	0	0	11	0
34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	7	7	0	0	6	6
34360	ENDOSULFAN, BETA	WET WGTTISMG/KG	2	2	0	0	1	0
34361	ENDOSULFAN, ALPHA	TOTWUG/L	12	12	0	0	11	0
34365	ENDOSULFAN, ALPHA	WET WGTTISMG/KG	2	2	0	0	1	0
34366	ENDRIN ALDEHYDE	TOTWUG/L	12	12	0	0	11	0
34371	ETHYLBENZENE	TOTWUG/L	4	4	0	0	4	4
34376	FLUORANTHENE	TOTWUG/L	4	4	0	0	4	4
34379	FLUORANTHENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34381	FLUORENE	TOTWUG/L	4	4	0	0	4	4
34384	FLUORENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	4	4	0	0	4	4
34396	HEXACHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34408	ISOPHORONE	TOTWUG/L	4	4	0	0	4	4
34413	METHYL BROMIDE	TOTWUG/L	4	4	0	0	4	4
34418	METHYL CHLORIDE	TOTWUG/L	4	4	0	0	4	4
34423	METHYLENE CHLORIDE	TOTWUG/L	4	4	0	0	4	4
34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	4	4	0	0	4	4
34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	4	4	0	0	4	4
34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	4	4	0	0	4	4
34445	NAPHTHALENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34447	NITROBENZENE	TOTWUG/L	4	4	0	0	4	4
34452	PARACHLOROMETA CRESOL	TOTWUG/L	4	4	0	0	4	4
34461	PHENANTHRENE	TOTWUG/L	4	4	0	0	4	4
34464	PHENANTHRENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34469	PYRENE	TOTWUG/L	4	4	0	0	4	4
34472	PYRENE	DRY WGTBOTUG/KG	7	7	0	0	6	6
34475	TETRACHLOROETHYLENE	TOTWUG/L	4	4	0	0	4	4
34480	THALLIUM	DRY WGTBOTMG/KG	11	11	0	0	9	0
34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	4	4	0	0	4	4
34496	1,1-DICHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34501	1,1-DICHLOROETHYLENE	TOTWUG/L	4	4	0	0	4	4
34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	4	4	0	0	4	4
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	7	7	0	0	6	6
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	7	7	0	0	6	6
34536	1,2-DICHLOROBENZENE	TOTWUG/L	4	4	0	0	4	4
34541	1,2-DICHLOROPROPANE	TOTWUG/L	4	4	0	0	4	4
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	4	4	0	0	4	4
34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	4	4	0	0	4	4
34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	4	4	0	0	4	4
34566	1,3-DICHLOROBENZENE	TOTWUG/L	4	4	0	0	4	4
34571	1,4-DICHLOROBENZENE	TOTWUG/L	4	4	0	0	4	4
34581	2-CHLORONAPHTHALENE	TOTWUG/L	4	4	0	0	4	4
34586	2-CHLOROPHENOL	TOTWUG/L	4	4	0	0	4	4
34591	2-NITROPHENOL	TOTWUG/L	4	4	0	0	4	4
34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	4	4	0	0	4	4
34601	2,4-DICHLOROPHENOL	TOTWUG/L	4	4	0	0	4	4
34606	2,4-DIMETHYLPHENOL	TOTWUG/L	4	4	0	0	4	4
34611	2,4-DINITROTOLUENE	TOTWUG/L	4	4	0	0	4	4
34616	2,4-DINITROPHENOL	TOTWUG/L	4	4	0	0	4	4
34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	4	4	0	0	4	4
34626	2,6-DINITROTOLUENE	TOTWUG/L	4	4	0	0	4	4
34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	4	4	0	0	4	4
34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	4	4	0	0	4	4

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	4	4	0	0	4	4
34646	4-NITROPHENOL TOTWUG/L	4	4	0	0	4	4
34664	PCB - 1221 WET WGTTISMG/KG	2	2	0	0	1	0
34667	PCB - 1232 WET WGTTISMG/KG	2	2	0	0	1	0
34668	DICHLORODIFUOROMETHANE TOTWUG/L	4	4	0	0	4	4
34669	PCB - 1248 WET WGTTISMG/KG	2	2	0	0	1	0
34670	PCB - 1260 WET WGTTISMG/KG	2	2	0	0	1	0
34671	PCB - 1016 TOTWUG/L	12	12	0	0	11	0
34674	PCB - 1016 WET WGTTISMG/KG	2	2	0	0	1	0
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	5	5	0	0	2	0
34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGTT,MG/KG	2	2	0	0	1	0
34684	DIELDRIN TISMG/KG	37	3	12	22	1	0
34685	ENDRIN WET WGTTISMG/KG	39	5	12	22	2	0
34686	HEPTACHLOR EPOXIDE WET WGTTISMG/KG	9	5	4	0	4	0
34687	HEPTACHLOR WET WGTTISMG/KG	39	5	12	22	2	0
34688	HEXACHLOROBENZENE WET WGTTISMG/KG	17	5	12	0	2	0
34689	PCB - 1242 WET WGTTISMG/KG	2	2	0	0	1	0
34690	PCB - 1254 WET WGTTISMG/KG	2	2	0	0	1	0
34691	TOXAPHENE WET WGTTISMG/KG	35	5	12	18	2	0
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	4	4	0	0	4	4
34696	NAPHTHALENE TOTWUG/L	4	4	0	0	4	4
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	4	4	0	0	4	4
34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	4	4	0	0	4	4
38442	DICAMBA (BANVEL) WATER,DISSUG/L	10	10	0	0	10	0
38451	DICHLORPROP WATER,SUSPUG/L	10	10	0	0	10	0
38462	FAMPHUR WATER, TOTUG/L	4	4	0	0	4	4
38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	2	2	0	0	1	0
38745	2,4-DB WATER, TOTUG/L	10	10	0	0	10	0
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	38	16	22	0	16	4
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	16	16	0	0	12	0
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	22	0	22	0	10	0
39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	15	3	12	0	1	0
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	22	0	22	0	10	0
39066	CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	15	3	12	0	1	0
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	22	0	22	0	10	0
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	17	5	12	0	2	0
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	7	7	0	0	6	6
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	22	0	22	0	10	0
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	17	5	12	0	2	0
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	21	5	12	4	2	0
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	7	7	0	0	6	6
39080	PRONAMIDE IN WATER, TOTALUG/L	4	4	0	0	4	4
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	3	3	0	0	3	0
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	6	6	0	0	5	4
39105	PERCENT FAT HEXANE EXTRACTION	39	5	12	22	2	0
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	4	4	0	0	4	4
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	4	4	0	0	4	4
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	4	4	0	0	4	4
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	39	5	12	22	2	0
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12	0
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	7	7	0	0	6	6
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10	0
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	7	7	0	0	6	6
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12	0
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10	0
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	7	7	0	0	6	6
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12	0
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	7	7	0	0	6	6
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10	0
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	7	7	0	0	6	6
39329	O,P DDE IN TISSUE, WET WGT(UG/G)	1	0	1	0	1	0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	57	12	45	0	19	0
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	30	20	10	0	22	6
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	12	12	0	0	11	0
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	12	12	0	0	11	0
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	12	12	0	0	11	0
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	7	7	0	0	6	6
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	23	1	22	0	11	0
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	16	16	0	0	12	0
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	16	16	0	0	12	0
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	16	16	0	0	12	0

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
39369	DDE IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	63	0	63	0	1	0
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	16	16	0	0	12	0
39374	DDT IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	22	0	22	0	1	0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	41	12	22	7	16	0
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	23	23	0	0	18	6
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12	0
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	23	23	0	0	18	6
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11	0
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	16	16	0	0	12	0
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	2	2	0	0	1	0
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	1	0	1	0	1	0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11	0
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	23	23	0	0	18	6
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11	0
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	7	7	0	0	6	6
39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4	4
39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4	4
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10	0
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	12	12	0	0	11	0
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	12	12	0	0	11	0
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	12	12	0	0	11	0
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	12	12	0	0	11	0
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	12	12	0	0	11	0
39515	PCBS (MG/KG) FISH TISSUE MG/KG	12	2	10	0	3	0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	24	1	22	1	11	0
39520	PCBS IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	84	0	84	0	1	0
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	16	16	0	0	12	0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4	4
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	25	0	24	1	16	0
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	10	0	10	0	9	0
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10	0
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	4	4	0	0	4	4
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	10	10	0	0	10	0
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	10	10	0	0	10	0
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	6	6	0	0	6	6
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	10	10	0	0	10	0
39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	3	3	0	0	1	0
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	14	2	12	0	2	0
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4	4
45007	TOLUIDINE WH WAT UG/L	4	4	0	0	4	4
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	7	7	0	0	6	6
45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	4	4	0	0	4	4
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	2	2	0	0	1	0
46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4	4
46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	32	32	0	0	5	0
49567	PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	225	225	0	0	3	0
49569	CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	216	216	0	0	3	0
49570	NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	216	216	0	0	3	0
49571	NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	225	225	0	0	3	0
49572	PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	227	227	0	0	3	0
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	7	7	0	0	6	6
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	7	7	0	0	6	6
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	7	7	0	0	6	6
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	55	0	31	24	27	0
50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	8	8	0	0	5	5
50120	ARSENIC,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	2	2	0	0	2	2
50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	8	8	0	0	5	5
50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	8	8	0	0	5	5
50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	8	8	0	0	5	5

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Parameter Code	Name		Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50138	SELENIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	2	2	0	0	2	2
50140	STRONTIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	2	2	0	0	2	2
50141	TITANIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	2	2	0	0	2	2
50142	VANADIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	2	2	0	0	2	2
50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	8	8	0	0	5	5
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	6	6	0	0	5	5
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	7	7	0	0	6	6
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	7	7	0	0	6	6
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	7	7	0	0	6	6
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	7	7	0	0	6	6
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	7	7	0	0	6	6
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	7	7	0	0	6	6
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	7	7	0	0	6	6
60050	ALGAE, TOTAL (CELLS/ML)		1	0	1	0	1	0
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	7	7	0	0	6	6
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	7	7	0	0	6	6
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	7	7	0	0	6	6
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	7	7	0	0	6	6
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	7	7	0	0	6	6
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	7	7	0	0	6	6
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	7	7	0	0	6	6
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	7	7	0	0	6	6
61290	BENZENE, TOTAL WATER	UG/L	4	4	0	0	4	4
61291	TOLUENE, TOTAL WATER	UG/L	4	4	0	0	4	4
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	7	7	0	0	6	6
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	6	6	0	0	5	5

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRYUG/KG	7	7	0	0	6	6
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT UG/KG	7	7	0	0	6	6
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT UG/KG	6	6	0	0	5	5
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	7	7	0	0	6	6
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	160	0	97	63	3	1
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	4	0	2	2	3	1
70302	SOLIDS, DISSOLVED-TONS PER DAY	115	0	95	20	2	0
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	117	0	97	20	3	1
70320	MOISTURE CONTENT (PERCENT OF TOTAL WET WEIGHT)	15	3	12	0	1	0
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	30	28	2	0	9	1
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	2001	0	1130	871	37	0
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2589	593	1123	873	57	0
70953	CHLOROPHYLL-A,PHYTOPLANKTON UG/L,CHROMO-FLUORO	19	0	19	0	1	0
70954	CHLOROPHYLL-B,PHYTOPLANKTON UG/L,CHROMO-FLUORO	19	0	19	0	1	0
71835	OXYGEN CONSUMED, FILTERED MG/L	36	0	0	36	1	0
71840	OXYGEN CONSUMED, UNFILTERED MG/L	36	0	0	36	1	0
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	48	1	2	45	3	1
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	2	0	2	0	1	1
71885	IRON (UG/L AS FE)	45	1	0	44	2	0

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	24	0	24	0	1	0
71887	NITROGEN, TOTAL, AS NO3 - MG/L	143	0	123	20	2	0
71890	MERCURY, DISSOLVED (UG/L AS HG)	22	22	0	0	12	6
71900	MERCURY, TOTAL (UG/L AS HG)	581	167	222	192	53	7
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	71	0	9	62	6	0
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	54	29	25	0	29	11
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	75	3	9	63	7	0
71935	MERCURY, TOTAL IN FISH (PPM,WET WEIGHT BASIS)	15	3	12	0	1	0
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	102	6	33	63	9	0
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	99	6	30	63	9	0
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	90	6	21	63	7	0
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	87	3	21	63	8	0
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	102	6	33	63	9	0
72008	DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	1	0	1	0	1	1
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	1	1	0	0	1	0
73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	4	4	0	0	4	4
73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	4	4	0	0	4	4
73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	4	4	0	0	4	4
73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	4	4	0	0	4	4
73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	4	4	0	0	4	4
73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	4	4	0	0	4	4
73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	4	4	0	0	4	4
73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	4	4	0	0	4	4
73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	4	4	0	0	4	4
73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	4	4	0	0	4	4
73599	1,4-NAPHTHALENEDIONE TOTWUG/L	4	4	0	0	4	4
73600	1-NAPHTHALENAMINE TOTWUG/L	4	4	0	0	4	4
73605	BENZENAMINE, 4-NITRO- TOTWUG/L	4	4	0	0	4	4
73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	4	4	0	0	4	4
73619	1-NITROSOPIPERIDINE TOTWUG/L	4	4	0	0	4	4
73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	4	4	0	0	4	4
73628	1,4-BENZENEDIAMINE TOTWUG/L	4	4	0	0	4	4
73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	4	4	0	0	4	4
75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	14	14	0	0	12	0
75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	7	7	0	0	6	6
75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	7	7	0	0	6	6
76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	4	4	0	0	4	4
77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	4	4	0	0	4	4
77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	4	4	0	0	4	4
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	4	4	0	0	4	4
77103	2-HEXANONE WHOLE WATER,UG/L	4	4	0	0	4	4
77128	STYRENE WHOLE WATER,UG/L	4	4	0	0	4	4
77142	O-TOLUIDINE WHOLE WATER,UG/L	4	4	0	0	4	4
77146	P-CRESOL WHOLE WATER,UG/L	4	4	0	0	4	4
77151	M-CRESOL WHOLE WATER,UG/L	4	4	0	0	4	4
77152	O-CRESOL WHOLE WATER,UG/L	4	4	0	0	4	4
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	4	4	0	0	4	4
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	4	4	0	0	4	4
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	4	4	0	0	4	4
77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	4	4	0	0	4	4
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	4	4	0	0	4	4
77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	4	4	0	0	4	4
77424	IODOMETHANE WHOLE WATER,UG/L	4	4	0	0	4	4
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	4	4	0	0	4	4
77545	SAFROLE WHOLE WATER,UG/L	4	4	0	0	4	4
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	4	4	0	0	4	4
77579	DIPHENYLAMINE WHOLE WATER,UG/L	4	4	0	0	4	4
77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	4	4	0	0	4	4
77596	METHYLENE BROMIDE WHOLE WATER,UG/L	4	4	0	0	4	4
77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	4	4	0	0	4	4
77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	4	4	0	0	4	4
77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	4	4	0	0	4	4
77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	4	4	0	0	4	4
77825	ALACHLOR WHOLE WATER,UG/L	10	10	0	0	10	0
78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	4	4	0	0	4	4
78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	4	4	0	0	4	4
78200	N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	4	4	0	0	4	4
78206	N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	4	4	0	0	4	4
78207	N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	4	4	0	0	4	4

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Parameter Code	Name	Total Obs	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
78300	3-NITROANILINE, TOTAL, IN WATER UG/L	4	4	0	0	4	4
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	7	7	0	0	6	6
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	7	7	0	0	6	6
79178	PCB-1242 TISDRYWTMG/KG	11	0	3	8	1	0
79179	PCB-1254 TISDRYWTMG/KG	37	3	12	22	1	0
79182	PCB-1248 TISDRYWTMG/KG	15	3	12	0	1	0
79183	PCB-1260 TISDRYWTMG/KG	23	3	12	8	1	0
79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	7	7	0	0	6	6
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	13	13	0	0	11	0
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	223	93	114	16	10	1
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	129	0	113	16	2	0
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	1	1	0	0	1	0
81281	KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	4	4	0	0	4	4
81302	DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	4	4	0	0	4	4
81309	CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	4	4	0	0	4	4
81312	POLYCHLORINATEDBIPHENYLS FISH TISSUE WET WGT MG/KG	3	3	0	0	1	0
81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	9	9	0	0	6	6
81520	CHLOROPRENE WHL WATER SMPL UG/L	4	4	0	0	4	4
81551	XYLENE WHL WATER SMPL UG/L	4	4	0	0	4	4
81552	ACETONE WHL WATER SMPL UG/L	4	4	0	0	4	4
81553	ACETOPHENONE WHL WATER SMPL UG/L	4	4	0	0	4	4
81593	METHACRYLONITRILE WHL WATER SMPL UG/L	4	4	0	0	4	4
81595	METHYL ETHYL KETONE WHL WATER SMPL UG/L	4	4	0	0	4	4
81596	METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	4	4	0	0	4	4
81597	METHYL METHACRYLATE WHL WATER SMPL UG/L	4	4	0	0	4	4
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	216	3	150	63	10	0
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	2	2	0	0	1	0
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	11	5	6	0	2	0
81665	VANADIUM IN FISH TISSUE WET WEIGHT MG/KG	12	0	12	0	2	0
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	3	3	0	0	1	0
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	11	5	6	0	2	0
81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	4	4	0	0	4	4
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	49	5	22	22	4	0
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	2	2	0	0	1	0
81944	DDT(INCLUDES DDE & DDD) IN TISSUE WET WEIGHT MG/KG	3	3	0	0	1	0
81987	TOTAL SEDIMENT PARTICLE SIZE %COARSER THAN 9.00PHI	37	3	12	22	1	0
82004	DACTHAL IN TISSUE SAMPLE WET WEIGHT MG/KG	12	3	9	0	1	0
82007	PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	5	5	0	0	4	0
82008	SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	5	5	0	0	4	0
82009	SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	5	5	0	0	4	0
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	14	5	9	0	2	0
82032	CALCIUM - TOTAL UG/L (AS CA)	11	11	0	0	5	0
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	41	41	0	0	4	0
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	1	1	0	0	1	0
82191	2-NAPTHYLAMINE IN WATER UG/L	4	4	0	0	4	4
82204	2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	4	4	0	0	4	4
82213	DIMETHYL BENZIDINE IN WATER UG/L	4	4	0	0	4	4
82398	SAMPLING METHOD (CODES)	1	0	1	0	1	0
83509	STREAM, WIDTH METER	1	1	0	0	1	0
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	2	0	2	0	1	1
84001	AQUIFER NAME CODE (SEE USGS CATALOG)	2	0	2	0	1	1
84007	ANATOMY ALPHA CODE	216	3	150	63	10	0
84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	213	0	150	63	9	0

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0102	No	00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)	05/18/82-05/18/82	0	1	
RICH0001	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	10/26/73-11/25/74	1	11	
RICH0002	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/02/72-03/24/78	5	38	
RICH0003	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/19/73-03/14/78	4	54	
RICH0005	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/19/73-06/19/90	17	179	
RICH0006	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/29/74-03/14/78	3	41	
RICH0008	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/10/74-05/15/78	3	33	
RICH0010	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/19/73-09/19/73	0	4	
RICH0011	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/26/74-12/15/98	24	126	
RICH0015	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/68-10/26/98	30	88	
RICH0017	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/14/94-10/26/98	4	46	
RICH0019	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/68-06/20/90	21	219	
RICH0020	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/14/94-10/26/98	4	46	
RICH0021	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/14/94-10/26/98	4	46	
RICH0023	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/68-06/28/83	14	70	
RICH0026	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/14/94-10/26/98	4	46	
RICH0028	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/18/73-01/10/74	0	9	
RICH0029	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/18/73-05/17/78	5	54	
RICH0032	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/68-12/15/98	30	229	
RICH0034	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/14/94-10/26/98	4	46	
RICH0035	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/31/72-07/08/74	1	11	
RICH0036	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	10/02/74-06/20/90	15	153	
RICH0059	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/94-10/26/98	4	46	
RICH0060	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/01/75-06/28/83	8	25	
RICH0061	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	01/17/90-11/19/98	8	38	
RICH0064	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/94-10/26/98	4	46	
RICH0065	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/68-12/07/98	30	266	
RICH0066	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/26/72-05/17/78	5	56	
RICH0067	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/30/73-06/20/90	17	174	
RICH0069	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/68-12/15/98	30	175	
RICH0077	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/94-10/26/98	4	46	
RICH0079	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/30/73-05/17/78	5	56	
RICH0080	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/26/72-05/17/78	5	57	
RICH0081	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/30/73-05/12/78	5	57	
RICH0085	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/29/96-12/14/98	2	30	
RICH0089	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/08/68-06/28/83	14	68	
RICH0091	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	08/06/97-12/07/98	1	9	
RICH0093	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/28/94-10/26/98	4	46	
RICH0094	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	02/03/69-12/07/98	29	236	
RICH0096	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-05/10/78	10	102	
RICH0101	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/26/72-06/20/90	17	176	
RICH0102	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/27/74-02/21/89	14	138	
RICH0103	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/26/72-07/21/74	1	16	
RICH0104	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/20/94-11/23/98	4	19	
RICH0105	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/68-10/26/98	30	111	
RICH0107	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/06/96-10/26/98	2	25	
RICH0108	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	45	
RICH0110	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	44	
RICH0112	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/06/96-10/26/98	2	25	
RICH0114	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/06/96-10/26/98	2	24	
RICH0115	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	46	
RICH0116	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	02/18/68-12/15/98	30	347	
RICH0118	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	44	
RICH0119	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	44	
RICH0120	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/18/68-04/25/78	9	88	
RICH0124	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/06/96-10/26/98	2	24	
RICH0125	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	44	
RICH0126	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/28/94-10/26/98	4	43	
RICH0127	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/06/96-10/26/98	2	25	
RICH0130	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-12/14/98	31	154	
RICH0134	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-12/14/98	31	255	
RICH0143	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-05/10/78	10	98	
RICH0146	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	02/10/75-12/07/98	23	218	
RICH0001	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	10/26/73-11/25/74	1	11	
RICH0002	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/02/72-03/24/78	5	38	
RICH0003	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/19/73-03/14/78	4	54	
RICH0005	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/19/73-03/14/78	4	55	
RICH0006	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/29/74-03/14/78	3	41	
RICH0008	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/10/74-05/15/78	3	33	
RICH0010	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/19/73-09/19/73	0	4	
RICH0011	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/26/74-05/22/78	3	21	
RICH0015	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/22/68-08/30/74	6	41	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0019	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	06/28/68-05/17/78	9	99	
RICH0023	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/22/68-05/22/78	9	59	
RICH0028	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/18/73-01/10/74	0	9	
RICH0029	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/18/73-05/17/78	5	54	
RICH0032	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/22/68-05/22/78	9	50	
RICH0035	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/31/72-07/08/74	1	11	
RICH0036	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	10/02/74-05/17/78	3	35	
RICH0060	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/01/75-05/22/78	3	14	
RICH0065	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	06/28/68-05/17/78	9	101	
RICH0066	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/26/72-05/17/78	5	56	
RICH0067	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/30/73-05/17/78	5	55	
RICH0069	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/22/68-05/22/78	9	56	
RICH0079	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/30/73-05/17/78	5	56	
RICH0080	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/26/72-05/17/78	5	57	
RICH0081	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/30/73-05/12/78	5	57	
RICH0089	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/08/68-05/22/78	9	57	
RICH0094	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	02/03/69-04/25/78	9	61	
RICH0096	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-05/10/78	10	102	
RICH0101	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/26/72-04/25/78	5	57	
RICH0102	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/27/74-04/25/78	3	41	
RICH0103	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/26/72-07/21/74	1	16	
RICH0105	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/22/68-05/22/78	9	56	
RICH0116	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	02/18/68-04/25/78	10	103	
RICH0120	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	06/18/68-04/25/78	9	88	
RICH0130	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-05/10/78	10	103	
RICH0134	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-05/10/78	10	101	
RICH0143	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-05/10/78	10	98	
RICH0146	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	02/10/75-05/10/78	3	36	
RICH0001	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-11/25/74	1	11	
RICH0002	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/02/72-03/24/78	5	33	
RICH0003	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-06/22/79	6	63	
RICH0005	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-06/19/90	17	184	
RICH0006	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	5	51	
RICH0008	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/74-06/12/79	4	42	
RICH0010	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-09/19/73	0	4	
RICH0011	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	24	148	
RICH0014	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/64-08/11/71	6	419	
RICH0015	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	30	91	
RICH0017	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	4	51	
RICH0018	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/27/68-11/04/71	3	21	
RICH0019	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	21	221	
RICH0020	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	4	51	
RICH0021	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	4	51	
RICH0023	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/02/83	15	2010	
RICH0025	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/92-06/04/97	5	3	
RICH0026	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	4	51	
RICH0027	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/74-02/27/79	4	122	
RICH0028	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-01/10/74	0	7	
RICH0029	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	6	61	
RICH0030	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	0	1	
RICH0032	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	30	1332	
RICH0034	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	4	51	
RICH0035	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-07/08/74	1	9	
RICH0036	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	15	161	
RICH0037	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	0	1	
RICH0038	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-06/04/97	2	2	
RICH0040	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	0	1	
RICH0044	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	0	1	
RICH0046	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-06/04/97	2	2	
RICH0047	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	0	1	
RICH0050	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/30/76-07/25/78	1	2	
RICH0051	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	0	1	
RICH0053	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	0	1	
RICH0054	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	0	1	
RICH0057	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-03/27/95	0	3	
RICH0058	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/89-06/15/89	0	1	
RICH0059	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	4	52	
RICH0060	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/01/75-09/27/83	8	34	
RICH0061	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/90-11/19/98	8	44	
RICH0063	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	0	1	
RICH0064	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	15	53	
RICH0065	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	30	274	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0066	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	6	65	
RICH0067	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	17	180	
RICH0068	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-12/07/94	0	1	
RICH0069	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	30	717	
RICH0070	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/04/71	3	20	
RICH0073	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/71-08/11/71	0	121	
RICH0074	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-06/04/97	2	3	
RICH0075	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-12/07/94	0	1	
RICH0076	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-12/07/94	0	1	
RICH0077	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	4	51	
RICH0078	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-06/04/97	2	3	
RICH0079	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	6	64	
RICH0080	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	6	64	
RICH0081	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	6	65	
RICH0082	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/69-05/09/69	0	1	
RICH0083	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/29/80-08/08/94	14	29	
RICH0084	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/04/91	6	11	
RICH0085	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/94-12/14/98	4	34	
RICH0086	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-06/04/97	2	3	
RICH0087	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-03/27/95	0	2	
RICH0088	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/80-08/01/83	3	5	
RICH0089	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/68-09/20/83	15	75	
RICH0091	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/97-12/07/98	1	9	
RICH0092	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/04/71	3	22	
RICH0093	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	4	51	
RICH0094	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	29	246	
RICH0095	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/11/84	0	1	
RICH0096	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	27	116	
RICH0099	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	4	110	
RICH0100	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/85-09/12/89	4	9	
RICH0101	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	17	184	
RICH0102	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	14	144	
RICH0103	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-07/21/74	1	16	
RICH0104	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/20/94-11/23/98	4	20	
RICH0105	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	30	121	
RICH0106	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	4	135	
RICH0107	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	3	37	
RICH0108	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	56	
RICH0110	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	55	
RICH0112	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	3	37	
RICH0113	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/83-09/27/83	0	3	
RICH0114	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	3	36	
RICH0115	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	56	
RICH0116	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	30	2527	
RICH0118	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-09/16/96	2	23	
RICH0119	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	55	
RICH0120	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	10	97	
RICH0121	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/24/79-09/03/81	1	24	
RICH0122	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/05/69-11/04/71	2	5	
RICH0124	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	3	36	
RICH0125	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	56	
RICH0126	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	4	54	
RICH0127	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	3	37	
RICH0128	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/83-09/27/87	4	111	
RICH0130	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	31	165	
RICH0131	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/04/91	6	33	
RICH0132	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-04/07/90	5	13	
RICH0133	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/94-10/19/94	0	4	
RICH0134	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	31	263	
RICH0135	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/85-08/16/85	0	1	
RICH0136	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-09/12/89	5	10	
RICH0140	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/94-10/19/94	0	2	
RICH0142	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-08/16/85	0	4	
RICH0143	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	11	108	
RICH0144	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-09/12/89	5	10	
RICH0145	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/87-09/04/91	4	20	
RICH0146	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	23	231	
RICH0147	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/89-09/04/91	1	19	
RICH0148	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-08/16/85	0	5	
RICH0149	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/03/86-04/03/86	0	1	
RICH0014	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/64-08/19/64	0	2	
RICH0084	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/04/91	6	8	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0088	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/16/80-08/01/83	3	5	
RICH0095	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/11/84	0	1	
RICH0099	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	4	110	
RICH0100	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/08/87-09/12/89	2	5	
RICH0106	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	4	137	
RICH0128	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/09/83-09/27/87	4	111	
RICH0131	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/04/91	6	32	
RICH0132	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-04/07/90	5	11	
RICH0135	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/16/85-08/16/85	0	1	
RICH0136	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-09/12/89	5	8	
RICH0142	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-08/16/85	0	4	
RICH0144	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-09/12/89	5	8	
RICH0145	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/12/88-09/04/91	3	21	
RICH0147	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	10/31/89-09/04/91	1	19	
RICH0148	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-08/16/85	0	5	
RICH0023	No	00023	SAMPLE WEIGHT IN POUNDS	10/26/79-10/26/79	0	3	
RICH0097	No	00023	SAMPLE WEIGHT IN POUNDS	05/23/75-08/27/75	0	11	
RICH0109	No	00023	SAMPLE WEIGHT IN POUNDS	05/08/75-05/08/75	0	1	
RICH0129	No	00023	SAMPLE WEIGHT IN POUNDS	10/01/70-10/01/84	14	34	
RICH0023	No	00024	SAMPLE LENGTH IN INCHES	10/26/79-10/26/79	0	3	
RICH0097	No	00024	SAMPLE LENGTH IN INCHES	05/23/75-08/27/75	0	11	
RICH0109	No	00024	SAMPLE LENGTH IN INCHES	05/08/75-05/08/75	0	1	
RICH0129	No	00024	SAMPLE LENGTH IN INCHES	10/01/70-10/01/84	14	34	
RICH0084	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	4	7	
RICH0100	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	2	6	
RICH0131	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	4	32	
RICH0132	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-04/07/90	2	8	
RICH0136	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	2	6	
RICH0144	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	2	6	
RICH0145	No	00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	4	23	
RICH0147	No	00025	BAROMETRIC PRESSURE (MM OF HG)	10/31/89-09/04/91	1	21	
RICH0027	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/13/75-01/13/75	0	1	
RICH0084	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/11/84-09/04/91	6	8	
RICH0099	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/17/83-10/17/83	0	1	
RICH0100	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	04/08/87-09/12/89	2	6	
RICH0106	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/24/83-10/17/83	0	2	
RICH0131	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/11/84-09/04/91	6	33	
RICH0132	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	04/08/87-04/07/90	2	8	
RICH0136	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/10/84-09/12/89	5	7	
RICH0142	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/10/84-09/10/84	0	1	
RICH0144	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/10/84-09/12/89	5	7	
RICH0145	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	04/08/87-09/04/91	4	28	
RICH0147	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/31/89-09/04/91	1	25	
RICH0027	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/13/75-02/27/79	4	16	
RICH0050	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/25/78-07/25/78	0	1	
RICH0084	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/11/84-09/04/91	6	8	
RICH0099	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/17/83-10/17/83	0	1	
RICH0100	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/08/87-09/12/89	2	6	
RICH0106	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/24/83-10/17/83	0	2	
RICH0121	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/24/79-09/03/81	1	24	
RICH0131	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/11/84-09/04/91	6	33	
RICH0132	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/08/87-04/07/90	2	8	
RICH0136	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/10/84-09/12/89	5	7	
RICH0142	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/10/84-09/10/84	0	1	
RICH0144	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/10/84-09/12/89	5	7	
RICH0145	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/08/87-09/04/91	4	28	
RICH0147	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/31/89-09/04/91	1	25	
RICH0001	No	00041	WEATHER (WMO CODE 4501)	10/26/73-11/25/74	1	11	
RICH0002	No	00041	WEATHER (WMO CODE 4501)	05/02/72-03/24/78	5	36	
RICH0003	No	00041	WEATHER (WMO CODE 4501)	04/19/73-06/22/79	6	64	
RICH0005	No	00041	WEATHER (WMO CODE 4501)	04/19/73-06/19/90	17	187	
RICH0006	No	00041	WEATHER (WMO CODE 4501)	05/29/74-06/22/79	5	50	
RICH0008	No	00041	WEATHER (WMO CODE 4501)	09/10/74-06/12/79	4	42	
RICH0010	No	00041	WEATHER (WMO CODE 4501)	04/19/73-09/19/73	0	4	
RICH0011	No	00041	WEATHER (WMO CODE 4501)	05/26/74-12/15/98	24	139	
RICH0015	No	00041	WEATHER (WMO CODE 4501)	07/22/68-10/26/98	30	87	
RICH0017	No	00041	WEATHER (WMO CODE 4501)	07/14/94-10/26/98	4	47	
RICH0019	No	00041	WEATHER (WMO CODE 4501)	06/28/68-06/20/90	21	218	
RICH0020	No	00041	WEATHER (WMO CODE 4501)	07/14/94-10/26/98	4	47	
RICH0021	No	00041	WEATHER (WMO CODE 4501)	07/14/94-10/26/98	4	47	
RICH0023	No	00041	WEATHER (WMO CODE 4501)	07/22/68-06/28/83	14	75	
RICH0026	No	00041	WEATHER (WMO CODE 4501)	07/14/94-10/26/98	4	47	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0027	No	00041	WEATHER (WMO CODE 4501)		03/12/74-02/27/79	4	120	
RICH0028	No	00041	WEATHER (WMO CODE 4501)		04/18/73-01/10/74	0	9	
RICH0029	No	00041	WEATHER (WMO CODE 4501)		05/29/73-06/21/79	6	61	
RICH0032	No	00041	WEATHER (WMO CODE 4501)		07/22/68-12/15/98	30	543	
RICH0034	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	47	
RICH0035	No	00041	WEATHER (WMO CODE 4501)		07/31/72-07/08/74	1	11	
RICH0036	No	00041	WEATHER (WMO CODE 4501)		10/02/74-06/20/90	15	159	
RICH0059	No	00041	WEATHER (WMO CODE 4501)		06/28/94-10/26/98	4	48	
RICH0060	No	00041	WEATHER (WMO CODE 4501)		05/01/75-06/28/83	8	32	
RICH0061	No	00041	WEATHER (WMO CODE 4501)		01/17/90-11/19/98	8	40	
RICH0064	No	00041	WEATHER (WMO CODE 4501)		06/28/94-10/26/98	4	48	
RICH0065	No	00041	WEATHER (WMO CODE 4501)		06/28/68-12/07/98	30	272	
RICH0066	No	00041	WEATHER (WMO CODE 4501)		09/26/72-06/21/79	6	66	
RICH0067	No	00041	WEATHER (WMO CODE 4501)		03/30/73-06/20/90	17	176	
RICH0069	No	00041	WEATHER (WMO CODE 4501)		07/22/68-12/15/98	30	217	
RICH0077	No	00041	WEATHER (WMO CODE 4501)		06/28/94-10/26/98	4	48	
RICH0079	No	00041	WEATHER (WMO CODE 4501)		03/30/73-06/21/79	6	65	
RICH0080	No	00041	WEATHER (WMO CODE 4501)		09/26/72-06/21/79	6	64	
RICH0081	No	00041	WEATHER (WMO CODE 4501)		03/30/73-06/21/79	6	65	
RICH0085	No	00041	WEATHER (WMO CODE 4501)		05/29/96-12/14/98	2	32	
RICH0089	No	00041	WEATHER (WMO CODE 4501)		07/08/68-06/28/83	14	75	
RICH0091	No	00041	WEATHER (WMO CODE 4501)		08/06/97-12/07/98	1	9	
RICH0093	No	00041	WEATHER (WMO CODE 4501)		06/28/94-10/26/98	4	48	
RICH0094	No	00041	WEATHER (WMO CODE 4501)		02/03/69-12/07/98	29	241	
RICH0096	No	00041	WEATHER (WMO CODE 4501)		06/18/68-04/24/79	10	110	
RICH0101	No	00041	WEATHER (WMO CODE 4501)		09/26/72-06/20/90	17	183	
RICH0102	No	00041	WEATHER (WMO CODE 4501)		05/27/74-11/29/88	14	144	
RICH0103	No	00041	WEATHER (WMO CODE 4501)		09/26/72-07/21/74	1	16	
RICH0104	No	00041	WEATHER (WMO CODE 4501)		07/20/94-11/23/98	4	19	
RICH0105	No	00041	WEATHER (WMO CODE 4501)		07/22/68-10/26/98	30	122	
RICH0107	No	00041	WEATHER (WMO CODE 4501)		05/06/96-10/26/98	2	32	
RICH0108	No	00041	WEATHER (WMO CODE 4501)		07/28/94-10/26/98	4	48	
RICH0110	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	48	
RICH0112	No	00041	WEATHER (WMO CODE 4501)		05/06/96-10/26/98	2	32	
RICH0114	No	00041	WEATHER (WMO CODE 4501)		05/06/96-10/26/98	2	31	
RICH0115	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	49	
RICH0116	No	00041	WEATHER (WMO CODE 4501)		02/18/68-12/15/98	30	516	
RICH0118	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	46	
RICH0119	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	48	
RICH0120	No	00041	WEATHER (WMO CODE 4501)		06/18/68-06/07/79	10	99	
RICH0121	No	00041	WEATHER (WMO CODE 4501)		10/24/79-09/03/81	1	23	
RICH0124	No	00041	WEATHER (WMO CODE 4501)		05/06/96-10/26/98	2	31	
RICH0125	No	00041	WEATHER (WMO CODE 4501)		07/28/94-10/26/98	4	48	
RICH0126	No	00041	WEATHER (WMO CODE 4501)		07/14/94-10/26/98	4	48	
RICH0127	No	00041	WEATHER (WMO CODE 4501)		05/06/96-10/26/98	2	32	
RICH0130	No	00041	WEATHER (WMO CODE 4501)		10/12/67-12/14/98	31	165	
RICH0134	No	00041	WEATHER (WMO CODE 4501)		10/12/67-12/14/98	31	257	
RICH0143	No	00041	WEATHER (WMO CODE 4501)		10/12/67-06/14/79	11	108	
RICH0146	No	00041	WEATHER (WMO CODE 4501)		02/10/75-12/07/98	23	233	
RICH0099	No	00059	FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/10/83-09/27/87	4	113	
RICH0106	No	00059	FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	10/30/82-09/27/87	4	140	
RICH0128	No	00059	FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	4	114	
RICH0027	No	00060	FLOW, STREAM, MEAN DAILY	CFS	03/12/74-09/22/76	2	68	
RICH0082	No	00060	FLOW, STREAM, MEAN DAILY	CFS	07/30/45-05/09/69	23	45	
RICH0005	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	01/05/83-04/09/85	2	13	
RICH0019	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	04/21/82-03/28/85	2	13	
RICH0027	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	08/13/75-02/27/79	3	57	
RICH0044	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/16/89-06/16/89	0	1	
RICH0047	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/16/89-06/16/89	0	1	
RICH0051	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/16/89-06/16/89	0	1	
RICH0053	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/16/89-06/16/89	0	1	
RICH0054	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/16/89-06/16/89	0	1	
RICH0058	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	06/15/89-06/15/89	0	1	
RICH0084	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/11/84-09/13/89	5	11	
RICH0088	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	07/16/80-08/01/83	3	5	
RICH0094	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	04/21/82-04/22/85	3	13	
RICH0100	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	03/15/85-09/12/89	4	9	
RICH0101	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	04/21/82-04/22/85	3	18	
RICH0106	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	03/24/83-03/24/83	0	1	
RICH0108	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/11/95-09/11/95	0	1	
RICH0110	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/11/95-09/11/95	0	1	
RICH0121	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	10/24/79-09/03/81	1	24	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0126	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	08/01/96-08/01/96	0	1	
RICH0131	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/11/84-09/04/91	6	31	
RICH0132	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-09/12/89	5	11	
RICH0135	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	08/16/85-08/16/85	0	1	
RICH0136	Yes	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-09/12/89	5	10	
RICH0142	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-08/16/85	0	4	
RICH0144	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-09/12/89	5	10	
RICH0145	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	04/08/87-09/04/91	4	27	
RICH0146	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	05/19/82-04/03/85	2	6	
RICH0147	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	10/31/89-09/04/91	1	23	
RICH0148	No	00061	FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-08/16/85	0	5	
RICH0067	No	00062	ELEVATION, RESERVOIR SURFACE WATER IN FEET		10/09/80-10/09/80	0	1	
RICH0149	No	00064	DEPTH OF STREAM, MEAN (FT)		04/03/86-04/03/86	0	1	
RICH0131	No	00065	STAGE, STREAM (FEET)		06/11/91-06/11/91	0	1	
RICH0145	No	00065	STAGE, STREAM (FEET)		06/11/91-06/11/91	0	1	
RICH0147	No	00065	STAGE, STREAM (FEET)		06/11/91-06/11/91	0	1	
RICH0002	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		05/31/72-03/24/78	5	19	
RICH0005	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		05/04/82-04/18/89	6	9	
RICH0011	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		06/07/74-12/15/98	24	134	
RICH0014	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		08/19/64-08/20/64	0	14	
RICH0015	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/22/68-10/26/98	30	80	
RICH0017	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/14/94-10/26/98	4	47	
RICH0019	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-06/26/89	0	6	
RICH0020	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/14/94-10/26/98	4	47	
RICH0021	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/14/94-10/26/98	4	47	
RICH0023	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		09/08/68-09/27/83	15	61	
RICH0026	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/14/94-10/26/98	4	47	
RICH0032	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		09/08/68-12/15/98	30	530	
RICH0034	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/14/94-10/26/98	4	47	
RICH0035	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/31/72-07/08/74	1	8	
RICH0036	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-06/26/89	0	7	
RICH0059	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		06/28/94-10/26/98	4	48	
RICH0060	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		05/01/75-09/27/83	8	30	
RICH0064	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		09/20/83-10/26/98	15	50	
RICH0065	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-06/26/89	0	7	
RICH0067	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-06/26/89	0	7	
RICH0069	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		09/08/68-12/15/98	30	205	
RICH0073	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		08/20/64-08/20/64	0	11	
RICH0077	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		06/28/94-10/26/98	4	47	
RICH0089	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/08/68-09/20/83	15	62	
RICH0093	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		06/28/94-10/26/98	4	48	
RICH0094	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-06/26/89	0	7	
RICH0101	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-05/24/89	0	6	
RICH0102	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		10/24/88-11/29/88	0	2	
RICH0105	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		09/08/68-10/26/98	30	100	
RICH0113	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		07/28/83-09/27/83	0	3	
RICH0115	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		08/17/94-10/26/98	4	33	
RICH0116	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		06/27/74-10/26/98	24	139	
RICH0119	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		08/17/94-10/26/98	4	10	
RICH0134	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		05/04/88-05/10/89	1	8	
RICH0146	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)		03/28/88-05/16/89	1	6	
RICH0005	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		11/09/88-06/19/90	1	18	
RICH0011	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		06/04/75-07/07/94	19	20	
RICH0018	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		05/11/71-07/23/71	0	4	
RICH0019	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-06/20/90	19	22	
RICH0023	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		07/28/75-07/16/80	4	2	
RICH0027	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		03/12/74-02/27/79	4	119	
RICH0032	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-10/05/93	22	21	
RICH0036	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-06/20/90	1	17	
RICH0050	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)		11/30/76-07/25/78	1	2	
RICH0060	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		07/28/75-07/28/75	0	1	
RICH0061	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		07/19/90-01/02/92	1	6	
RICH0065	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-01/02/92	20	25	
RICH0067	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-06/20/90	1	17	
RICH0069	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-10/05/93	22	19	
RICH0083	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		08/14/89-08/14/89	0	1	
RICH0089	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-07/16/80	9	4	
RICH0092	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		07/23/71-07/23/71	0	1	
RICH0094	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-05/05/94	5	56	
RICH0101	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-06/20/90	1	15	
RICH0102	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/21/89	0	1	
RICH0105	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-07/16/80	9	4	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0116	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-02/01/94	4	64	
RICH0120	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/28/71-07/08/71	0	4	
RICH0130	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/28/71-07/09/71	0	3	
RICH0134	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/21/88-06/10/91	2	22	
RICH0146	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	01/25/89-06/05/91	2	22	
RICH0011	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/07/94-12/15/98	4	54	
RICH0032	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	9	153	
RICH0059	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	11	
RICH0061	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/12/94-11/19/98	4	21	
RICH0064	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	11	
RICH0065	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/07/98	4	30	
RICH0069	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	9	140	
RICH0077	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	11	
RICH0085	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/29/96-12/14/98	2	32	
RICH0091	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/06/97-12/07/98	1	9	
RICH0093	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	11	
RICH0094	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/12/94-12/07/98	4	21	
RICH0104	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/20/94-11/23/98	4	20	
RICH0105	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	11	
RICH0108	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	14	
RICH0110	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	13	
RICH0115	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	14	
RICH0116	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	9	84	
RICH0118	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	0	12	
RICH0119	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	13	
RICH0125	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	14	
RICH0126	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	0	13	
RICH0130	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	4	54	
RICH0134	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/02/97-12/14/98	1	18	
RICH0146	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	4	54	
RICH0018	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	0	4	
RICH0070	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	0	4	
RICH0073	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	08/20/64-08/20/64	0	2	
RICH0092	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	0	4	
RICH0011	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	0	10	
RICH0015	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-06/28/83	0	1	
RICH0023	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	0	9	
RICH0032	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	15	210	
RICH0060	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	0	9	
RICH0064	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	07/28/83-10/12/83	0	6	
RICH0069	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	16	145	
RICH0083	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	04/29/80-08/08/94	14	8	
RICH0089	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	0	7	
RICH0105	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-11/18/82	0	1	
RICH0113	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	07/28/83-10/12/83	0	7	
RICH0116	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	08/16/83-10/03/83	0	2	
RICH0050	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	11/30/76-07/25/78	1	2	
RICH0061	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/24/91-10/26/92	1	6	
RICH0065	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/24/91-01/21/93	1	7	
RICH0082	No	00080	COLOR (PLATINUM-COBALT UNITS)	07/30/45-05/09/69	23	45	
RICH0084	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	4	7	
RICH0094	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/13/91-05/05/94	3	21	
RICH0100	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	2	6	
RICH0116	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-01/12/94	2	20	
RICH0131	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	4	29	
RICH0132	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	2	6	
RICH0134	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/13/91-03/03/93	1	8	
RICH0136	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	2	6	
RICH0144	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	2	6	
RICH0145	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	4	26	
RICH0146	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/13/91-03/03/93	1	8	
RICH0147	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/31/89-09/04/91	1	25	
RICH0149	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/03/86-04/03/86	0	1	
RICH0019	No	00091	FLOW, MINIMUM OF FLOW RANGE CFS	05/18/82-05/18/82	0	1	
RICH0005	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/14/79-10/19/89	10	110	
RICH0011	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	18	110	
RICH0015	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/28/83-10/26/98	15	49	
RICH0017	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0019	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	104	
RICH0020	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	48	
RICH0021	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0023	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-09/27/83	3	16	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0025	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/30/92-06/04/97	5	3	
RICH0026	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0030	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	0	1	
RICH0032	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	18	1268	A
RICH0034	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0036	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	104	
RICH0037	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	0	1	
RICH0038	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-06/04/97	2	2	
RICH0040	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	0	1	
RICH0046	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-06/04/97	2	2	
RICH0057	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-03/27/95	0	2	
RICH0059	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	48	
RICH0060	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-09/27/83	3	15	
RICH0061	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/30/92-11/19/98	6	23	
RICH0063	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	0	1	
RICH0064	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/20/83-10/26/98	15	49	
RICH0065	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	19	128	
RICH0067	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	106	
RICH0068	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-12/07/94	0	1	
RICH0069	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	18	657	
RICH0074	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-06/04/97	2	3	
RICH0075	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-12/07/94	0	1	
RICH0076	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-12/07/94	0	1	
RICH0077	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0078	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-06/04/97	2	3	
RICH0083	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/29/80-08/14/89	9	9	
RICH0085	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/19/94-12/14/98	4	33	
RICH0086	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-06/04/97	2	3	
RICH0087	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-03/27/95	0	2	
RICH0089	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-09/20/83	3	14	
RICH0091	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/06/97-12/07/98	1	9	
RICH0093	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	4	47	
RICH0094	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	19	128	
RICH0096	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/19/94-10/19/94	0	1	
RICH0101	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	106	
RICH0102	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-02/21/89	9	93	
RICH0104	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/95-11/23/98	3	18	
RICH0105	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-10/26/98	18	58	
RICH0107	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	3	36	
RICH0108	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	4	48	
RICH0110	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	4	51	
RICH0112	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	3	36	
RICH0113	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/83-09/27/83	0	3	
RICH0114	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	3	35	
RICH0115	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	4	47	
RICH0116	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	19	362	A
RICH0118	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-09/16/96	2	18	
RICH0119	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	4	50	
RICH0124	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	3	35	
RICH0125	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	4	49	
RICH0126	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	4	49	
RICH0127	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	3	36	
RICH0130	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	4	46	
RICH0133	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/19/94-10/19/94	0	1	
RICH0134	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	19	120	
RICH0140	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/19/94-10/19/94	0	1	
RICH0146	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	19	148	
RICH0005	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/24/89-06/19/90	0	10	
RICH0011	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/94-12/15/98	4	54	
RICH0019	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-06/20/90	0	8	
RICH0027	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/74-02/27/79	4	121	
RICH0032	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	9	133	
RICH0036	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-06/20/90	0	8	
RICH0044	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	0	1	
RICH0047	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	0	1	
RICH0050	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/30/76-07/25/78	1	2	
RICH0051	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	0	1	
RICH0053	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	0	1	
RICH0054	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	0	1	
RICH0058	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/15/89-06/15/89	0	1	
RICH0059	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	0	11	
RICH0061	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/90-11/19/98	8	35	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0064	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	0	11	
RICH0065	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/11/80-12/07/98	18	55	
RICH0067	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/27/89-06/20/90	0	8	
RICH0069	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		12/20/88-12/15/98	9	119	
RICH0077	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	0	11	
RICH0082	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/06/52-05/09/69	16	5	
RICH0083	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/08/94-08/08/94	0	1	
RICH0084	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/04/91	6	11	
RICH0085	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		05/29/96-12/14/98	2	32	
RICH0088	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/16/80-08/01/83	3	5	
RICH0091	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/06/97-12/07/98	1	9	
RICH0093	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	0	11	
RICH0094	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/27/89-12/07/98	9	63	
RICH0095	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/11/84	0	1	
RICH0099	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/10/83-09/27/87	4	114	
RICH0100	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/15/85-09/12/89	4	9	
RICH0101	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/27/89-06/20/90	0	7	
RICH0104	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/20/94-11/23/98	4	20	
RICH0105	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	0	11	
RICH0106	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/30/82-09/27/87	4	141	
RICH0108	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	14	
RICH0110	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	13	
RICH0115	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	14	
RICH0116	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	30	151	S
RICH0118	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	0	12	
RICH0119	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	13	
RICH0121	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/24/79-09/03/81	1	24	
RICH0125	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	14	
RICH0126	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	0	13	
RICH0128	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	4	114	
RICH0130	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/19/94-12/14/98	4	54	
RICH0131	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/04/91	6	33	
RICH0132	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/10/84-04/07/90	5	13	
RICH0134	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/10/89-12/14/98	9	44	
RICH0135	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/16/85-08/16/85	0	1	
RICH0136	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/10/84-09/12/89	5	10	
RICH0142	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/10/84-08/16/85	0	4	
RICH0144	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/10/84-09/12/89	5	10	
RICH0145	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/08/87-09/04/91	4	28	
RICH0146	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	9	75	
RICH0147	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/31/89-09/04/91	1	25	
RICH0148	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/14/85-08/16/85	0	4	
RICH0149	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/03/86-04/03/86	0	1	
RICH0011	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		09/08/94-11/18/98	4	33	
RICH0015	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0017	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0020	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0021	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0026	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0032	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	14	1114	
RICH0034	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0059	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0064	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0069	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		06/29/88-11/18/98	10	579	
RICH0077	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0093	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0105	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0108	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0110	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0115	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0116	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	14	182	
RICH0118	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0119	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0125	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0126	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	0	1	
RICH0130	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		10/18/94-11/02/95	1	4	
RICH0146	No	00096	SALINITY AT 25 DEGREES C (MG/ML)		07/26/95-08/31/95	0	2	
RICH0011	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-12/15/98	4	102	
RICH0015	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	
RICH0017	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	
RICH0020	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	
RICH0021	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0025	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	04/30/92-06/04/97	5	3	
RICH0026	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	
RICH0030	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	0	1	
RICH0032	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	14	1245	A
RICH0034	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	4	50	
RICH0037	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	0	1	
RICH0038	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-06/04/97	2	2	
RICH0040	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	0	1	
RICH0044	Yes	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	0	1	
RICH0046	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-06/04/97	2	2	
RICH0047	Yes	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	0	1	
RICH0051	Yes	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	0	1	
RICH0053	Yes	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	0	1	
RICH0054	Yes	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	0	1	
RICH0057	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-03/27/95	0	3	
RICH0058	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/15/89-06/15/89	0	1	
RICH0059	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	4	51	
RICH0061	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-11/19/98	8	41	
RICH0063	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	0	1	
RICH0064	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	4	50	
RICH0065	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-12/07/98	8	45	
RICH0068	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-12/07/94	0	1	
RICH0069	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/29/88-12/15/98	10	640	
RICH0074	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-06/04/97	2	3	
RICH0075	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-12/07/94	0	1	
RICH0076	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-12/07/94	0	1	
RICH0077	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	4	50	
RICH0078	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-06/04/97	2	3	
RICH0083	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	08/14/89-08/08/94	4	8	
RICH0085	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-12/14/98	4	34	
RICH0086	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-06/04/97	2	3	
RICH0087	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-03/27/95	0	2	
RICH0091	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	08/06/97-12/07/98	1	9	
RICH0093	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	4	50	
RICH0094	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	02/10/92-12/07/98	6	33	
RICH0096	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-10/19/94	0	5	
RICH0104	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/20/94-11/23/98	4	20	
RICH0105	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	4	50	
RICH0107	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/20/95-10/26/98	3	37	
RICH0108	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	56	
RICH0110	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	55	
RICH0112	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/20/95-10/26/98	3	37	
RICH0114	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/20/95-10/26/98	3	36	
RICH0115	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	55	
RICH0116	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	14	280	
RICH0118	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-09/16/96	2	23	
RICH0119	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	55	
RICH0124	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/20/95-10/26/98	3	36	
RICH0125	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	56	
RICH0126	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	4	54	
RICH0127	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/20/95-10/26/98	3	37	
RICH0130	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-12/14/98	4	54	
RICH0133	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-10/19/94	0	4	
RICH0134	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/14/98	8	35	
RICH0140	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-10/19/94	0	2	
RICH0146	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	8	69	
RICH0149	No	00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	04/03/86-04/03/86	0	1	
RICH0001	No	00300	OXYGEN, DISSOLVED	MG/L	10/26/73-11/25/74	1	11	
RICH0002	No	00300	OXYGEN, DISSOLVED	MG/L	05/02/72-03/24/78	5	36	
RICH0003	No	00300	OXYGEN, DISSOLVED	MG/L	04/19/73-06/22/79	6	63	
RICH0005	No	00300	OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	17	184	
RICH0006	No	00300	OXYGEN, DISSOLVED	MG/L	05/29/74-06/22/79	5	53	
RICH0008	No	00300	OXYGEN, DISSOLVED	MG/L	09/10/74-06/12/79	4	42	
RICH0010	No	00300	OXYGEN, DISSOLVED	MG/L	04/19/73-09/19/73	0	4	
RICH0011	No	00300	OXYGEN, DISSOLVED	MG/L	05/26/74-07/07/94	20	45	
RICH0014	No	00300	OXYGEN, DISSOLVED	MG/L	06/18/71-08/11/71	0	373	
RICH0015	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	14	42	
RICH0018	No	00300	OXYGEN, DISSOLVED	MG/L	07/27/68-11/02/71	3	20	
RICH0019	No	00300	OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	21	219	A
RICH0023	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-11/02/83	15	2013	
RICH0027	No	00300	OXYGEN, DISSOLVED	MG/L	03/12/74-02/27/79	4	121	
RICH0028	No	00300	OXYGEN, DISSOLVED	MG/L	04/18/73-01/10/74	0	8	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0029	No	00300	OXYGEN, DISSOLVED	MG/L	04/18/73-06/21/79	6	62	
RICH0032	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	19	162	
RICH0035	No	00300	OXYGEN, DISSOLVED	MG/L	07/31/72-07/08/74	1	11	
RICH0036	No	00300	OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	15	159	
RICH0060	No	00300	OXYGEN, DISSOLVED	MG/L	05/01/75-09/27/83	8	35	
RICH0061	No	00300	OXYGEN, DISSOLVED	MG/L	07/19/90-07/17/91	0	5	
RICH0064	No	00300	OXYGEN, DISSOLVED	MG/L	09/20/83-10/03/83	0	2	
RICH0065	No	00300	OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	23	228	A
RICH0066	No	00300	OXYGEN, DISSOLVED	MG/L	09/26/72-06/21/79	6	66	
RICH0067	No	00300	OXYGEN, DISSOLVED	MG/L	03/30/73-06/20/90	17	179	A
RICH0069	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-09/27/83	15	77	
RICH0070	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-11/04/71	3	20	
RICH0073	No	00300	OXYGEN, DISSOLVED	MG/L	06/18/71-08/11/71	0	132	
RICH0079	No	00300	OXYGEN, DISSOLVED	MG/L	03/30/73-06/21/79	6	65	
RICH0080	No	00300	OXYGEN, DISSOLVED	MG/L	09/26/72-06/21/79	6	66	
RICH0081	No	00300	OXYGEN, DISSOLVED	MG/L	03/30/73-06/21/79	6	65	
RICH0083	No	00300	OXYGEN, DISSOLVED	MG/L	04/29/80-08/14/89	9	23	
RICH0084	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-09/04/91	4	7	
RICH0089	No	00300	OXYGEN, DISSOLVED	MG/L	07/08/68-09/20/83	15	77	
RICH0092	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-11/04/71	3	22	
RICH0094	No	00300	OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	29	216	T,A,S
RICH0096	No	00300	OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	109	
RICH0100	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-04/05/89	1	5	
RICH0101	No	00300	OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	17	184	
RICH0102	No	00300	OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	14	142	
RICH0103	No	00300	OXYGEN, DISSOLVED	MG/L	09/26/72-07/21/74	1	16	
RICH0105	No	00300	OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	14	72	
RICH0113	No	00300	OXYGEN, DISSOLVED	MG/L	07/28/83-09/27/83	0	3	
RICH0116	No	00300	OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	25	2293	T,A,S
RICH0120	No	00300	OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	10	98	
RICH0121	No	00300	OXYGEN, DISSOLVED	MG/L	10/24/79-09/03/81	1	24	
RICH0122	No	00300	OXYGEN, DISSOLVED	MG/L	05/05/69-11/04/71	2	5	
RICH0130	No	00300	OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	110	
RICH0131	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-09/04/91	4	31	
RICH0132	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-04/07/90	2	7	
RICH0134	No	00300	OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	22	231	A
RICH0136	Yes	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-04/05/89	1	5	
RICH0143	No	00300	OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	107	
RICH0144	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-09/12/89	2	6	
RICH0145	No	00300	OXYGEN, DISSOLVED	MG/L	04/08/87-09/04/91	4	20	
RICH0146	No	00300	OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	16	165	
RICH0147	No	00300	OXYGEN, DISSOLVED	MG/L	10/31/89-09/04/91	1	19	
RICH0001	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/26/73-11/25/74	1	11	
RICH0005	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	10	119	
RICH0008	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/16/74-10/16/74	0	1	
RICH0011	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	24	69	
RICH0015	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	14	15	
RICH0018	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-11/04/71	2	9	
RICH0019	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	21	161	
RICH0023	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	14	29	
RICH0027	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	4	121	
RICH0029	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	05/17/74-05/17/74	0	1	
RICH0032	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	29	115	S
RICH0035	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/31/72-07/31/72	0	1	
RICH0036	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	14	113	
RICH0059	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/28/94-06/01/95	0	12	
RICH0060	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/28/75-06/28/83	7	13	
RICH0061	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/19/90-11/19/98	8	34	
RICH0064	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/14/94-06/01/95	0	11	
RICH0065	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	30	164	T,S
RICH0066	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/26/75-06/21/79	4	39	
RICH0067	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/26/76-06/20/90	13	114	
RICH0069	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	29	98	S
RICH0070	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-11/04/71	2	11	
RICH0077	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/28/94-06/01/95	0	12	
RICH0080	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/29/76-07/26/76	0	2	
RICH0085	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	05/29/96-12/14/98	2	32	
RICH0089	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	14	25	
RICH0091	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	08/06/97-12/07/98	1	9	
RICH0092	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-11/04/71	2	11	
RICH0093	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/28/94-06/01/95	0	12	
RICH0094	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	29	177	T,S

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0096	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	08/20/68-07/30/73	4	12	
RICH0101	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	17	113	
RICH0102	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	13	134	
RICH0103	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-10/19/73	0	2	
RICH0104	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	07/20/94-11/23/98	4	20	
RICH0105	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/01/95	26	49	S
RICH0108	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	15	
RICH0110	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	14	
RICH0115	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	15	
RICH0116	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	30	262	T,A,S
RICH0118	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	13	
RICH0119	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	14	
RICH0120	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/07/68-04/18/73	4	8	
RICH0122	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	05/05/69-11/04/71	2	5	
RICH0125	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	15	
RICH0126	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	0	14	
RICH0130	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	31	78	S
RICH0134	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	31	168	T,S
RICH0143	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-09/09/75	7	21	
RICH0146	No	00310	BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	19	176	
RICH0027	No	00335	COD, .025N K2CR2O7	MG/L	03/12/74-02/12/75	0	12	
RICH0116	No	00335	COD, .025N K2CR2O7	MG/L	12/20/88-03/15/89	0	2	
RICH0005	No	00340	COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	10	119	
RICH0011	No	00340	COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	23	85	
RICH0015	No	00340	COD, .25N K2CR2O7	MG/L	06/28/83-06/28/83	0	1	
RICH0019	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	113	
RICH0023	No	00340	COD, .25N K2CR2O7	MG/L	05/19/80-06/28/83	3	13	
RICH0027	No	00340	COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	4	108	
RICH0032	No	00340	COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	18	98	
RICH0036	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	112	
RICH0060	No	00340	COD, .25N K2CR2O7	MG/L	05/19/80-06/28/83	3	12	
RICH0061	No	00340	COD, .25N K2CR2O7	MG/L	07/19/90-11/19/98	8	36	
RICH0065	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	19	158	
RICH0067	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	114	
RICH0069	No	00340	COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	18	81	
RICH0083	No	00340	COD, .25N K2CR2O7	MG/L	08/08/94-08/08/94	0	1	
RICH0085	No	00340	COD, .25N K2CR2O7	MG/L	05/29/96-12/14/98	2	32	
RICH0089	No	00340	COD, .25N K2CR2O7	MG/L	05/19/80-06/28/83	3	13	
RICH0091	No	00340	COD, .25N K2CR2O7	MG/L	08/06/97-12/07/98	1	9	
RICH0094	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	19	172	
RICH0101	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	113	
RICH0102	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	9	93	
RICH0104	No	00340	COD, .25N K2CR2O7	MG/L	07/20/94-11/23/98	4	20	
RICH0105	No	00340	COD, .25N K2CR2O7	MG/L	07/22/74-06/28/83	8	13	
RICH0116	No	00340	COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	19	217	
RICH0121	No	00340	COD, .25N K2CR2O7	MG/L	10/24/79-09/03/81	1	22	
RICH0130	No	00340	COD, .25N K2CR2O7	MG/L	07/19/94-12/14/98	4	54	
RICH0134	No	00340	COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	19	148	
RICH0146	No	00340	COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	19	181	
RICH0001	No	00400	PH (STANDARD UNITS)		10/26/73-11/25/74	1	10	
RICH0002	No	00400	PH (STANDARD UNITS)		05/02/72-03/24/78	5	36	
RICH0003	No	00400	PH (STANDARD UNITS)		04/19/73-06/22/79	6	61	
RICH0005	No	00400	PH (STANDARD UNITS)		04/19/73-06/19/90	17	182	
RICH0006	No	00400	PH (STANDARD UNITS)		05/29/74-06/22/79	5	49	
RICH0008	No	00400	PH (STANDARD UNITS)		09/10/74-06/12/79	4	40	
RICH0010	No	00400	PH (STANDARD UNITS)		04/19/73-09/19/73	0	4	
RICH0011	No	00400	PH (STANDARD UNITS)		05/26/74-12/15/98	24	149	
RICH0015	No	00400	PH (STANDARD UNITS)		07/22/68-10/26/98	30	93	
RICH0017	No	00400	PH (STANDARD UNITS)		07/14/94-10/26/98	4	51	
RICH0018	No	00400	PH (STANDARD UNITS)		07/27/68-11/02/71	3	19	
RICH0019	No	00400	PH (STANDARD UNITS)		06/28/68-06/20/90	21	222	A
RICH0020	No	00400	PH (STANDARD UNITS)		07/14/94-10/26/98	4	51	
RICH0021	No	00400	PH (STANDARD UNITS)		07/14/94-10/26/98	4	51	
RICH0023	No	00400	PH (STANDARD UNITS)		07/22/68-09/27/83	15	79	
RICH0025	No	00400	PH (STANDARD UNITS)		04/30/92-06/04/97	5	3	
RICH0026	No	00400	PH (STANDARD UNITS)		07/14/94-10/26/98	4	51	
RICH0027	No	00400	PH (STANDARD UNITS)		03/12/74-02/27/79	4	121	
RICH0028	No	00400	PH (STANDARD UNITS)		04/18/73-01/10/74	0	8	
RICH0029	No	00400	PH (STANDARD UNITS)		04/18/73-06/21/79	6	61	
RICH0030	No	00400	PH (STANDARD UNITS)		12/09/94-12/09/94	0	1	
RICH0032	No	00400	PH (STANDARD UNITS)		07/22/68-12/15/98	30	526	T,A,S
RICH0034	No	00400	PH (STANDARD UNITS)		07/14/94-10/26/98	4	51	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0035	No	00400	PH (STANDARD UNITS)	07/31/72-07/08/74	1	11	
RICH0036	No	00400	PH (STANDARD UNITS)	10/02/74-06/20/90	15	160	
RICH0037	No	00400	PH (STANDARD UNITS)	12/09/94-12/09/94	0	1	
RICH0038	No	00400	PH (STANDARD UNITS)	12/09/94-06/04/97	2	2	
RICH0040	No	00400	PH (STANDARD UNITS)	12/09/94-12/09/94	0	1	
RICH0046	No	00400	PH (STANDARD UNITS)	12/09/94-06/04/97	2	2	
RICH0050	Yes	00400	PH (STANDARD UNITS)	11/30/76-11/30/76	0	1	
RICH0057	No	00400	PH (STANDARD UNITS)	12/07/94-03/27/95	0	3	
RICH0059	No	00400	PH (STANDARD UNITS)	06/28/94-10/26/98	4	52	
RICH0060	No	00400	PH (STANDARD UNITS)	05/01/75-09/27/83	8	35	
RICH0061	No	00400	PH (STANDARD UNITS)	01/17/90-11/19/98	8	44	
RICH0063	No	00400	PH (STANDARD UNITS)	12/09/94-12/09/94	0	1	
RICH0064	No	00400	PH (STANDARD UNITS)	09/20/83-10/26/98	15	53	
RICH0065	No	00400	PH (STANDARD UNITS)	06/28/68-12/07/98	30	274	T,A,S
RICH0066	No	00400	PH (STANDARD UNITS)	09/26/72-06/21/79	6	65	
RICH0067	No	00400	PH (STANDARD UNITS)	03/30/73-06/20/90	17	178	A
RICH0068	No	00400	PH (STANDARD UNITS)	12/07/94-12/07/94	0	1	
RICH0069	No	00400	PH (STANDARD UNITS)	07/22/68-12/15/98	30	357	T,S
RICH0070	No	00400	PH (STANDARD UNITS)	07/22/68-11/02/71	3	18	
RICH0074	No	00400	PH (STANDARD UNITS)	12/07/94-06/04/97	2	3	
RICH0075	No	00400	PH (STANDARD UNITS)	12/07/94-12/07/94	0	1	
RICH0076	No	00400	PH (STANDARD UNITS)	12/07/94-12/07/94	0	1	
RICH0077	No	00400	PH (STANDARD UNITS)	06/28/94-10/26/98	4	51	
RICH0078	No	00400	PH (STANDARD UNITS)	12/09/94-06/04/97	2	3	
RICH0079	No	00400	PH (STANDARD UNITS)	03/30/73-06/21/79	6	64	
RICH0080	No	00400	PH (STANDARD UNITS)	09/26/72-06/21/79	6	64	
RICH0081	No	00400	PH (STANDARD UNITS)	03/30/73-06/21/79	6	65	
RICH0082	No	00400	PH (STANDARD UNITS)	07/30/45-05/09/69	23	44	
RICH0083	No	00400	PH (STANDARD UNITS)	04/29/80-08/08/94	14	19	
RICH0084	No	00400	PH (STANDARD UNITS)	04/08/87-09/04/91	4	7	
RICH0085	No	00400	PH (STANDARD UNITS)	07/19/94-12/14/98	4	34	
RICH0086	No	00400	PH (STANDARD UNITS)	12/07/94-06/04/97	2	3	
RICH0087	No	00400	PH (STANDARD UNITS)	12/07/94-03/27/95	0	2	
RICH0089	No	00400	PH (STANDARD UNITS)	07/08/68-09/20/83	15	77	
RICH0091	No	00400	PH (STANDARD UNITS)	08/06/97-12/07/98	1	9	
RICH0092	No	00400	PH (STANDARD UNITS)	07/22/68-11/02/71	3	19	
RICH0093	No	00400	PH (STANDARD UNITS)	06/28/94-10/26/98	4	51	
RICH0094	No	00400	PH (STANDARD UNITS)	02/03/69-12/07/98	29	241	T,A,S
RICH0096	No	00400	PH (STANDARD UNITS)	09/20/67-10/19/94	27	117	S
RICH0100	No	00400	PH (STANDARD UNITS)	04/08/87-09/12/89	2	6	
RICH0101	No	00400	PH (STANDARD UNITS)	09/26/72-06/20/90	17	184	
RICH0102	No	00400	PH (STANDARD UNITS)	05/27/74-11/29/88	14	143	
RICH0103	No	00400	PH (STANDARD UNITS)	09/26/72-07/21/74	1	16	
RICH0104	No	00400	PH (STANDARD UNITS)	07/20/94-11/23/98	4	20	
RICH0105	No	00400	PH (STANDARD UNITS)	07/22/68-10/26/98	30	123	S
RICH0107	No	00400	PH (STANDARD UNITS)	09/20/95-10/26/98	3	37	
RICH0108	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	56	
RICH0110	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	55	
RICH0112	No	00400	PH (STANDARD UNITS)	09/20/95-10/26/98	3	37	
RICH0113	No	00400	PH (STANDARD UNITS)	07/28/83-09/27/83	0	3	
RICH0114	No	00400	PH (STANDARD UNITS)	09/20/95-10/26/98	3	36	
RICH0115	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	56	
RICH0116	No	00400	PH (STANDARD UNITS)	02/18/68-12/15/98	30	526	T,A,S
RICH0118	No	00400	PH (STANDARD UNITS)	06/27/94-06/11/96	1	21	
RICH0119	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	55	
RICH0120	No	00400	PH (STANDARD UNITS)	06/18/68-06/07/79	10	97	
RICH0121	No	00400	PH (STANDARD UNITS)	10/24/79-09/03/81	1	24	
RICH0122	No	00400	PH (STANDARD UNITS)	05/05/69-11/02/71	2	3	
RICH0124	No	00400	PH (STANDARD UNITS)	09/20/95-10/26/98	3	36	
RICH0125	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	56	
RICH0126	No	00400	PH (STANDARD UNITS)	06/27/94-10/26/98	4	55	
RICH0127	No	00400	PH (STANDARD UNITS)	09/20/95-10/26/98	3	37	
RICH0130	No	00400	PH (STANDARD UNITS)	09/20/67-12/14/98	31	162	T,S
RICH0131	No	00400	PH (STANDARD UNITS)	04/08/87-09/04/91	4	32	
RICH0132	No	00400	PH (STANDARD UNITS)	04/08/87-04/07/90	2	8	
RICH0133	No	00400	PH (STANDARD UNITS)	07/19/94-10/19/94	0	4	
RICH0134	No	00400	PH (STANDARD UNITS)	09/20/67-12/14/98	31	264	T,A,S
RICH0136	Yes	00400	PH (STANDARD UNITS)	04/08/87-09/12/89	2	6	
RICH0140	No	00400	PH (STANDARD UNITS)	07/19/94-10/19/94	0	2	
RICH0143	No	00400	PH (STANDARD UNITS)	09/20/67-06/14/79	11	108	
RICH0144	No	00400	PH (STANDARD UNITS)	04/08/87-09/12/89	2	6	
RICH0145	No	00400	PH (STANDARD UNITS)	04/08/87-09/04/91	4	26	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0146	No	00400	PH (STANDARD UNITS)		02/10/75-12/07/98	23	233	A
RICH0147	No	00400	PH (STANDARD UNITS)		10/31/89-09/04/91	1	24	
RICH0001	No	00403	PH, LAB, STANDARD UNITS	SU	10/26/73-11/25/74	1	11	
RICH0003	No	00403	PH, LAB, STANDARD UNITS	SU	01/03/75-01/03/75	0	1	
RICH0005	No	00403	PH, LAB, STANDARD UNITS	SU	01/03/75-06/19/90	15	21	
RICH0006	No	00403	PH, LAB, STANDARD UNITS	SU	01/03/75-06/22/79	4	2	
RICH0011	No	00403	PH, LAB, STANDARD UNITS	SU	05/26/74-12/15/98	24	55	
RICH0015	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-05/26/74	5	6	
RICH0019	No	00403	PH, LAB, STANDARD UNITS	SU	10/24/68-06/20/90	21	30	
RICH0023	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-05/26/74	5	6	
RICH0032	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	29	77	S
RICH0036	No	00403	PH, LAB, STANDARD UNITS	SU	01/23/80-06/20/90	10	20	
RICH0059	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	10	
RICH0061	No	00403	PH, LAB, STANDARD UNITS	SU	07/19/90-11/19/98	8	35	
RICH0064	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	10	
RICH0065	No	00403	PH, LAB, STANDARD UNITS	SU	10/24/68-12/07/98	30	73	S
RICH0067	No	00403	PH, LAB, STANDARD UNITS	SU	11/29/83-06/20/90	6	18	
RICH0069	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	29	66	S
RICH0077	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	10	
RICH0080	No	00403	PH, LAB, STANDARD UNITS	SU	03/29/76-03/29/76	0	1	
RICH0083	No	00403	PH, LAB, STANDARD UNITS	SU	04/29/80-08/14/89	9	10	
RICH0084	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-09/13/89	2	6	
RICH0085	No	00403	PH, LAB, STANDARD UNITS	SU	05/29/96-12/14/98	2	32	
RICH0089	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-05/29/74	5	6	
RICH0091	No	00403	PH, LAB, STANDARD UNITS	SU	08/06/97-12/07/98	1	9	
RICH0093	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	10	
RICH0094	No	00403	PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	29	148	S
RICH0096	No	00403	PH, LAB, STANDARD UNITS	SU	09/20/67-10/29/70	3	12	
RICH0099	No	00403	PH, LAB, STANDARD UNITS	SU	10/17/83-10/17/83	0	1	
RICH0100	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-09/12/89	2	6	
RICH0101	No	00403	PH, LAB, STANDARD UNITS	SU	06/02/74-06/20/90	16	19	
RICH0102	No	00403	PH, LAB, STANDARD UNITS	SU	06/02/74-02/21/89	14	7	
RICH0104	No	00403	PH, LAB, STANDARD UNITS	SU	07/20/94-11/23/98	4	20	
RICH0105	No	00403	PH, LAB, STANDARD UNITS	SU	03/20/69-06/01/95	26	17	
RICH0106	No	00403	PH, LAB, STANDARD UNITS	SU	03/24/83-10/17/83	0	2	
RICH0108	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	12	
RICH0110	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	11	
RICH0115	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	12	
RICH0116	No	00403	PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	30	145	S
RICH0118	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	11	
RICH0119	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	11	
RICH0120	No	00403	PH, LAB, STANDARD UNITS	SU	10/07/68-04/25/78	9	8	
RICH0125	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	12	
RICH0126	No	00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	0	11	
RICH0130	No	00403	PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	31	66	S
RICH0131	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-10/31/89	2	7	
RICH0132	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-09/12/89	2	6	
RICH0134	No	00403	PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	31	67	S
RICH0136	Yes	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-09/12/89	2	6	
RICH0143	No	00403	PH, LAB, STANDARD UNITS	SU	09/20/67-10/29/70	3	12	
RICH0144	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-09/12/89	2	6	
RICH0145	No	00403	PH, LAB, STANDARD UNITS	SU	04/08/87-10/31/89	2	7	
RICH0146	No	00403	PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	17	90	
RICH0147	No	00403	PH, LAB, STANDARD UNITS	SU	10/31/89-10/31/89	0	1	
RICH0149	No	00403	PH, LAB, STANDARD UNITS	SU	04/03/86-04/03/86	0	1	
RICH0027	No	00405	CARBON DIOXIDE (MG/L AS CO2)		03/12/74-12/21/78	4	20	
RICH0050	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)		11/30/76-11/30/76	0	1	
RICH0080	No	00405	CARBON DIOXIDE (MG/L AS CO2)		05/17/78-05/17/78	0	1	
RICH0044	Yes	00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	0	1	
RICH0047	Yes	00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	0	1	
RICH0051	Yes	00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	0	1	
RICH0053	Yes	00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	0	1	
RICH0054	Yes	00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	0	1	
RICH0058	No	00406	PH, FIELD, STANDARD UNITS	SU	06/15/89-06/15/89	0	1	
RICH0149	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS	UEQ/L	04/03/86-04/03/86	0	1	
RICH0001	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		10/26/73-11/25/74	1	11	
RICH0003	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		01/03/75-01/03/75	0	1	
RICH0005	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		01/03/75-06/19/90	15	21	
RICH0006	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		01/03/75-06/22/79	4	2	
RICH0011	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	24	59	
RICH0015	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-05/26/74	5	6	
RICH0019	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		10/24/68-06/20/90	21	30	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0023	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-09/27/83	14	9	
RICH0027	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/12/74-12/21/78	4	20	
RICH0032	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	29	78	S
RICH0036	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/23/80-06/20/90	10	20	
RICH0050	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/30/76-07/25/78	1	2	
RICH0059	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	10	
RICH0060	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/83-09/27/83	0	3	
RICH0061	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/90-11/19/98	8	34	
RICH0064	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/83-06/01/95	11	12	
RICH0065	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/24/68-12/07/98	30	73	S
RICH0067	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/29/83-06/20/90	6	19	
RICH0069	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	29	69	S
RICH0077	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	10	
RICH0080	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/29/76-03/29/76	0	1	
RICH0082	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/09/69-05/09/69	0	1	
RICH0083	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/29/80-08/08/94	14	10	
RICH0085	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/29/96-12/14/98	2	32	
RICH0089	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-09/20/83	14	8	
RICH0091	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/06/97-12/07/98	1	9	
RICH0093	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	10	
RICH0094	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	29	148	S
RICH0096	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-10/29/70	3	12	
RICH0101	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/02/74-06/20/90	16	21	
RICH0102	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/02/74-02/21/89	14	6	
RICH0104	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/20/94-11/23/98	4	20	
RICH0105	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-06/01/95	26	17	
RICH0108	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	12	
RICH0110	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	11	
RICH0113	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/83-09/27/83	0	3	
RICH0115	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	12	
RICH0116	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	30	146	S
RICH0118	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	11	
RICH0119	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	11	
RICH0120	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/07/68-04/25/78	9	8	
RICH0125	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	12	
RICH0126	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	0	11	
RICH0130	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	31	66	S
RICH0134	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	31	65	S
RICH0143	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-10/29/70	3	12	
RICH0146	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	17	89	
RICH0011	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	08/16/83-10/03/83	0	4	
RICH0023	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	0	3	
RICH0032	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/20/83-10/03/83	0	2	
RICH0060	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	0	3	
RICH0064	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/20/83-10/03/83	0	2	
RICH0069	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	0	3	
RICH0089	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	08/16/83-09/20/83	0	2	
RICH0094	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/21/74-07/21/74	0	1	
RICH0096	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/20/67-09/20/67	0	1	
RICH0113	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	0	3	
RICH0116	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	08/16/83-10/03/83	0	2	
RICH0134	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	05/06/70-05/06/70	0	1	
RICH0094	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	07/24/69-08/15/79	10	4	
RICH0027	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/12/74-12/21/78	4	20	
RICH0050	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	11/30/76-07/25/78	1	2	
RICH0082	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/30/45-05/09/69	23	45	
RICH0149	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/03/86-04/03/86	0	1	
RICH0027	No	00445	CARBONATE ION (MG/L AS CO3)	03/12/74-12/21/78	4	19	
RICH0050	Yes	00445	CARBONATE ION (MG/L AS CO3)	11/30/76-11/30/76	0	1	
RICH0082	No	00445	CARBONATE ION (MG/L AS CO3)	05/09/69-05/09/69	0	1	
RICH0131	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	0	1	
RICH0145	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	0	1	
RICH0147	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	0	1	
RICH0131	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	0	1	
RICH0145	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	0	1	
RICH0147	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	0	1	
RICH0011	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	0	2	
RICH0015	No	00480	SALINITY - PARTS PER THOUSAND	06/28/83-06/28/83	0	1	
RICH0023	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	0	2	
RICH0032	No	00480	SALINITY - PARTS PER THOUSAND	06/28/83-06/28/83	0	1	
RICH0060	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	0	2	
RICH0069	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	0	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0089	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-11/18/82	0	1	
RICH0105	No	00480	SALINITY - PARTS PER THOUSAND	11/18/82-11/18/82	0	1	
RICH0005	No	00500	RESIDUE, TOTAL (MG/L)	08/14/79-06/19/90	10	20	
RICH0006	No	00500	RESIDUE, TOTAL (MG/L)	11/24/75-06/22/79	3	35	
RICH0011	No	00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	24	84	
RICH0015	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	14	8	
RICH0019	No	00500	RESIDUE, TOTAL (MG/L)	10/24/68-06/20/90	21	30	
RICH0023	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	14	35	
RICH0032	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	26	44	S
RICH0036	No	00500	RESIDUE, TOTAL (MG/L)	08/15/79-06/20/90	10	17	
RICH0059	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	10	
RICH0060	No	00500	RESIDUE, TOTAL (MG/L)	05/19/80-06/28/83	3	12	
RICH0061	No	00500	RESIDUE, TOTAL (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	10	
RICH0065	No	00500	RESIDUE, TOTAL (MG/L)	10/24/68-12/07/98	30	73	S
RICH0066	No	00500	RESIDUE, TOTAL (MG/L)	09/26/72-06/21/79	6	59	
RICH0067	No	00500	RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	17	77	
RICH0069	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	14	36	
RICH0077	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-05/18/95	0	9	
RICH0080	No	00500	RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	6	60	
RICH0085	No	00500	RESIDUE, TOTAL (MG/L)	05/29/96-12/14/98	2	32	
RICH0089	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	14	36	
RICH0091	No	00500	RESIDUE, TOTAL (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	10	
RICH0094	No	00500	RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	29	145	S
RICH0096	No	00500	RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	105	
RICH0101	No	00500	RESIDUE, TOTAL (MG/L)	09/26/72-06/20/90	17	78	
RICH0102	No	00500	RESIDUE, TOTAL (MG/L)	05/27/74-02/21/89	14	52	
RICH0103	No	00500	RESIDUE, TOTAL (MG/L)	09/26/72-07/21/74	1	15	
RICH0104	No	00500	RESIDUE, TOTAL (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	26	44	S
RICH0108	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	12	
RICH0110	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	11	
RICH0115	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	12	
RICH0116	No	00500	RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	27	84	S
RICH0118	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	11	
RICH0119	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	11	
RICH0120	No	00500	RESIDUE, TOTAL (MG/L)	10/07/68-06/02/74	5	8	
RICH0121	No	00500	RESIDUE, TOTAL (MG/L)	10/24/79-12/18/79	0	2	
RICH0125	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	12	
RICH0126	No	00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	0	11	
RICH0130	No	00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	30	159	S
RICH0134	No	00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	30	159	S
RICH0143	No	00500	RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	101	
RICH0146	No	00500	RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	23	107	
RICH0005	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	08/14/79-06/19/90	10	20	
RICH0006	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/24/75-06/22/79	3	35	
RICH0011	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	24	84	
RICH0015	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	14	8	
RICH0019	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-06/20/90	21	30	
RICH0023	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	14	35	
RICH0032	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	26	44	S
RICH0036	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	08/15/79-06/20/90	10	17	
RICH0059	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	10	
RICH0060	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/19/80-06/28/83	3	12	
RICH0061	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	10	
RICH0065	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-12/07/98	30	73	S
RICH0066	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/21/79	6	58	
RICH0067	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	17	76	
RICH0069	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	14	36	
RICH0077	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-05/18/95	0	9	
RICH0080	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	6	60	
RICH0085	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/29/96-12/14/98	2	31	
RICH0089	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	14	36	
RICH0091	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	10	
RICH0094	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	29	147	S
RICH0096	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	106	
RICH0101	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/20/90	17	79	
RICH0102	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/27/74-02/21/89	14	52	
RICH0103	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-07/21/74	1	15	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0104	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	26	44	S
RICH0108	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	11	
RICH0110	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	11	
RICH0115	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	12	
RICH0116	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	27	83	S
RICH0118	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	11	
RICH0119	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	11	
RICH0120	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/07/68-06/02/74	5	8	
RICH0125	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	12	
RICH0126	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	0	11	
RICH0130	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	31	160	T,S
RICH0134	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	31	160	T,S
RICH0143	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	103	
RICH0146	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	23	107	
RICH0002	No	00510	RESIDUE, TOTAL FIXED (MG/L)	08/09/72-08/09/72	0	1	
RICH0005	No	00510	RESIDUE, TOTAL FIXED (MG/L)	08/14/79-06/19/90	10	21	
RICH0006	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/24/75-06/22/79	3	35	
RICH0011	No	00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	24	84	
RICH0015	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	14	8	
RICH0019	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/28/69-06/20/90	21	28	
RICH0023	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	14	35	
RICH0032	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	26	44	S
RICH0036	No	00510	RESIDUE, TOTAL FIXED (MG/L)	08/15/79-06/20/90	10	17	
RICH0059	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	10	
RICH0060	No	00510	RESIDUE, TOTAL FIXED (MG/L)	05/19/80-06/28/83	3	12	
RICH0061	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	10	
RICH0065	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/28/69-12/07/98	29	71	S
RICH0066	No	00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/21/79	6	59	
RICH0067	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	17	76	
RICH0069	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	14	36	
RICH0077	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-05/18/95	0	9	
RICH0080	No	00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	6	59	
RICH0085	No	00510	RESIDUE, TOTAL FIXED (MG/L)	05/29/96-12/14/98	2	31	
RICH0089	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	14	36	
RICH0091	No	00510	RESIDUE, TOTAL FIXED (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	10	
RICH0094	No	00510	RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	29	146	S
RICH0096	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	103	
RICH0101	No	00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/20/90	17	79	
RICH0102	No	00510	RESIDUE, TOTAL FIXED (MG/L)	05/27/74-02/21/89	14	52	
RICH0103	No	00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-07/21/74	1	15	
RICH0104	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	26	44	S
RICH0108	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	12	
RICH0110	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	10	
RICH0115	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	12	
RICH0116	No	00510	RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	27	82	S
RICH0118	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	11	
RICH0119	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	11	
RICH0120	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/02/74	5	6	
RICH0125	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	12	
RICH0126	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	0	11	
RICH0130	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	29	156	S
RICH0134	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	29	156	S
RICH0143	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	99	
RICH0146	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	23	107	
RICH0006	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/27/76-08/29/77	1	2	
RICH0011	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-10/03/83	2	5	
RICH0023	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-09/27/83	2	4	
RICH0032	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-10/03/83	2	3	
RICH0060	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/80-09/27/83	3	4	
RICH0064	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	09/20/83-10/03/83	0	2	
RICH0069	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-09/27/83	2	4	
RICH0089	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-09/20/83	2	3	
RICH0096	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/23/73-03/23/73	0	1	
RICH0105	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-07/27/81	0	1	
RICH0113	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/28/83-09/27/83	0	3	
RICH0116	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	08/16/83-10/03/83	0	2	
RICH0130	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/23/73-03/23/73	0	1	
RICH0002	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/05/72-09/05/72	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0005	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/79-06/19/90	10	119	
RICH0006	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/24/75-06/22/79	3	34	
RICH0011	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	24	94	
RICH0015	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/28/83	14	22	
RICH0019	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	21	160	
RICH0023	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-09/27/83	14	56	
RICH0032	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	351	T,S
RICH0035	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/09/72-08/09/72	0	1	
RICH0036	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	112	
RICH0059	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0060	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/01/75-09/27/83	8	33	
RICH0061	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/20/83-06/01/95	11	14	
RICH0065	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	29	166	T,S
RICH0066	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	6	61	
RICH0067	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	17	174	
RICH0069	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	347	T,S
RICH0077	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0080	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	6	61	
RICH0083	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/29/80-09/09/80	0	9	
RICH0085	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/29/96-12/14/98	2	31	
RICH0089	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-10/12/83	14	62	
RICH0091	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0094	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	29	240	T,A,S
RICH0096	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	103	
RICH0101	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	17	175	
RICH0102	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	14	140	
RICH0103	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-07/21/74	1	15	
RICH0104	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/01/95	26	62	S
RICH0108	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0110	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0113	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/28/83-10/03/83	0	7	
RICH0115	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0116	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	30	368	T,A,S
RICH0118	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	12	
RICH0119	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0120	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/02/74	5	6	
RICH0121	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/79-09/03/81	1	22	
RICH0125	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0126	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0130	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	29	156	S
RICH0134	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	29	251	T,A,S
RICH0143	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	99	
RICH0146	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	23	186	
RICH0002	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/09/72-09/05/72	0	2	
RICH0005	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/14/79-06/19/90	10	120	
RICH0006	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/24/75-06/22/79	3	35	
RICH0011	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	24	94	
RICH0015	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/28/83	14	22	
RICH0019	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	21	160	
RICH0023	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-09/27/83	14	56	
RICH0032	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	351	T,S
RICH0035	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/09/72-08/09/72	0	1	
RICH0036	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	112	
RICH0059	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0060	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/01/75-09/27/83	8	33	
RICH0061	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/83-06/01/95	11	14	
RICH0065	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	30	168	T,S
RICH0066	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	6	61	
RICH0067	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	17	173	
RICH0069	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	347	T,S
RICH0077	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0080	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	6	61	
RICH0083	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/29/80-09/09/80	0	9	
RICH0085	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/29/96-12/14/98	2	31	
RICH0089	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-10/12/83	14	62	
RICH0091	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0094	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	29	237	T,A,S

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0096	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	103	
RICH0101	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	17	174	
RICH0102	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	14	141	
RICH0103	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-07/21/74	1	15	
RICH0104	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/01/95	26	61	S
RICH0108	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0110	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0113	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/28/83-10/03/83	0	7	
RICH0115	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0116	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	30	368	T,A,S
RICH0118	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	12	
RICH0119	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0120	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/07/68-06/02/74	5	8	
RICH0125	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0126	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0130	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	31	161	T,S
RICH0134	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	31	255	T,A,S
RICH0143	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	102	
RICH0146	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	23	186	
RICH0002	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/09/72-09/05/72	0	2	
RICH0005	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/14/79-06/19/90	10	120	
RICH0006	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/24/75-06/22/79	3	36	
RICH0011	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	24	90	
RICH0015	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	14	22	
RICH0019	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	21	160	
RICH0023	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	14	53	
RICH0032	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	348	T,S
RICH0035	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/09/72-08/09/72	0	1	
RICH0036	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	112	
RICH0059	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0060	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/01/75-06/28/83	8	30	
RICH0061	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/19/90-11/19/98	8	35	
RICH0064	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0065	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	29	166	T,S
RICH0066	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	6	61	
RICH0067	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	17	174	
RICH0069	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	29	342	T,S
RICH0077	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0080	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	6	61	
RICH0083	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/29/80-09/09/80	0	9	
RICH0085	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/29/96-12/14/98	2	31	
RICH0089	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	14	54	
RICH0091	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/06/97-12/07/98	1	9	
RICH0093	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	11	
RICH0094	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	29	239	T,A,S
RICH0096	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	101	
RICH0101	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	17	176	
RICH0102	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	14	141	
RICH0103	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-07/21/74	1	15	
RICH0104	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/20/94-11/23/98	4	20	
RICH0105	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/01/95	26	62	S
RICH0108	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0110	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	12	
RICH0115	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0116	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	30	363	T,A,S
RICH0118	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	0	12	
RICH0119	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0120	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/02/74	5	6	
RICH0125	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	14	
RICH0126	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	0	13	
RICH0130	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	29	155	S
RICH0134	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	29	249	T,A,S
RICH0143	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	96	
RICH0146	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	23	185	
RICH0036	No	00545	RESIDUE, SETTLEABLE (ML/L)	10/02/74-06/21/79	4	34	
RICH0066	No	00545	RESIDUE, SETTLEABLE (ML/L)	03/01/77-03/01/77	0	1	
RICH0094	No	00545	RESIDUE, SETTLEABLE (ML/L)	02/03/69-02/03/69	0	1	
RICH0134	No	00545	RESIDUE, SETTLEABLE (ML/L)	08/18/82-08/18/82	0	1	
RICH0084	No	00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	09/04/91-09/04/91	0	1	
RICH0131	No	00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	1	18	
RICH0145	No	00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	1	16	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0147	No	00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	1	21	
RICH0027	No	00572	BIOMASS, PERIPHYTON (GRAMS PER SQUARE METER)	09/14/74-03/05/75	0	3	
RICH0027	No	00573	BIOMASS, PERIPHYTON,DRY WEIGHT TOTAL (G/M2)	03/05/75-03/05/75	0	1	
RICH0027	No	00600	NITROGEN, TOTAL (MG/L AS N)	03/12/74-02/27/79	4	120	
RICH0121	No	00600	NITROGEN, TOTAL (MG/L AS N)	10/24/79-09/03/81	1	23	
RICH0027	No	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	06/12/74-02/27/79	4	114	
RICH0032	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	14	408	
RICH0069	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	10	280	
RICH0084	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/11/84-09/13/89	5	7	
RICH0100	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0116	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14	208	
RICH0131	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/11/84-09/12/89	5	7	
RICH0132	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0136	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0142	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/84-09/10/84	0	1	
RICH0144	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0145	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0001	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/26/73-11/25/74	1	11	
RICH0002	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/08/72-03/24/78	5	32	
RICH0003	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	6	65	
RICH0005	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/19/90	17	183	
RICH0006	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/29/74-06/22/79	5	51	
RICH0008	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/10/74-06/12/79	4	41	
RICH0010	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-09/19/73	0	4	
RICH0011	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	24	101	
RICH0015	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/19/69-06/28/83	14	36	
RICH0018	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/69-11/04/71	2	18	
RICH0019	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	20	178	
RICH0023	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	72	
RICH0027	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/12/74-02/27/79	4	120	
RICH0028	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-01/10/74	0	8	
RICH0029	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	6	59	
RICH0032	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/69-06/01/95	26	80	S
RICH0035	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/31/72-07/08/74	1	10	
RICH0036	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	15	151	
RICH0059	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0060	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/01/75-09/27/83	8	35	
RICH0061	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/19/90-11/19/98	8	36	
RICH0064	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/20/83-06/01/95	11	14	
RICH0065	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	28	226	T,A,S
RICH0066	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	6	64	
RICH0067	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	17	173	A
RICH0069	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	71	
RICH0070	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-11/04/71	1	13	
RICH0077	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/94-06/01/95	0	12	
RICH0079	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	6	62	
RICH0080	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	6	62	
RICH0081	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	6	62	
RICH0083	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/80-08/08/94	14	11	
RICH0084	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/04/91-09/04/91	0	1	
RICH0085	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/29/96-12/14/98	2	32	
RICH0089	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/20/83	13	70	
RICH0091	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/06/97-12/07/98	1	9	
RICH0092	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/17/70-11/04/71	1	15	
RICH0093	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/94-06/01/95	0	12	
RICH0094	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	26	236	T,A,S
RICH0096	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10	104	
RICH0101	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	17	173	
RICH0102	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	14	140	
RICH0103	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-07/21/74	1	14	
RICH0104	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/20/94-11/23/98	4	20	
RICH0105	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	76	S
RICH0108	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	13	
RICH0110	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	12	
RICH0113	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/83-10/12/83	0	14	
RICH0115	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	13	
RICH0116	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	267	T,A,S
RICH0118	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	12	
RICH0119	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	12	
RICH0120	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	9	83	
RICH0122	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/19/71-11/04/71	0	4	
RICH0125	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	13	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0126	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	0	12	
RICH0130	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	157	S
RICH0131	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	1	23	
RICH0134	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	249	T,A,S
RICH0141	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/11/88-07/11/88	0	1	
RICH0143	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10	100	
RICH0145	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	1	20	
RICH0146	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	23	222	A
RICH0147	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	1	25	
RICH0032	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	14	415	
RICH0050	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	11/30/76-07/25/78	1	2	
RICH0069	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	10	289	
RICH0116	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14	210	
RICH0001	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/26/73-11/25/74	1	11	
RICH0002	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/08/72-03/24/78	5	32	
RICH0003	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	6	65	
RICH0005	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	17	182	
RICH0006	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/29/74-06/22/79	5	51	
RICH0008	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/10/74-06/12/79	4	41	
RICH0010	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-09/19/73	0	4	
RICH0011	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	24	97	
RICH0015	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/69-06/28/83	14	36	
RICH0019	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	20	180	
RICH0023	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	71	
RICH0028	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-01/10/74	0	8	
RICH0029	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	6	60	
RICH0032	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	26	79	S
RICH0035	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/31/72-07/08/74	1	10	
RICH0036	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	15	151	
RICH0059	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0060	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	8	35	
RICH0061	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/19/90-11/19/98	8	36	
RICH0064	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/20/83-06/01/95	11	13	
RICH0065	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	28	226	T,A,S
RICH0066	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	6	63	
RICH0067	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	17	174	A
RICH0069	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	73	
RICH0077	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0079	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	6	63	
RICH0080	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	6	62	
RICH0081	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	6	62	
RICH0083	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/29/80-08/08/94	14	8	
RICH0085	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/29/96-12/14/98	2	32	
RICH0089	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	13	69	
RICH0091	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/06/97-12/07/98	1	9	
RICH0093	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0094	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	26	236	T,A,S
RICH0096	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10	104	
RICH0101	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	17	172	
RICH0102	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	14	140	
RICH0103	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-07/21/74	1	14	
RICH0104	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/20/94-11/23/98	4	20	
RICH0105	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	77	S
RICH0108	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0110	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0113	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/83-10/12/83	0	13	
RICH0115	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0116	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	266	T,A,S
RICH0118	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0119	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0120	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	9	84	
RICH0125	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0126	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0130	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	158	S
RICH0134	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	247	T,A,S
RICH0141	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/11/88-07/11/88	0	1	
RICH0143	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10	100	
RICH0146	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	23	223	A
RICH0032	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	14	409	
RICH0050	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	11/30/76-07/25/78	1	2	
RICH0069	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	10	289	
RICH0116	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14	208	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0001	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/26/73-11/25/74	1	11	
RICH0002	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/08/72-08/13/76	4	31	
RICH0003	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-05/26/78	5	51	
RICH0005	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	17	169	
RICH0006	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/29/74-05/26/78	3	37	
RICH0008	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/10/74-05/15/78	3	26	
RICH0010	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-09/19/73	0	4	
RICH0011	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	24	97	
RICH0015	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/19/69-06/28/83	14	36	
RICH0019	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	20	167	
RICH0023	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	71	
RICH0028	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/73-01/10/74	0	8	
RICH0029	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/73-02/02/79	5	47	
RICH0032	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	26	79	S
RICH0035	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/31/72-07/08/74	1	10	
RICH0036	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	15	138	
RICH0059	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0060	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	8	35	
RICH0061	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/19/90-11/19/98	8	36	
RICH0064	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/20/83-06/01/95	11	13	
RICH0065	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	28	211	T,S
RICH0066	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	6	52	
RICH0067	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	17	160	
RICH0069	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	13	70	
RICH0077	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0079	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-03/07/79	5	48	
RICH0080	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	6	50	
RICH0081	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-03/07/79	5	50	
RICH0083	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/14/89-08/08/94	4	2	
RICH0085	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/29/96-12/14/98	2	32	
RICH0089	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	13	70	
RICH0091	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/06/97-12/07/98	1	9	
RICH0093	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0094	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	26	219	T,A,S
RICH0096	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	8	85	
RICH0101	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	17	156	
RICH0102	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	14	124	
RICH0103	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-07/21/74	1	14	
RICH0104	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/20/94-11/23/98	4	20	
RICH0105	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	77	S
RICH0108	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0110	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0113	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/83-10/12/83	0	12	
RICH0115	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0116	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	25	248	T,A,S
RICH0118	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0119	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0120	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	7	68	
RICH0125	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0126	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0130	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	140	S
RICH0134	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	30	228	T,A,S
RICH0141	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/11/88-07/11/88	0	1	
RICH0143	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	8	82	
RICH0146	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	23	206	
RICH0011	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	08/16/83-10/03/83	0	4	
RICH0023	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0032	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/20/83-10/03/83	0	2	
RICH0060	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0064	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/20/83-10/03/83	0	2	
RICH0069	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0089	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	08/16/83-09/20/83	0	2	
RICH0113	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0116	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	08/16/83-10/03/83	0	2	
RICH0001	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/26/73-11/25/74	1	11	
RICH0002	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/08/72-03/24/78	5	32	
RICH0003	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	6	65	
RICH0005	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/19/90	17	180	
RICH0006	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/29/74-06/22/79	5	51	
RICH0008	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/74-06/12/79	4	41	
RICH0010	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-09/19/73	0	4	
RICH0011	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	24	97	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0015	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/19/69-06/28/83	14	36	
RICH0018	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-11/04/71	2	19	
RICH0019	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	20	178	
RICH0023	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/27/83	13	71	
RICH0027	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/12/74-02/27/79	4	120	
RICH0028	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-01/10/74	0	8	
RICH0029	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	6	60	
RICH0032	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	26	377	T,S
RICH0035	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/31/72-07/08/74	1	10	
RICH0036	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	15	147	
RICH0059	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0060	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/01/75-09/27/83	8	35	
RICH0061	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/19/90-11/19/98	8	36	
RICH0064	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/20/83-06/01/95	11	13	
RICH0065	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	28	223	T,S
RICH0066	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	6	64	
RICH0067	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	17	171	
RICH0069	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	23	245	
RICH0070	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-11/04/71	1	14	
RICH0077	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0079	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	6	62	
RICH0080	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	6	62	
RICH0081	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	6	63	
RICH0083	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/29/80-08/08/94	14	11	
RICH0084	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/11/84-09/04/91	6	8	
RICH0085	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/29/96-12/14/98	2	32	
RICH0089	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/20/83	13	70	
RICH0091	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/06/97-12/07/98	1	9	
RICH0092	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/17/70-11/04/71	1	16	
RICH0093	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	0	11	
RICH0094	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	26	233	T,A,S
RICH0096	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	104	
RICH0100	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0101	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	17	170	
RICH0102	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	14	138	
RICH0103	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-07/21/74	1	14	
RICH0104	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/20/94-11/23/98	4	20	
RICH0105	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	25	77	S
RICH0108	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0110	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0113	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0115	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0116	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	25	410	T,A,S
RICH0118	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0119	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0120	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	9	84	
RICH0121	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/24/79-09/03/81	1	24	
RICH0122	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/19/71-11/04/71	0	4	
RICH0125	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	12	
RICH0126	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	0	11	
RICH0130	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	30	158	S
RICH0131	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/11/84-09/04/91	6	30	
RICH0132	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/12/89	2	5	
RICH0134	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	30	243	A,S
RICH0136	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0142	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/84-09/10/84	0	1	
RICH0143	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	99	
RICH0144	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0145	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/04/91	4	26	
RICH0146	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	23	220	
RICH0147	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/31/89-09/04/91	1	25	
RICH0002	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/24/78-03/24/78	0	1	
RICH0003	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	2	14	
RICH0005	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	2	13	
RICH0006	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	2	14	
RICH0008	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/01/77-06/12/79	1	15	
RICH0018	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/20/69-11/04/71	2	19	
RICH0019	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	13	
RICH0027	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/12/74-02/27/79	4	120	
RICH0029	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	12	
RICH0036	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	13	
RICH0065	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-08/07/80	3	15	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0066	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	12	
RICH0067	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	12	
RICH0070	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/21/70-11/04/71	1	15	
RICH0079	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	14	
RICH0080	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-04/23/79	1	12	
RICH0081	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	1	13	
RICH0083	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/29/80-08/14/89	9	10	
RICH0084	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/04/91-09/04/91	0	1	
RICH0092	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/17/70-11/04/71	1	16	
RICH0094	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/15/77-06/07/79	1	16	
RICH0096	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	1	18	
RICH0101	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/77-06/07/79	1	16	
RICH0102	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/77-04/21/82	4	17	
RICH0116	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/15/77-08/07/80	3	18	
RICH0120	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/15/77-06/07/79	1	16	
RICH0121	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/24/79-09/03/81	1	24	
RICH0122	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/19/71-11/04/71	0	4	
RICH0130	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	1	18	
RICH0131	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	1	23	
RICH0134	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	1	18	
RICH0143	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	1	18	
RICH0145	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	1	20	
RICH0146	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	1	17	
RICH0147	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	1	25	
RICH0011	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-10/03/83	0	4	
RICH0023	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0032	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-12/15/98	15	70	
RICH0050	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/30/76-07/25/78	1	2	
RICH0060	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0064	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-10/03/83	0	2	
RICH0069	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-12/15/98	15	69	
RICH0084	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/84-09/13/89	5	7	
RICH0089	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-09/20/83	0	2	
RICH0099	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/17/83-10/17/83	0	1	
RICH0100	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0106	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/24/83-10/17/83	0	2	
RICH0113	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-09/27/83	0	3	
RICH0116	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-12/15/98	15	37	
RICH0131	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/84-09/12/89	5	7	
RICH0132	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0136	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0142	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/84-09/10/84	0	1	
RICH0144	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/84-09/12/89	5	7	
RICH0145	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	2	6	
RICH0018	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	04/21/70-11/04/71	1	16	
RICH0070	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	04/21/70-11/04/71	1	14	
RICH0082	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/09/69-05/09/69	0	1	
RICH0092	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	02/17/70-11/04/71	1	16	
RICH0122	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/19/71-11/04/71	0	4	
RICH0018	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/20/69-11/04/71	2	19	
RICH0032	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/20/69-10/02/69	0	3	
RICH0050	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	11/30/76-07/25/78	1	2	
RICH0070	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/21/70-11/04/71	1	15	
RICH0092	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/17/70-11/04/71	1	17	
RICH0096	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/07/68-07/16/69	0	4	
RICH0122	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/19/71-11/04/71	0	4	
RICH0130	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/07/68-07/16/69	0	4	
RICH0134	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/07/68-07/16/69	0	4	
RICH0143	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/07/68-07/16/69	0	4	
RICH0005	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/14/79-06/19/90	10	117	
RICH0011	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	18	72	
RICH0015	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/28/83-06/28/83	0	1	
RICH0019	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	107	
RICH0023	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-09/27/83	3	16	
RICH0027	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/12/74-02/27/79	4	120	
RICH0032	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	15	327	
RICH0036	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	106	
RICH0059	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0060	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-09/27/83	3	15	
RICH0061	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/90-11/19/98	8	36	
RICH0064	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/20/83-06/01/95	11	13	
RICH0065	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	19	149	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0067	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	107	
RICH0069	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	15	193	
RICH0077	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0083	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/29/80-08/08/94	14	11	
RICH0084	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/11/84-09/04/91	6	8	
RICH0085	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/29/96-12/14/98	2	32	
RICH0089	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-09/20/83	3	15	
RICH0091	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/06/97-12/07/98	1	9	
RICH0093	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0094	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	19	170	
RICH0100	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0101	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	107	
RICH0102	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-11/29/88	9	88	
RICH0104	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/20/94-11/23/98	4	20	
RICH0105	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-06/01/95	15	23	
RICH0108	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0110	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0113	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/83-09/27/83	0	6	
RICH0115	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0116	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	16	313	
RICH0118	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0119	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0121	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/24/79-09/03/81	1	24	
RICH0125	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0126	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0130	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	4	54	
RICH0131	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/11/84-09/04/91	6	30	
RICH0132	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0134	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	19	143	
RICH0136	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/84-09/12/89	5	7	
RICH0141	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/11/88-07/11/88	0	1	
RICH0142	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/84-09/10/84	0	1	
RICH0144	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/84-09/12/89	5	7	
RICH0145	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/04/91	4	26	
RICH0146	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	19	178	
RICH0147	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/89-09/04/91	1	25	
RICH0032	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	11	335	
RICH0069	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	7	209	
RICH0084	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/13/89	2	6	
RICH0100	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0116	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	11	169	
RICH0131	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0132	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0136	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0144	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0145	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0149	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/03/86-04/03/86	0	1	
RICH0011	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	08/16/83-10/03/83	0	6	
RICH0023	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-09/27/83	0	3	
RICH0032	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	09/20/83-10/03/83	0	2	
RICH0060	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-09/27/83	0	3	
RICH0064	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	09/20/83-10/03/83	0	2	
RICH0069	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-09/27/83	0	3	
RICH0089	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	08/16/83-09/20/83	0	2	
RICH0113	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-10/03/83	0	8	
RICH0116	No	00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	08/16/83-10/03/83	0	3	
RICH0005	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/14/79-06/19/90	10	119	
RICH0011	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-07/07/94	14	18	
RICH0015	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/28/83-06/28/83	0	1	
RICH0019	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	109	
RICH0023	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-09/27/83	3	16	
RICH0032	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	18	428	
RICH0036	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	109	
RICH0050	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/30/76-07/25/78	1	2	
RICH0060	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-09/27/83	3	15	
RICH0061	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/19/90-07/17/91	0	5	
RICH0064	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/20/83-10/03/83	0	2	
RICH0065	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	11	110	
RICH0067	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	108	
RICH0069	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	18	305	
RICH0083	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/29/80-09/09/80	0	8	
RICH0084	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/11/84-09/13/89	5	7	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0089	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-09/20/83	3	15	
RICH0094	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	14	152	
RICH0100	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0101	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	110	
RICH0102	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-11/29/88	9	91	
RICH0105	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-06/28/83	3	12	
RICH0113	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/28/83-09/27/83	0	3	
RICH0116	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	19	365	A
RICH0131	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/11/84-09/12/89	5	7	
RICH0132	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0134	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	11	114	
RICH0136	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/84-09/12/89	5	7	
RICH0141	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/11/88-07/11/88	0	1	
RICH0142	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/84-09/10/84	0	1	
RICH0144	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/84-09/12/89	5	7	
RICH0145	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	2	6	
RICH0146	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	11	113	
RICH0005	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/14/79-06/19/90	10	112	
RICH0011	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-08/20/96	16	43	
RICH0015	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/28/83-06/28/83	0	1	
RICH0018	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	0	4	
RICH0019	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	15	148	
RICH0023	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-09/27/83	3	16	
RICH0027	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/12/74-02/27/79	4	113	
RICH0032	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	21	376	
RICH0036	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	105	
RICH0059	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	0	1	
RICH0060	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-09/27/83	3	15	
RICH0061	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/19/90-06/24/96	5	23	
RICH0064	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/83-07/14/94	10	3	
RICH0065	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	16	131	
RICH0066	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/26/75-06/21/79	4	42	
RICH0067	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	108	
RICH0069	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	21	241	
RICH0070	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	0	4	
RICH0077	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	0	1	
RICH0083	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/94-08/08/94	0	1	
RICH0084	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/11/84-09/04/91	6	8	
RICH0085	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/29/96-08/22/96	0	4	
RICH0089	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-09/20/83	3	15	
RICH0092	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	0	4	
RICH0093	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	0	1	
RICH0094	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	17	154	
RICH0100	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/12/89	2	6	
RICH0101	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	107	
RICH0102	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	13	130	
RICH0104	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/20/94-07/10/96	1	8	
RICH0105	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/74-07/14/94	19	34	
RICH0108	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0110	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0113	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/28/83-09/27/83	0	3	
RICH0115	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0116	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	21	374	A
RICH0118	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	0	1	
RICH0119	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0122	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/02/71-11/04/71	0	3	
RICH0125	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0126	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	0	2	
RICH0130	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/19/94-08/22/96	2	26	
RICH0131	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/11/84-09/04/91	6	30	
RICH0132	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/12/89	2	5	
RICH0134	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	14	123	
RICH0136	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/10/84-09/12/89	5	7	
RICH0142	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/10/84-09/10/84	0	1	
RICH0144	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/10/84-09/12/89	5	7	
RICH0145	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/04/91	4	26	
RICH0146	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	17	149	
RICH0147	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/89-09/04/91	1	25	
RICH0149	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	04/03/86-04/03/86	0	1	
RICH0061	No	00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	09/12/97-09/12/97	0	1	
RICH0085	No	00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	11/10/97-11/10/97	0	1	
RICH0104	No	00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	04/19/95-04/19/95	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0130	No	00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)		02/15/95-11/10/97	2	2	
RICH0018	No	00690	CARBON, TOTAL (MG/L AS C)		10/21/71-11/04/71	0	4	
RICH0070	No	00690	CARBON, TOTAL (MG/L AS C)		10/21/71-11/04/71	0	4	
RICH0092	No	00690	CARBON, TOTAL (MG/L AS C)		10/21/71-11/04/71	0	4	
RICH0122	No	00690	CARBON, TOTAL (MG/L AS C)		11/02/71-11/04/71	0	3	
RICH0149	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)		04/03/86-04/03/86	0	1	
RICH0121	No	00720	CYANIDE, TOTAL (MG/L AS CN)	MG/L	10/24/79-09/03/81	1	24	
RICH0131	No	00720	CYANIDE, TOTAL (MG/L AS CN)	MG/L	10/31/89-03/31/91	1	15	
RICH0145	No	00720	CYANIDE, TOTAL (MG/L AS CN)	MG/L	10/31/89-09/15/90	0	13	
RICH0147	No	00720	CYANIDE, TOTAL (MG/L AS CN)	MG/L	10/31/89-09/15/90	0	16	
RICH0005	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		03/13/85-06/19/90	5	16	
RICH0011	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/07/94-12/15/98	4	54	
RICH0019	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-06/20/90	1	18	
RICH0032	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		06/18/92-12/15/98	6	70	
RICH0036	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-06/20/90	1	17	
RICH0050	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/30/76-07/25/78	1	2	
RICH0061	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	8	36	
RICH0065	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	13	63	
RICH0067	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-06/20/90	5	41	
RICH0069	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		02/17/94-12/15/98	4	55	
RICH0081	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		10/20/77-10/20/77	0	1	
RICH0082	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/30/45-05/09/69	23	45	
RICH0083	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		08/08/94-08/08/94	0	1	
RICH0085	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		05/29/96-12/14/98	2	32	
RICH0089	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		05/19/80-05/19/80	0	1	
RICH0091	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		08/06/97-12/07/98	1	9	
RICH0094	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	13	78	
RICH0096	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		10/12/67-10/12/67	0	1	
RICH0101	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-06/20/90	1	15	
RICH0102	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-02/21/89	0	2	
RICH0104	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/20/94-11/23/98	4	20	
RICH0116	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		10/20/86-12/15/98	12	117	
RICH0130	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	31	56	S
RICH0134	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	31	51	S
RICH0143	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-10/12/67	0	2	
RICH0146	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)		01/25/89-12/07/98	9	87	
RICH0050	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)		11/30/76-07/25/78	1	2	
RICH0082	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)		01/14/48-05/09/69	21	8	
RICH0050	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)		11/30/76-07/25/78	1	2	
RICH0082	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		07/30/45-05/09/69	23	45	
RICH0084	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/13/89	2	6	
RICH0099	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		10/17/83-10/17/83	0	1	
RICH0100	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0106	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		03/24/83-10/17/83	0	2	
RICH0131	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0132	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0136	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0144	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0145	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/08/87-09/12/89	2	6	
RICH0149	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/03/86-04/03/86	0	1	
RICH0027	No	00916	CALCIUM, TOTAL (MG/L AS CA)		03/12/74-03/12/74	0	1	
RICH0043	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	1	
RICH0045	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	2	
RICH0048	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	1	
RICH0052	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	1	
RICH0055	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	1	
RICH0056	Yes	00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	0	1	
RICH0050	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		11/30/76-07/25/78	1	2	
RICH0082	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		07/30/45-05/09/69	23	45	
RICH0084	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/13/89	2	6	
RICH0099	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		10/17/83-10/17/83	0	1	
RICH0100	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0106	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		03/24/83-10/17/83	0	2	
RICH0131	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0132	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0136	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0144	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0145	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/08/87-09/12/89	2	6	
RICH0149	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/03/86-04/03/86	0	1	
RICH0027	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		03/12/74-03/12/74	0	1	
RICH0061	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		07/15/92-01/21/93	0	2	
RICH0065	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		07/15/92-01/21/93	0	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0116	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		11/02/92-11/02/92	0	1	
RICH0134	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		09/02/92-03/03/93	0	3	
RICH0146	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)		09/02/92-03/03/93	0	3	
RICH0027	No	00929	SODIUM, TOTAL (MG/L AS NA)		06/26/74-06/26/74	0	1	
RICH0027	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		03/12/74-03/12/74	0	1	
RICH0050	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)		11/30/76-07/25/78	1	2	
RICH0082	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		07/30/45-05/09/69	23	45	
RICH0084	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/13/89	2	6	
RICH0099	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		10/17/83-10/17/83	0	1	
RICH0100	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0106	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		03/24/83-10/17/83	0	2	
RICH0131	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0132	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0136	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0144	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0145	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/08/87-09/12/89	2	6	
RICH0149	No	00930	SODIUM, DISSOLVED (MG/L AS NA)		04/03/86-04/03/86	0	1	
RICH0050	Yes	00931	SODIUM ADSORPTION RATIO		11/30/76-07/25/78	1	2	
RICH0082	No	00931	SODIUM ADSORPTION RATIO		05/09/69-05/09/69	0	1	
RICH0050	Yes	00932	SODIUM, PERCENT		11/30/76-07/25/78	1	2	
RICH0082	No	00932	SODIUM, PERCENT		05/09/69-05/09/69	0	1	
RICH0050	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)		11/30/76-07/25/78	1	2	
RICH0082	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		10/01/45-05/09/69	23	10	
RICH0084	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/13/89	2	6	
RICH0099	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		10/17/83-10/17/83	0	1	
RICH0100	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0106	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		03/24/83-10/17/83	0	2	
RICH0131	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0132	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0136	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0144	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0145	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/08/87-09/12/89	2	6	
RICH0149	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/03/86-04/03/86	0	1	
RICH0027	No	00937	POTASSIUM, TOTAL MG/L AS K)		03/12/74-06/26/74	0	2	
RICH0001	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	11/28/73-05/29/74	0	2	
RICH0002	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	08/09/72-09/05/72	0	2	
RICH0003	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	01/23/78-01/23/78	0	1	
RICH0005	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/18/88-06/19/90	1	18	
RICH0011	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/26/74-12/15/98	24	79	
RICH0015	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-08/30/74	4	17	
RICH0018	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-05/05/70	0	1	
RICH0019	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	06/22/75-06/20/90	14	19	
RICH0023	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-04/24/79	8	38	
RICH0027	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	03/12/74-12/21/78	4	20	
RICH0029	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	06/15/76-06/15/76	0	1	
RICH0032	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	28	95	S
RICH0035	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	08/09/72-08/09/72	0	1	
RICH0036	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	06/23/77-06/20/90	12	18	
RICH0050	Yes	00940	CHLORIDE,TOTAL IN WATER	MG/L	11/30/76-07/25/78	1	2	
RICH0059	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	10	
RICH0060	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/01/75-04/24/79	3	18	
RICH0061	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/19/90-11/19/98	8	34	
RICH0064	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	10	
RICH0065	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/24/88-12/07/98	10	61	
RICH0066	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	11/27/72-06/21/79	6	61	
RICH0067	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	03/30/73-06/20/90	17	79	
RICH0069	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	26	87	S
RICH0070	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-05/05/70	0	1	
RICH0077	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	10	
RICH0080	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	09/26/72-04/23/79	6	63	
RICH0082	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/30/45-05/09/69	23	45	
RICH0084	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/04/91	4	7	
RICH0085	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	05/29/96-12/14/98	2	32	
RICH0089	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-04/24/79	6	38	
RICH0091	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	08/06/97-12/07/98	1	9	
RICH0092	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	02/17/70-05/03/70	0	2	
RICH0093	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	10	
RICH0094	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	03/24/75-12/07/98	23	78	
RICH0099	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/17/83-10/17/83	0	1	
RICH0100	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/12/89	2	6	
RICH0101	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/24/88-06/20/90	1	15	
RICH0102	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	08/06/75-02/21/89	13	4	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0104	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/20/94-11/23/98	4	20	
RICH0105	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-06/01/95	22	46	
RICH0106	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	03/24/83-10/17/83	0	2	
RICH0108	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	12	
RICH0110	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	11	
RICH0115	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	12	
RICH0116	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	02/18/68-12/15/98	30	126	S
RICH0118	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	11	
RICH0119	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	11	
RICH0125	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	12	
RICH0126	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	0	11	
RICH0130	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/30/75-12/14/98	23	55	
RICH0131	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/04/91	4	29	
RICH0132	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/12/89	2	6	
RICH0134	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/30/75-12/14/98	23	53	
RICH0136	Yes	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/12/89	2	6	
RICH0143	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	07/30/75-07/30/75	0	1	
RICH0144	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/12/89	2	6	
RICH0145	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	04/08/87-09/04/91	4	26	
RICH0146	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/06/88-12/07/98	10	87	
RICH0147	No	00940	CHLORIDE,TOTAL IN WATER	MG/L	10/31/89-09/04/91	1	25	
RICH0149	No	00941	CHLORIDE, DISSOLVED IN WATER	MG/L	04/03/86-04/03/86	0	1	
RICH0005	No	00945	SULFATE, TOTAL (MG/L AS SO4)		02/27/89-06/19/90	1	16	
RICH0011	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/07/94-12/15/98	4	54	
RICH0019	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-06/20/90	1	17	
RICH0027	No	00945	SULFATE, TOTAL (MG/L AS SO4)		03/12/74-12/21/78	4	20	
RICH0032	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/27/81-12/15/98	17	62	
RICH0036	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-06/20/90	1	16	
RICH0050	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)		11/30/76-07/25/78	1	2	
RICH0059	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	10	
RICH0061	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/19/90-11/19/98	8	34	
RICH0064	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	10	
RICH0065	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-12/07/98	10	60	
RICH0067	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-06/20/90	1	16	
RICH0069	No	00945	SULFATE, TOTAL (MG/L AS SO4)		09/08/94-12/15/98	4	50	
RICH0077	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	10	
RICH0082	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/30/45-05/09/69	23	45	
RICH0084	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/04/91	4	7	
RICH0085	No	00945	SULFATE, TOTAL (MG/L AS SO4)		05/29/96-12/14/98	2	32	
RICH0091	No	00945	SULFATE, TOTAL (MG/L AS SO4)		08/06/97-12/07/98	1	9	
RICH0093	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	10	
RICH0094	No	00945	SULFATE, TOTAL (MG/L AS SO4)		02/21/89-12/07/98	9	76	
RICH0099	No	00945	SULFATE, TOTAL (MG/L AS SO4)		10/17/83-10/17/83	0	1	
RICH0100	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/12/89	2	6	
RICH0101	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-06/20/90	1	14	
RICH0102	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-02/21/89	0	2	
RICH0104	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/20/94-11/23/98	4	20	
RICH0105	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	10	
RICH0106	No	00945	SULFATE, TOTAL (MG/L AS SO4)		03/24/83-10/17/83	0	2	
RICH0108	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	12	
RICH0110	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	11	
RICH0115	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	12	
RICH0116	No	00945	SULFATE, TOTAL (MG/L AS SO4)		02/18/68-12/15/98	30	122	S
RICH0118	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	11	
RICH0119	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	11	
RICH0125	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	12	
RICH0126	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	0	11	
RICH0130	No	00945	SULFATE, TOTAL (MG/L AS SO4)		07/19/94-12/14/98	4	54	
RICH0131	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/04/91	4	29	
RICH0132	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/12/89	2	6	
RICH0134	No	00945	SULFATE, TOTAL (MG/L AS SO4)		11/21/88-12/14/98	10	51	
RICH0136	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/12/89	2	6	
RICH0144	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/12/89	2	6	
RICH0145	No	00945	SULFATE, TOTAL (MG/L AS SO4)		04/08/87-09/04/91	4	26	
RICH0146	No	00945	SULFATE, TOTAL (MG/L AS SO4)		01/25/89-12/07/98	9	86	
RICH0147	No	00945	SULFATE, TOTAL (MG/L AS SO4)		10/31/89-09/04/91	1	25	
RICH0149	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)		04/03/86-04/03/86	0	1	
RICH0050	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)		11/30/76-07/25/78	1	2	
RICH0082	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)		07/30/45-05/09/69	23	45	
RICH0084	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)		04/08/87-09/13/89	2	6	
RICH0100	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)		04/08/87-09/12/89	2	6	
RICH0131	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)		04/08/87-02/05/91	3	7	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0132	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	2	6	
RICH0136	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	2	6	
RICH0144	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	2	6	
RICH0145	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-02/05/91	3	7	
RICH0147	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/05/91-02/05/91	0	1	
RICH0149	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/03/86-04/03/86	0	1	
RICH0005	No	00951	FLUORIDE, TOTAL (MG/L AS F)	02/27/89-06/19/90	1	16	
RICH0019	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	1	18	
RICH0036	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	1	17	
RICH0061	No	00951	FLUORIDE, TOTAL (MG/L AS F)	07/19/90-04/19/93	2	9	
RICH0065	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-04/19/93	4	27	
RICH0067	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	1	17	
RICH0094	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	4	47	
RICH0101	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	1	14	
RICH0102	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-02/21/89	0	2	
RICH0116	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-07/07/93	4	48	
RICH0134	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/21/88-03/03/93	4	27	
RICH0146	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/25/89-03/03/93	4	26	
RICH0005	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	05/23/89-06/19/90	1	13	
RICH0019	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	1	15	
RICH0032	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	02/13/90-12/15/98	8	258	
RICH0036	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	1	14	
RICH0050	Yes	00955	SILICA, DISSOLVED (MG/L AS SIO2)	11/30/76-07/25/78	1	2	
RICH0061	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	07/19/90-10/26/92	2	9	
RICH0065	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-01/21/93	3	24	
RICH0067	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	1	13	
RICH0069	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	02/13/90-12/15/98	8	256	
RICH0082	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	07/30/45-05/09/69	23	45	
RICH0084	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/13/89	2	6	
RICH0094	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-02/09/93	3	42	
RICH0100	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0101	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	1	12	
RICH0116	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	08/29/84-12/15/98	14	174	
RICH0131	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0132	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0134	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	05/10/89-12/28/92	3	22	
RICH0136	Yes	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0144	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0145	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	2	6	
RICH0146	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	03/15/89-12/02/92	3	23	
RICH0149	No	00955	SILICA, DISSOLVED (MG/L AS SIO2)	04/03/86-04/03/86	0	1	
RICH0039	Yes	00997	ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	0	1	
RICH0041	Yes	00997	ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	0	1	
RICH0042	Yes	00997	ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	0	1	
RICH0049	Yes	00997	ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/06/89-12/06/89	0	1	
RICH0002	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/02/72-05/27/76	4	2	
RICH0003	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/24/75-05/24/79	3	7	
RICH0005	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/24/75-03/13/85	9	8	
RICH0006	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/24/75-05/24/79	3	7	
RICH0008	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/25/75-05/15/78	2	4	
RICH0011	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/04/76-10/28/82	6	3	
RICH0015	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/02/72-05/02/72	0	1	
RICH0019	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/15/71-03/28/85	14	10	
RICH0023	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/02/72-10/28/82	10	4	
RICH0028	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-08/04/73	0	1	
RICH0029	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3	3	
RICH0032	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	11	5	
RICH0036	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/23/77-03/28/85	7	3	
RICH0044	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	12/06/89-12/06/89	0	1	
RICH0060	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/04/76-10/28/82	6	3	
RICH0061	No	01002	ARSENIC, TOTAL (UG/L AS AS)	01/17/91-04/19/93	2	10	
RICH0065	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/15/71-04/19/93	22	21	
RICH0066	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3	3	
RICH0067	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-03/28/85	11	5	
RICH0069	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	11	5	
RICH0079	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3	3	
RICH0080	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3	3	
RICH0081	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3	3	
RICH0083	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/08/94-08/08/94	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0084	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	3	5	
RICH0089	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	11	5	
RICH0094	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/06/72-04/28/93	20	18	
RICH0096	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/71-11/20/78	7	9	
RICH0100	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	1	4	
RICH0101	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/18/75-03/28/85	9	8	
RICH0102	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/18/75-03/28/85	9	8	
RICH0105	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	11	5	
RICH0116	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/71-04/08/93	21	19	
RICH0120	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/15/71-11/01/78	7	11	
RICH0121	No	01002	ARSENIC, TOTAL (UG/L AS AS)	10/24/79-09/03/81	1	24	
RICH0130	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/15/71-11/20/78	7	10	
RICH0131	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	3	27	
RICH0132	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	1	4	
RICH0134	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/71-06/01/93	22	19	
RICH0136	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	1	4	
RICH0143	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/71-11/20/78	7	8	
RICH0144	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	1	4	
RICH0145	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	3	24	
RICH0146	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/13/75-06/01/93	17	14	
RICH0147	No	01002	ARSENIC, TOTAL (UG/L AS AS)	10/31/89-09/04/91	1	25	
RICH0005	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/12/81-07/21/92	11	2	
RICH0012	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	06/25/92-06/25/92	0	3	
RICH0129	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	10/01/77-10/01/86	9	15	
RICH0044	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	07/24/91-07/24/91	0	2	
RICH0039	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	0	1	
RICH0043	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	0	1	
RICH0039	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	0	1	
RICH0061	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	07/15/92-01/21/93	0	2	
RICH0065	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	07/15/92-01/21/93	0	2	
RICH0134	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	09/02/92-03/03/93	0	3	
RICH0146	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	09/02/92-03/03/93	0	3	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0043	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/27/92-07/27/92	0	1	
RICH0085	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/27/92-08/27/92	0	1	
RICH0104	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/27/92-08/27/92	0	1	
RICH0130	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/21/92-07/21/92	0	1	
RICH0146	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/21/92-07/21/92	0	1	
RICH0043	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01018	IRON.TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	0	1	
RICH0044	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01020	BORON, DISSOLVED (UG/L AS B)	12/06/89-12/06/89	0	1	
RICH0044	Yes	01022	BORON, TOTAL (UG/L AS B)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01022	BORON, TOTAL (UG/L AS B)	12/06/89-12/06/89	0	1	
RICH0043	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	0	1	
RICH0044	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/24/91-07/24/91	0	2	
RICH0084	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0100	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0131	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0132	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0136	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0144	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0145	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	0	2	
RICH0001	No	01027	CADMIUM, TOTAL (UG/L AS CD)	12/07/73-12/07/73	0	1	
RICH0002	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-05/27/76	4	5	
RICH0003	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/12/76-05/24/79	3	6	
RICH0005	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/24/75-03/13/85	9	8	
RICH0006	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/24/75-05/24/79	3	7	
RICH0008	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/25/75-05/15/78	2	4	
RICH0011	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/04/76-10/28/82	6	3	
RICH0015	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-08/20/72	0	4	
RICH0019	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-03/28/85	14	12	
RICH0023	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	10	7	
RICH0028	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-08/04/73	0	1	
RICH0029	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4	4	
RICH0032	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	10	7	
RICH0035	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/31/72-08/09/72	0	2	
RICH0036	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/23/77-03/28/85	7	4	
RICH0039	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	0	1	
RICH0060	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/04/76-10/28/82	6	3	
RICH0061	No	01027	CADMIUM, TOTAL (UG/L AS CD)	01/17/91-04/19/93	2	10	
RICH0065	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/19/93	22	23	
RICH0066	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4	4	
RICH0067	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-03/28/85	11	6	
RICH0069	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	10	7	
RICH0079	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4	4	
RICH0080	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4	4	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0081	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4	4	
RICH0083	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/08/94-08/08/94	0	1	
RICH0084	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	3	5	
RICH0089	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	10	7	
RICH0094	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/06/72-04/28/93	20	18	
RICH0096	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-11/20/78	7	13	
RICH0100	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	1	4	
RICH0101	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/18/75-03/28/85	9	8	
RICH0102	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/18/75-03/28/85	9	8	
RICH0105	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	10	6	
RICH0116	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/08/93	22	22	
RICH0120	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/28/71-11/01/78	7	11	
RICH0121	No	01027	CADMIUM, TOTAL (UG/L AS CD)	10/24/79-09/03/81	1	24	
RICH0130	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-11/20/78	7	13	
RICH0131	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	3	28	
RICH0132	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-04/07/90	1	6	
RICH0134	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/28/71-06/01/93	22	22	
RICH0136	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	1	4	
RICH0143	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/23/70-11/20/78	7	12	
RICH0144	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	1	4	
RICH0145	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	3	24	
RICH0146	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/13/75-06/01/93	17	15	
RICH0147	No	01027	CADMIUM, TOTAL (UG/L AS CD)	10/31/89-09/04/91	1	25	
RICH0005	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	
RICH0005	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	0	1	
RICH0032	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/22/93-06/22/93	0	1	
RICH0036	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0044	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/24/91-07/24/91	0	2	
RICH0145	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	04/08/87-04/08/87	0	1	
RICH0001	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	12/07/73-12/07/73	0	1	
RICH0002	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/02/72-05/27/76	4	8	
RICH0003	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/14/73-05/24/79	6	12	
RICH0005	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/14/73-03/13/85	11	13	
RICH0006	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/21/75-05/24/79	4	10	
RICH0008	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/17/75-05/15/78	3	7	
RICH0011	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/04/75-10/28/82	7	7	
RICH0015	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-05/03/73	3	8	
RICH0019	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/15/69-03/28/85	15	21	
RICH0023	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	12	15	
RICH0028	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-12/12/73	0	3	
RICH0029	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	4	7	
RICH0032	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	12	15	
RICH0035	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-05/03/73	0	4	
RICH0036	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/26/75-03/28/85	10	5	
RICH0039	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	0	1	
RICH0060	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/04/75-10/28/82	7	7	
RICH0061	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	01/17/91-04/19/93	2	10	
RICH0065	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/19/93	23	32	
RICH0066	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	01/29/73-11/17/77	4	8	
RICH0067	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-03/28/85	11	9	
RICH0069	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	12	15	
RICH0079	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	4	7	
RICH0080	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/26/72-11/17/77	5	9	
RICH0081	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	4	7	
RICH0083	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/08/94-08/08/94	0	1	
RICH0084	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	3	5	
RICH0089	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	12	15	
RICH0094	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/06/72-04/28/93	20	23	
RICH0096	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/20/78	8	22	
RICH0100	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	1	4	
RICH0101	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/26/72-03/28/85	12	14	
RICH0102	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/75-03/28/85	10	11	
RICH0103	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/26/72-01/29/73	0	2	
RICH0105	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	12	14	
RICH0116	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/08/93	23	32	
RICH0120	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/01/78	8	19	
RICH0121	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/24/79-09/03/81	1	23	
RICH0130	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/20/78	8	23	
RICH0131	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	3	29	
RICH0132	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-04/07/90	1	6	
RICH0134	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-06/01/93	23	32	
RICH0136	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	1	4	
RICH0143	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/20/78	8	22	
RICH0144	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	1	4	
RICH0145	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	3	24	
RICH0146	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/20/75-06/01/93	18	17	
RICH0147	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/31/89-09/04/91	1	25	
RICH0039	Yes	01037	COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01037	COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01037	COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01037	COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	0	1	
RICH0084	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/13/89	1	4	
RICH0100	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	1	4	
RICH0131	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-10/31/89	1	5	
RICH0132	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	1	4	
RICH0136	Yes	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	1	4	
RICH0144	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	1	4	
RICH0145	No	01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-10/31/89	1	5	
RICH0147	No	01037	COBALT, TOTAL (UG/L AS CO)	10/31/89-10/31/89	0	1	
RICH0044	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/89-07/24/91	1	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0047	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	07/24/91-07/24/91	0	2	
RICH0084	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0100	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0131	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0132	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0136	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0144	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0145	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	0	2	
RICH0001	No	01042	COPPER, TOTAL (UG/L AS CU)	12/07/73-12/07/73	0	1	
RICH0002	No	01042	COPPER, TOTAL (UG/L AS CU)	05/02/72-05/27/76	4	8	
RICH0003	No	01042	COPPER, TOTAL (UG/L AS CU)	05/14/73-05/24/79	6	12	
RICH0005	No	01042	COPPER, TOTAL (UG/L AS CU)	05/14/73-03/13/85	11	13	
RICH0006	No	01042	COPPER, TOTAL (UG/L AS CU)	03/21/75-05/24/79	4	10	
RICH0008	No	01042	COPPER, TOTAL (UG/L AS CU)	03/17/75-05/15/78	3	7	
RICH0011	No	01042	COPPER, TOTAL (UG/L AS CU)	06/04/75-10/28/82	7	7	
RICH0015	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-05/03/73	3	8	
RICH0019	No	01042	COPPER, TOTAL (UG/L AS CU)	07/15/69-03/28/85	15	20	
RICH0023	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	12	15	
RICH0028	No	01042	COPPER, TOTAL (UG/L AS CU)	05/29/73-12/12/73	0	3	
RICH0029	No	01042	COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	4	7	
RICH0032	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	12	15	
RICH0035	No	01042	COPPER, TOTAL (UG/L AS CU)	07/31/72-05/03/73	0	4	
RICH0036	No	01042	COPPER, TOTAL (UG/L AS CU)	03/26/75-03/28/85	10	5	
RICH0039	Yes	01042	COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01042	COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01042	COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01042	COPPER, TOTAL (UG/L AS CU)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01042	COPPER, TOTAL (UG/L AS CU)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01042	COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	0	1	
RICH0060	No	01042	COPPER, TOTAL (UG/L AS CU)	06/04/75-10/28/82	7	7	
RICH0061	No	01042	COPPER, TOTAL (UG/L AS CU)	01/17/91-04/19/93	2	10	
RICH0065	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-04/19/93	23	31	
RICH0066	No	01042	COPPER, TOTAL (UG/L AS CU)	01/29/73-11/17/77	4	8	
RICH0067	No	01042	COPPER, TOTAL (UG/L AS CU)	05/29/73-03/28/85	11	9	
RICH0069	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	12	15	
RICH0079	No	01042	COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	4	7	
RICH0080	No	01042	COPPER, TOTAL (UG/L AS CU)	10/26/72-11/17/77	5	9	
RICH0081	No	01042	COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	4	7	
RICH0083	No	01042	COPPER, TOTAL (UG/L AS CU)	08/08/94-08/08/94	0	1	
RICH0084	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	3	5	
RICH0089	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	12	15	
RICH0094	No	01042	COPPER, TOTAL (UG/L AS CU)	05/06/72-04/28/93	20	23	
RICH0096	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-11/20/78	8	21	
RICH0100	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	1	4	
RICH0101	No	01042	COPPER, TOTAL (UG/L AS CU)	10/26/72-03/28/85	12	13	
RICH0102	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/75-03/28/85	10	10	
RICH0103	No	01042	COPPER, TOTAL (UG/L AS CU)	10/26/72-01/29/73	0	2	
RICH0105	No	01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	12	14	
RICH0116	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-04/08/93	23	31	
RICH0120	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-11/01/78	8	19	
RICH0121	No	01042	COPPER, TOTAL (UG/L AS CU)	10/24/79-09/03/81	1	24	
RICH0130	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-11/20/78	8	22	
RICH0131	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	3	27	
RICH0132	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	1	4	
RICH0134	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-06/01/93	23	31	
RICH0136	Yes	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	1	4	
RICH0143	No	01042	COPPER, TOTAL (UG/L AS CU)	03/24/70-11/20/78	8	21	
RICH0144	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	1	4	
RICH0145	No	01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	3	24	
RICH0146	No	01042	COPPER, TOTAL (UG/L AS CU)	03/20/75-06/01/93	18	16	
RICH0147	No	01042	COPPER, TOTAL (UG/L AS CU)	10/31/89-09/04/91	1	25	
RICH0005	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0052	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/12/81-07/21/92	11	2	
RICH0003	No	01045	IRON, TOTAL (UG/L AS FE)	11/02/78-05/24/79	0	2	
RICH0005	No	01045	IRON, TOTAL (UG/L AS FE)	05/24/79-05/24/79	0	1	
RICH0006	No	01045	IRON, TOTAL (UG/L AS FE)	11/02/78-05/24/79	0	2	
RICH0019	No	01045	IRON, TOTAL (UG/L AS FE)	07/15/69-04/28/71	1	4	
RICH0029	No	01045	IRON, TOTAL (UG/L AS FE)	11/17/77-11/17/77	0	1	
RICH0044	Yes	01045	IRON, TOTAL (UG/L AS FE)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01045	IRON, TOTAL (UG/L AS FE)	12/06/89-12/06/89	0	1	
RICH0061	No	01045	IRON, TOTAL (UG/L AS FE)	01/17/91-04/19/93	2	10	
RICH0065	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-04/19/93	22	13	
RICH0083	No	01045	IRON, TOTAL (UG/L AS FE)	04/29/80-08/08/94	14	10	
RICH0084	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	4	7	
RICH0094	No	01045	IRON, TOTAL (UG/L AS FE)	11/01/78-04/28/93	14	10	
RICH0096	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-11/20/78	8	4	
RICH0100	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0101	No	01045	IRON, TOTAL (UG/L AS FE)	11/01/78-11/01/78	0	1	
RICH0102	No	01045	IRON, TOTAL (UG/L AS FE)	11/01/78-11/01/78	0	1	
RICH0116	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-04/08/93	22	12	
RICH0120	No	01045	IRON, TOTAL (UG/L AS FE)	04/28/71-11/01/78	7	2	
RICH0130	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-11/20/78	8	4	
RICH0131	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	4	29	
RICH0132	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0134	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-06/01/93	22	11	
RICH0136	Yes	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0143	No	01045	IRON, TOTAL (UG/L AS FE)	06/29/70-11/20/78	8	4	
RICH0144	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0145	No	01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	4	26	
RICH0146	No	01045	IRON, TOTAL (UG/L AS FE)	11/20/78-06/01/93	14	9	
RICH0147	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/89-09/04/91	1	25	
RICH0044	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/89-07/24/91	1	2	
RICH0050	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	11/30/76-07/25/78	1	2	
RICH0051	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	07/24/91-07/24/91	0	2	
RICH0082	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/09/69-05/09/69	0	1	
RICH0084	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	4	7	
RICH0100	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0131	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	4	29	
RICH0132	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0136	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0144	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	2	6	
RICH0145	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	4	26	
RICH0147	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/89-09/04/91	1	25	
RICH0044	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	07/24/91-07/24/91	0	2	
RICH0084	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0100	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0131	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0132	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0136	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0144	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0145	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	0	2	
RICH0001	No	01051	LEAD, TOTAL (UG/L AS PB)	12/07/73-12/07/73	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0002	No	01051	LEAD, TOTAL (UG/L AS PB)	05/02/72-05/27/76	4	7	
RICH0003	No	01051	LEAD, TOTAL (UG/L AS PB)	12/07/73-05/24/79	5	10	
RICH0005	No	01051	LEAD, TOTAL (UG/L AS PB)	12/07/73-03/13/85	11	11	
RICH0006	No	01051	LEAD, TOTAL (UG/L AS PB)	03/21/75-05/24/79	4	9	
RICH0008	No	01051	LEAD, TOTAL (UG/L AS PB)	03/17/75-05/15/78	3	7	
RICH0011	No	01051	LEAD, TOTAL (UG/L AS PB)	06/04/75-10/28/82	7	7	
RICH0015	No	01051	LEAD, TOTAL (UG/L AS PB)	05/02/72-10/04/72	0	5	
RICH0019	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-03/28/85	14	18	
RICH0023	No	01051	LEAD, TOTAL (UG/L AS PB)	05/02/72-10/28/82	10	12	
RICH0028	No	01051	LEAD, TOTAL (UG/L AS PB)	08/04/73-12/12/73	0	2	
RICH0029	No	01051	LEAD, TOTAL (UG/L AS PB)	08/04/73-06/23/77	3	5	
RICH0032	No	01051	LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	11	13	
RICH0035	No	01051	LEAD, TOTAL (UG/L AS PB)	07/31/72-10/04/72	0	3	
RICH0036	No	01051	LEAD, TOTAL (UG/L AS PB)	03/26/75-03/28/85	10	5	
RICH0039	Yes	01051	LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01051	LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01051	LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01051	LEAD, TOTAL (UG/L AS PB)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01051	LEAD, TOTAL (UG/L AS PB)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01051	LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	0	1	
RICH0060	No	01051	LEAD, TOTAL (UG/L AS PB)	06/04/75-10/28/82	7	7	
RICH0061	No	01051	LEAD, TOTAL (UG/L AS PB)	01/17/91-04/19/93	2	10	
RICH0065	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-04/19/93	22	30	
RICH0066	No	01051	LEAD, TOTAL (UG/L AS PB)	01/29/73-11/17/77	4	7	
RICH0067	No	01051	LEAD, TOTAL (UG/L AS PB)	08/04/73-03/28/85	11	8	
RICH0069	No	01051	LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	11	13	
RICH0079	No	01051	LEAD, TOTAL (UG/L AS PB)	08/04/73-11/17/77	4	6	
RICH0080	No	01051	LEAD, TOTAL (UG/L AS PB)	10/26/72-11/17/77	5	9	
RICH0081	No	01051	LEAD, TOTAL (UG/L AS PB)	08/04/73-11/17/77	4	6	
RICH0083	No	01051	LEAD, TOTAL (UG/L AS PB)	08/08/94-08/08/94	0	1	
RICH0084	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	3	5	
RICH0089	No	01051	LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	11	13	
RICH0094	No	01051	LEAD, TOTAL (UG/L AS PB)	05/06/72-04/28/93	20	23	
RICH0096	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	8	18	
RICH0100	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	1	4	
RICH0101	No	01051	LEAD, TOTAL (UG/L AS PB)	10/26/72-03/28/85	12	14	
RICH0102	No	01051	LEAD, TOTAL (UG/L AS PB)	03/24/75-03/28/85	10	10	
RICH0103	No	01051	LEAD, TOTAL (UG/L AS PB)	10/26/72-01/29/73	0	2	
RICH0105	No	01051	LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	11	12	
RICH0116	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-04/08/93	22	30	
RICH0120	No	01051	LEAD, TOTAL (UG/L AS PB)	03/15/71-11/01/78	7	19	
RICH0121	No	01051	LEAD, TOTAL (UG/L AS PB)	10/24/79-09/03/81	1	24	
RICH0130	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	8	20	
RICH0131	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	3	26	
RICH0132	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	1	4	
RICH0134	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-06/01/93	22	28	
RICH0136	Yes	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	1	4	
RICH0143	No	01051	LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	8	18	
RICH0144	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	1	4	
RICH0145	No	01051	LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	3	24	
RICH0146	No	01051	LEAD, TOTAL (UG/L AS PB)	03/20/75-06/01/93	18	17	
RICH0147	No	01051	LEAD, TOTAL (UG/L AS PB)	10/31/89-09/04/91	1	25	
RICH0005	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	04/19/95-04/19/95	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0116	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/12/81-07/21/92	11	2	
RICH0043	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/12/97-09/12/97	0	1	
RICH0085	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	11/10/97-11/10/97	0	1	
RICH0104	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	04/19/95-04/19/95	0	1	
RICH0130	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	02/15/95-11/10/97	2	2	
RICH0003	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-05/24/79	0	2	
RICH0005	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/79-05/24/79	0	1	
RICH0006	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-05/24/79	0	2	
RICH0015	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0019	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-04/28/71	1	3	
RICH0023	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0032	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0044	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	12/06/89-12/06/89	0	1	
RICH0061	No	01055	MANGANESE, TOTAL (UG/L AS MN)	01/17/91-04/19/93	2	10	
RICH0065	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-04/19/93	23	13	
RICH0069	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0083	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/29/80-08/08/94	14	10	
RICH0084	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	4	7	
RICH0089	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0094	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/01/78-04/28/93	14	10	
RICH0096	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/20/78	8	4	
RICH0100	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	2	6	
RICH0101	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/01/78-11/01/78	0	1	
RICH0102	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/01/78-11/01/78	0	1	
RICH0105	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	0	1	
RICH0116	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-04/08/93	23	12	
RICH0120	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/01/78	8	3	
RICH0130	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/20/78	8	4	
RICH0131	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	4	29	
RICH0132	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	2	6	
RICH0134	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-06/01/93	23	12	
RICH0136	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	2	6	
RICH0143	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/20/78	8	4	
RICH0144	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	2	6	
RICH0145	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	4	26	
RICH0146	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/20/78-06/01/93	14	9	
RICH0147	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/31/89-09/04/91	1	25	
RICH0044	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/24/91-07/24/91	0	2	
RICH0084	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/04/91	4	7	
RICH0100	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/12/89	2	5	
RICH0131	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/02/91	3	15	
RICH0132	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/12/88	1	3	
RICH0136	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/12/89	2	6	
RICH0144	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/04/89	1	4	
RICH0145	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/04/91	4	22	
RICH0147	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/89-07/28/91	1	11	
RICH0149	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/03/86-04/03/86	0	1	
RICH0039	Yes	01059	THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01059	THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01059	THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01059	THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	0	1	
RICH0061	No	01059	THALLIUM, TOTAL (UG/L AS TL)	07/15/92-01/21/93	0	2	
RICH0065	No	01059	THALLIUM, TOTAL (UG/L AS TL)	07/15/92-01/21/93	0	2	
RICH0134	No	01059	THALLIUM, TOTAL (UG/L AS TL)	09/02/92-03/03/93	0	3	
RICH0146	No	01059	THALLIUM, TOTAL (UG/L AS TL)	09/02/92-03/03/93	0	3	
RICH0044	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	07/24/91-07/24/91	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0053	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	07/24/91-07/24/91	0	2	
RICH0044	Yes	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	12/06/89-12/06/89	0	1	
RICH0043	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	0	1	
RICH0001	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/07/73-12/07/73	0	1	
RICH0002	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/27/76	3	3	
RICH0003	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/14/73-05/24/79	6	11	
RICH0005	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/14/73-05/24/79	6	10	
RICH0006	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/21/75-05/24/79	4	10	
RICH0008	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/17/75-05/15/78	3	7	
RICH0011	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/04/75-05/22/78	2	3	
RICH0015	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/03/73	0	1	
RICH0019	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/17/77	4	6	
RICH0023	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	5	4	
RICH0028	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-08/04/73	0	2	
RICH0029	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	4	6	
RICH0032	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	5	4	
RICH0035	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/03/73	0	1	
RICH0036	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/26/75-11/17/77	2	3	
RICH0044	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/24/91-07/24/91	0	2	
RICH0060	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/04/75-05/22/78	2	3	
RICH0065	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/17/77	4	7	
RICH0066	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/17/77	4	7	
RICH0067	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	4	6	
RICH0069	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	5	4	
RICH0079	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	4	6	
RICH0080	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/17/77	4	7	
RICH0081	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	4	6	
RICH0089	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	5	4	
RICH0094	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	5	9	
RICH0096	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	5	9	
RICH0101	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	5	9	
RICH0102	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/24/75-11/01/78	3	8	
RICH0103	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-01/29/73	0	1	
RICH0105	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	5	4	
RICH0116	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	5	9	
RICH0120	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/24/73-11/01/78	5	9	
RICH0130	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	5	10	
RICH0134	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	5	10	
RICH0143	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	5	9	
RICH0146	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/20/75-11/20/78	3	7	
RICH0005	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/04/82-03/13/85	2	2	
RICH0011	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0019	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2	2	
RICH0023	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0032	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0036	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2	2	
RICH0039	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	0	1	
RICH0060	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0061	No	01067	NICKEL, TOTAL (UG/L AS NI)	01/17/91-04/19/93	2	10	
RICH0065	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-04/19/93	10	12	
RICH0067	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2	2	
RICH0069	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0083	No	01067	NICKEL, TOTAL (UG/L AS NI)	08/08/94-08/08/94	0	1	
RICH0084	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	3	5	
RICH0089	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0094	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-04/28/93	10	11	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0100	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	1	4	
RICH0101	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2	2	
RICH0102	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2	2	
RICH0105	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	0	4	
RICH0116	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/18/82-04/08/93	10	10	
RICH0121	No	01067	NICKEL, TOTAL (UG/L AS NI)	10/24/79-09/03/81	1	24	
RICH0131	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	3	28	
RICH0132	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-04/07/90	1	6	
RICH0134	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/28/82-06/01/93	10	10	
RICH0136	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	1	4	
RICH0144	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	1	4	
RICH0145	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	3	23	
RICH0146	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/29/82-06/01/93	10	10	
RICH0147	No	01067	NICKEL, TOTAL (UG/L AS NI)	10/31/89-09/04/91	1	22	
RICH0005	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	11	2	
RICH0012	No	01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	06/25/92-06/25/92	0	3	
RICH0012	No	01073	THALLIUM,TISSUE,WET WEIGHT,MG/KG	06/25/92-06/25/92	0	3	
RICH0039	Yes	01077	SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01077	SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01077	SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01077	SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	0	1	
RICH0121	No	01077	SILVER, TOTAL (UG/L AS AG)	10/24/79-09/03/81	1	24	
RICH0061	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/27/92-07/27/92	0	1	
RICH0085	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	11/10/97-11/10/97	0	1	
RICH0104	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	04/19/95-04/19/95	0	1	
RICH0130	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/21/92-07/21/92	0	1	
RICH0146	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/21/92-07/21/92	0	1	
RICH0044	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	12/06/89-12/06/89	0	1	
RICH0044	Yes	01082	STRONTIUM, TOTAL (UG/L AS SR)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01082	STRONTIUM, TOTAL (UG/L AS SR)	12/06/89-12/06/89	0	1	
RICH0043	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	0	1	
RICH0044	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	12/06/89-12/06/89	0	1	
RICH0039	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01087	VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	0	1	
RICH0043	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	2	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0048	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	0	1	
RICH0044	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/24/91-07/24/91	0	2	
RICH0084	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0100	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0131	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0132	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0136	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0144	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0145	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	0	2	
RICH0001	No	01092	ZINC, TOTAL (UG/L AS ZN)	12/07/73-12/07/73	0	1	
RICH0002	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/02/72-05/27/76	4	8	
RICH0003	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/14/73-05/24/79	6	12	
RICH0005	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/14/73-03/13/85	11	12	
RICH0006	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/21/75-05/24/79	4	10	
RICH0008	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/17/75-05/15/78	3	7	
RICH0011	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/04/75-10/28/82	7	7	
RICH0015	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-05/03/73	3	8	
RICH0019	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/15/69-03/28/85	15	21	
RICH0023	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	12	15	
RICH0028	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/29/73-12/12/73	0	3	
RICH0029	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	4	7	
RICH0032	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	12	15	
RICH0035	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/31/72-05/03/73	0	4	
RICH0036	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/26/75-03/28/85	10	5	
RICH0039	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	0	1	
RICH0060	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/04/75-10/28/82	7	7	
RICH0061	No	01092	ZINC, TOTAL (UG/L AS ZN)	01/17/91-04/19/93	2	10	
RICH0065	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/19/93	23	32	
RICH0066	No	01092	ZINC, TOTAL (UG/L AS ZN)	01/29/73-11/17/77	4	8	
RICH0067	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/29/73-03/28/85	11	9	
RICH0069	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	12	15	
RICH0079	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	4	7	
RICH0080	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/26/72-11/17/77	5	9	
RICH0081	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	4	7	
RICH0083	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/08/94-08/08/94	0	1	
RICH0084	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	3	5	
RICH0089	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	12	15	
RICH0094	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/06/72-04/28/93	20	23	
RICH0096	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/20/78	8	22	
RICH0100	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	1	4	
RICH0101	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/26/72-03/28/85	12	14	
RICH0102	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/75-03/28/85	10	11	
RICH0103	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/26/72-01/29/73	0	2	
RICH0105	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	12	14	
RICH0116	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/08/93	23	32	
RICH0120	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/01/78	8	19	
RICH0121	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/24/79-09/03/81	1	24	
RICH0130	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/20/78	8	23	
RICH0131	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	3	27	
RICH0132	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	1	4	
RICH0134	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-06/01/93	23	32	
RICH0136	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	1	4	
RICH0143	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/20/78	8	22	
RICH0144	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	1	4	
RICH0145	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	3	24	
RICH0146	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/20/75-06/01/93	18	17	
RICH0147	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/31/89-09/04/91	1	25	
RICH0005	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	1	2	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0023	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	1	2	
RICH0061	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/12/81-07/21/92	11	2	
RICH0039	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01097	ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	0	1	
RICH0061	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	09/12/97-09/12/97	0	1	
RICH0085	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	11/10/97-11/10/97	0	1	
RICH0104	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	04/19/95-04/19/95	0	1	
RICH0130	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	02/15/95-11/10/97	2	2	
RICH0039	Yes	01102	TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01102	TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01102	TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	0	1	
RICH0049	Yes	01102	TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	12/06/89-12/06/89	0	1	
RICH0149	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/03/86-04/03/86	0	1	
RICH0044	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/06/89-07/24/91	1	2	
RICH0047	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	12/06/89-07/24/91	1	2	
RICH0051	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/24/91-07/24/91	0	1	
RICH0053	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/24/91-07/24/91	0	1	
RICH0054	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/24/91-07/24/91	0	2	
RICH0043	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/12/97-09/12/97	0	1	
RICH0085	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	11/10/97-11/10/97	0	1	
RICH0104	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	04/19/95-04/19/95	0	1	
RICH0130	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	02/15/95-11/10/97	2	2	
RICH0099	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	10/17/83-10/17/83	0	1	
RICH0106	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	10/17/83-10/17/83	0	1	
RICH0032	No	01140	SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	4	154	
RICH0044	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01140	SILICON, DISSOLVED (UG/L AS SI)	12/06/89-12/06/89	0	1	
RICH0069	No	01140	SILICON, DISSOLVED (UG/L AS SI)	06/29/88-04/13/89	0	33	
RICH0116	No	01140	SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	4	78	
RICH0044	Yes	01142	SILICON, TOTAL (UG/L AS SI)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01142	SILICON, TOTAL (UG/L AS SI)	12/06/89-12/06/89	0	1	
RICH0044	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	12/06/89-12/06/89	0	1	
RICH0039	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	0	1	
RICH0041	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	0	1	
RICH0042	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	0	1	
RICH0044	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	12/06/89-12/06/89	0	1	
RICH0049	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	0	1	
RICH0061	No	01147	SELENIUM, TOTAL (UG/L AS SE)	01/17/91-04/19/93	2	10	
RICH0065	No	01147	SELENIUM, TOTAL (UG/L AS SE)	01/17/91-04/19/93	2	10	
RICH0083	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/08/94-08/08/94	0	1	
RICH0084	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/13/89	1	4	
RICH0094	No	01147	SELENIUM, TOTAL (UG/L AS SE)	10/25/90-04/28/93	2	8	
RICH0100	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	1	4	
RICH0116	No	01147	SELENIUM, TOTAL (UG/L AS SE)	01/14/91-04/08/93	2	7	
RICH0131	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-10/31/89	1	5	
RICH0132	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	1	4	
RICH0134	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/91-06/01/93	2	8	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0136	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	1	4	
RICH0144	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	1	4	
RICH0145	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/12/88-01/25/90	1	6	
RICH0146	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/91-06/01/93	2	8	
RICH0147	No	01147	SELENIUM, TOTAL (UG/L AS SE)	10/31/89-10/31/89	0	1	
RICH0012	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/25/92-06/25/92	0	1	
RICH0043	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/27/92-07/27/92	0	1	
RICH0085	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/27/92-08/27/92	0	1	
RICH0104	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/27/92-08/27/92	0	1	
RICH0130	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/21/92-07/21/92	0	1	
RICH0146	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/21/92-07/21/92	0	1	
RICH0012	No	01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	06/25/92-06/25/92	0	3	
RICH0129	No	01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	10/01/77-10/01/86	9	15	
RICH0044	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01150	TITANIUM, DISSOLVED (UG/L AS TI)	12/06/89-12/06/89	0	1	
RICH0044	Yes	01152	TITANIUM, TOTAL (UG/L AS TI)	12/06/89-12/06/89	0	1	
RICH0047	Yes	01152	TITANIUM, TOTAL (UG/L AS TI)	12/06/89-12/06/89	0	1	
RICH0043	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	1	
RICH0045	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	2	
RICH0048	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	1	
RICH0052	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	1	
RICH0055	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	1	
RICH0056	Yes	01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	0	1	
RICH0061	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	09/12/97-09/12/97	0	1	
RICH0085	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	11/10/97-11/10/97	0	1	
RICH0104	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	04/19/95-04/19/95	0	1	
RICH0130	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	02/15/95-11/10/97	2	2	
RICH0005	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	04/18/90-04/18/90	0	1	
RICH0011	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0015	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0017	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0019	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-01/25/90	0	2	
RICH0020	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0021	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0025	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0026	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0032	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0034	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0036	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-01/25/90	0	2	
RICH0038	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0046	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0059	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0061	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	01/17/90-11/19/98	8	36	
RICH0064	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0065	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-12/07/98	8	42	
RICH0067	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-01/25/90	0	2	
RICH0069	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/18/97-11/18/97	0	1	
RICH0074	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0077	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0078	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0085	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/19/94-12/14/98	4	34	
RICH0086	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/04/97-06/04/97	0	1	
RICH0091	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/06/97-12/07/98	1	9	
RICH0093	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0094	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-12/07/98	8	42	
RICH0096	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/19/94-10/19/94	0	3	
RICH0101	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	01/25/90-01/25/90	0	1	
RICH0104	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/20/94-11/23/98	4	19	
RICH0105	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/11/98-08/11/98	0	1	
RICH0107	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/20/95-10/26/98	3	35	
RICH0108	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-10/26/98	4	48	
RICH0110	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-10/26/98	4	47	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0112	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/20/95-10/26/98	3	35	
RICH0114	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/20/95-10/26/98	3	34	
RICH0115	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-06/16/98	3	16	
RICH0116	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/19/89-12/15/98	8	83	
RICH0118	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-10/26/98	4	45	
RICH0119	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-09/29/98	4	37	
RICH0124	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/20/95-10/26/98	3	34	
RICH0125	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-10/26/98	4	48	
RICH0126	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/28/94-10/26/98	4	46	
RICH0127	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/20/95-10/26/98	3	35	
RICH0130	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/19/94-12/14/98	4	55	
RICH0133	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/19/94-10/19/94	0	3	
RICH0134	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	01/10/90-12/14/98	8	33	
RICH0140	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/19/94-10/19/94	0	2	
RICH0146	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	01/10/90-12/07/98	8	68	
RICH0102	No	02152	INVALID PARAMETER	05/18/82-05/18/82	0	1	
RICH0067	No	05053	INVALID PARAMETER	08/15/79-08/15/79	0	1	
RICH0067	No	05109	INVALID PARAMETER	08/15/79-08/15/79	0	1	
RICH0027	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED,M-ENDO MED,35C	06/12/74-11/04/76	2	60	
RICH0011	No	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	05/26/74-05/26/74	0	1	
RICH0015	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	2	13	
RICH0018	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/27/68-11/04/71	3	24	
RICH0019	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/28/68-10/27/70	2	15	
RICH0023	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	2	13	
RICH0032	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	2	13	
RICH0065	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/28/68-10/27/70	2	15	
RICH0069	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	2	13	
RICH0070	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-11/04/71	3	23	
RICH0089	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/08/68-09/09/70	2	13	
RICH0092	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-11/04/71	3	24	
RICH0094	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/03/69-07/24/69	0	2	
RICH0096	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	10	19	
RICH0105	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-05/04/76	7	15	
RICH0116	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/18/68-05/26/74	6	18	
RICH0120	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/18/68-07/09/70	2	10	
RICH0122	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	05/05/69-11/04/71	2	5	
RICH0130	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	10	18	
RICH0134	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	10	18	
RICH0143	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	10	18	
RICH0146	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/28/77-10/28/77	0	1	
RICH0011	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-10/03/83	0	4	
RICH0023	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	0	3	
RICH0032	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-07/08/86	2	54	
RICH0060	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	0	3	
RICH0064	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-10/03/83	0	2	
RICH0069	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	0	3	
RICH0089	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-09/20/83	0	2	
RICH0113	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	0	3	
RICH0116	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-07/08/86	2	26	
RICH0032	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	0	5	
RICH0069	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	0	4	
RICH0116	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	0	4	
RICH0011	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	4	106	
RICH0015	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	51	
RICH0017	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	52	
RICH0018	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	0	9	
RICH0020	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	52	
RICH0021	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	52	
RICH0026	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	52	
RICH0032	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	4	107	
RICH0034	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	51	
RICH0059	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	4	52	
RICH0061	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-11/19/98	4	21	
RICH0064	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	4	52	
RICH0065	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/04/94-12/07/98	4	29	
RICH0069	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	4	53	
RICH0070	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/71-11/04/71	0	8	
RICH0077	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	4	53	
RICH0085	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/29/96-12/14/98	2	32	
RICH0091	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	08/06/97-12/07/98	1	9	
RICH0092	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	0	9	
RICH0093	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	4	53	

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0094	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-12/07/98	4	21	
RICH0104	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/20/94-11/23/98	4	18	
RICH0105	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	4	53	
RICH0107	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	3	39	
RICH0108	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	56	
RICH0110	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	56	
RICH0112	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	3	38	
RICH0114	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	3	38	
RICH0115	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	56	
RICH0116	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	4	111	
RICH0118	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	55	
RICH0119	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	55	
RICH0122	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/19/71-11/04/71	0	4	
RICH0124	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	3	38	
RICH0125	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	56	
RICH0126	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	4	55	
RICH0127	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	3	39	
RICH0130	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	4	53	
RICH0134	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/02/97-12/14/98	1	18	
RICH0146	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	4	54	
RICH0001	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/28/73-11/25/74	0	10	
RICH0002	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/02/72-03/24/78	5	35	
RICH0003	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	6	66	
RICH0005	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/19/90	17	180	
RICH0006	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	5	52	
RICH0008	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/10/74-06/12/79	4	39	
RICH0010	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-09/19/73	0	4	
RICH0011	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	20	42	
RICH0015	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	12	29	
RICH0018	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/02/71-11/02/71	0	1	
RICH0019	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	19	197	A
RICH0023	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/27/83	12	63	
RICH0027	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/12/74-10/05/77	3	88	
RICH0028	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-01/10/74	0	8	
RICH0029	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	6	57	
RICH0032	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	22	135	
RICH0035	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/31/72-07/08/74	1	11	
RICH0036	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	15	153	
RICH0060	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	8	34	
RICH0061	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/19/90-04/05/94	3	15	
RICH0064	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/20/83-10/03/83	0	2	
RICH0065	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	23	217	A
RICH0066	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	6	63	
RICH0067	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	17	174	A
RICH0069	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	22	68	
RICH0070	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-10/19/71	0	1	
RICH0079	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	6	61	
RICH0080	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	6	62	
RICH0081	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	6	62	
RICH0083	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/29/80-08/08/94	14	5	
RICH0089	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	12	62	
RICH0092	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-11/02/71	0	2	
RICH0094	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	22	218	A
RICH0096	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8	93	
RICH0101	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	17	175	
RICH0102	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	14	136	
RICH0103	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-07/21/74	1	16	
RICH0104	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/24/94-04/19/95	0	2	
RICH0105	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	12	56	
RICH0113	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/83-09/27/83	0	3	
RICH0116	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	23	278	A
RICH0120	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	8	81	
RICH0130	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8	93	
RICH0134	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	23	211	A
RICH0141	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/11/88-07/11/88	0	1	
RICH0143	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	8	87	
RICH0146	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	19	164	
RICH0027	No	31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	10/18/77-02/27/79	1	32	
RICH0121	No	31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	10/24/79-09/03/81	1	23	
RICH0027	No	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	4	119	
RICH0121	No	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	10/24/79-09/03/81	1	24	
RICH0027	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	06/12/74-07/14/76	2	2	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0039	Yes	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	32104	BROMOFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32104	BROMOFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32104	BROMOFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32104	BROMOFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	32106	CHLOROFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	32106	CHLOROFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	32106	CHLOROFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	32106	CHLOROFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0011	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/16/83-10/03/83	0	8	
RICH0023	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	0	8	
RICH0032	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/30/83-10/03/83	0	6	
RICH0060	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	0	8	
RICH0064	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/30/83-10/03/83	0	6	
RICH0069	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	0	8	
RICH0089	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/16/83-10/03/83	0	8	
RICH0113	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	0	8	
RICH0116	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/16/83-10/03/83	0	4	
RICH0131	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	0	2	
RICH0145	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	0	2	
RICH0147	No	32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	0	2	
RICH0018	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	0	3	
RICH0070	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	0	3	
RICH0083	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	04/29/80-08/08/94	14	9	
RICH0092	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	0	3	
RICH0122	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	0	3	
RICH0083	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/08/94-08/08/94	0	1	
RICH0131	No	32213	PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	10/31/89-01/25/90	0	2	
RICH0145	No	32213	PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	10/31/89-01/25/90	0	2	
RICH0147	No	32213	PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	10/31/89-01/25/90	0	2	
RICH0011	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/83-10/03/83	0	8	
RICH0023	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	0	8	
RICH0032	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/30/83-10/03/83	0	6	
RICH0060	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	0	8	
RICH0064	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/30/83-10/03/83	0	6	
RICH0069	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	0	8	
RICH0083	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/08/94-08/08/94	0	1	
RICH0089	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/83-10/03/83	0	8	
RICH0113	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	0	8	
RICH0116	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/83-10/03/83	0	4	
RICH0083	No	32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	08/08/94-08/08/94	0	1	
RICH0027	No	32226	CHLOROPHYLL B, PERIPHYTON, SPECTRO, MG/M2	09/14/74-09/14/74	0	1	
RICH0027	No	32228	CHLOROPHYLL A, PERIPHYTON, SPECTRO, MG/M2	09/14/74-09/14/74	0	1	
RICH0027	No	32230	CHLOROPHYLL A (MG/L)	03/12/74-08/09/78	4	95	
RICH0027	No	32231	CHLOROPHYLL B (MG/L)	03/12/74-08/09/78	4	95	
RICH0061	No	32240	TANNIN AND LIGNIN (MG/L)	01/02/92-04/19/93	1	4	
RICH0065	No	32240	TANNIN AND LIGNIN (MG/L)	01/02/92-04/19/93	1	5	
RICH0094	No	32240	TANNIN AND LIGNIN (MG/L)	01/12/94-05/05/94	0	2	
RICH0116	No	32240	TANNIN AND LIGNIN (MG/L)	01/12/94-01/12/94	0	1	
RICH0134	No	32240	TANNIN AND LIGNIN (MG/L)	12/03/91-03/03/93	1	5	
RICH0146	No	32240	TANNIN AND LIGNIN (MG/L)	12/03/91-03/03/93	1	6	
RICH0084	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/04/91-09/04/91	0	1	
RICH0094	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	01/22/74-06/02/74	0	5	
RICH0131	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-09/04/91	1	23	
RICH0145	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-07/26/91	1	17	
RICH0147	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-09/04/91	1	25	
RICH0039	Yes	34200	ACENAPHTHYLENE TOTWUG/L	05/03/96-05/03/96	0	1	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0041	Yes	34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34208	ACENAPHTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34223	ANTHRACENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	1	
RICH0045	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	1	
RICH0048	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	1	
RICH0052	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	1	
RICH0055	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	1	
RICH0056	Yes	34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG		09/02/97-09/02/97	0	2	
RICH0043	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34250	BENZO-A-PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0012	No	34252	BERYLLIUM	WET WGTTISMG/KG	06/25/92-06/25/92	0	3	
RICH0043	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	34257	B-BHC-BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0012	No	34258	B-BHC-BETA	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0005	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0116	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0043	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	34262	DELTA BENZENE HEXACHLORIDE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0012	No	34263	DELTA BENZENE HEXACHLORIDE	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0039	Yes	34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	0	1	
RICH0041	Yes	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	0	1	
RICH0042	Yes	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	0	1	
RICH0049	Yes	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	0	1	
RICH0039	Yes	34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34323	CHRYSENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0005	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34351	ENDOSULFAN SULFATE	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0005	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34356	ENDOSULFAN, BETA	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34356	ENDOSULFAN, BETA	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0043	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	34359	ENDOSULFAN, BETA	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0012	No	34360	ENDOSULFAN, BETA	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0005	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0012	No	34365	ENDOSULFAN, ALPHA	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0005	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34366	ENDRIN ALDEHYDE	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0039	Yes	34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34379	FLUORANTHENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34384	FLUORENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34406	INDENO (1,2,3-CD) PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0049	Yes	34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34445	NAPHTHALENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34464	PHENANTHRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34472	PYRENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0061	No	34480	THALLIUM	DRY WGTBOTMG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	34480	THALLIUM	DRY WGTBOTMG/KG	07/27/92-07/27/92	0	1	
RICH0085	No	34480	THALLIUM	DRY WGTBOTMG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	34480	THALLIUM	DRY WGTBOTMG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	34480	THALLIUM	DRY WGTBOTMG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	34480	THALLIUM	DRY WGTBOTMG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	34480	THALLIUM	DRY WGTBOTMG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	34480	THALLIUM	DRY WGTBOTMG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	34480	THALLIUM	DRY WGTBOTMG/KG	07/21/92-07/21/92	0	1	
RICH0039	Yes	34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0039	Yes	34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY	WGTBOTUG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0039	Yes	34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0012	No	34664	PCB - 1221	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0012	No	34667	PCB - 1232	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0039	Yes	34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0012	No	34669	PCB - 1248	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0012	No	34670	PCB - 1260	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0005	No	34671	PCB - 1016	TOTWUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0083	No	34671	PCB - 1016	TOTWUG/L	08/14/89-08/08/94	4	2	
RICH0094	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	34671	PCB - 1016	TOTWUG/L	03/06/85-03/06/85	0	1	
RICH0012	No	34674	PCB - 1016	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0012	No	34680	ALDRIN IN FISH TISSUE	WET WEIGHT MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34680	ALDRIN IN FISH TISSUE	WET WEIGHT MG/KG	10/01/86-10/01/86	0	3	
RICH0012	No	34682	CHLORDANE(TECH MIX & METABS),TISSUE	WET WGTT,MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34684	DIELDRIN	TISMG/KG	10/01/70-10/01/86	16	37	
RICH0012	No	34685	ENDRIN	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34685	ENDRIN	WET WGTTISMG/KG	10/01/70-10/01/86	16	37	
RICH0004	No	34686	HEPTACHLOR EPOXIDE	WET WGTTISMG/KG	04/06/79-04/06/79	0	2	
RICH0007	No	34686	HEPTACHLOR EPOXIDE	WET WGTTISMG/KG	04/06/79-04/06/79	0	2	
RICH0012	No	34686	HEPTACHLOR EPOXIDE	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34686	HEPTACHLOR EPOXIDE	WET WGTTISMG/KG	10/01/86-10/01/86	0	3	
RICH0012	No	34687	HEPTACHLOR	WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34687	HEPTACHLOR	WET WGTTISMG/KG	10/01/70-10/01/86	16	37	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0012	No	34688	HEXACHLOROBENZENE WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34688	HEXACHLOROBENZENE WET WGTTISMG/KG	10/01/77-10/01/86	9	15	
RICH0012	No	34689	PCB - 1242 WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0012	No	34690	PCB - 1254 WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0012	No	34691	TOXAPHENE WET WGTTISMG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	34691	TOXAPHENE WET WGTTISMG/KG	10/01/71-10/01/86	15	33	
RICH0039	Yes	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34696	NAPHTHALENE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34696	NAPHTHALENE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34696	NAPHTHALENE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34696	NAPHTHALENE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0005	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0094	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	03/06/85-03/06/85	0	1	
RICH0005	No	38451	DICHLORPROP WATER,SUSPUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0094	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	38451	DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	38451	DICHLORPROP WATER,SUSPUG/L	03/06/85-03/06/85	0	1	
RICH0039	Yes	38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	0	1	
RICH0012	No	38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	06/25/92-06/25/92	0	2	
RICH0005	No	38745	2,4-DB WATER, TOTUG/L	03/13/85-03/13/85	0	1	
RICH0019	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0036	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0065	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0067	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0094	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0101	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0102	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0116	No	38745	2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	0	1	
RICH0134	No	38745	2,4-DB WATER, TOTUG/L	03/06/85-03/06/85	0	1	
RICH0005	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/17/79-03/13/85	5	4	
RICH0019	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0036	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0039	Yes	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0065	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0067	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0083	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0101	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0102	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	5	3	
RICH0134	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/16/79-03/06/85	5	4	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0146	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/16/79-09/08/80	0	2	
RICH0012	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/25/92-06/25/92	0	1	
RICH0023	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	09/23/91-09/23/91	0	1	
RICH0061	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/27/92-07/27/92	0	1	
RICH0083	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/14/89-08/08/94	4	2	
RICH0085	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/06/85-07/21/92	7	2	
RICH0005	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-09/08/80	0	2	
RICH0129	No	39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	9	15	
RICH0005	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-09/08/80	0	2	
RICH0129	No	39066	CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	9	15	
RICH0005	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/16/79-09/08/80	0	2	
RICH0012	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	06/25/92-06/25/92	0	2	
RICH0129	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	10/01/77-10/01/86	9	15	
RICH0043	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	0	1	
RICH0005	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/16/79-09/08/80	0	2	
RICH0012	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	06/25/92-06/25/92	0	2	
RICH0129	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	10/01/77-10/01/86	9	15	
RICH0012	No	39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	06/25/92-06/25/92	0	2	
RICH0129	No	39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	10/01/70-10/01/86	16	19	
RICH0043	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0056	Yes	39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	0	1	
RICH0039	Yes	39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	0	1	
RICH0131	No	39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	0	1	
RICH0145	No	39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	0	1	
RICH0147	No	39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	0	1	
RICH0011	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	10/21/97-10/21/97	0	2	
RICH0039	Yes	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0012	No	39105	PERCENT FAT HEXANE EXTRACTION	06/25/92-06/25/92	0	2	
RICH0129	No	39105	PERCENT FAT HEXANE EXTRACTION	10/01/70-10/01/86	16	37	
RICH0039	Yes	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	0	1	
RICH0012	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	06/25/92-06/25/92	0	2	
RICH0129	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	10/01/70-10/01/86	16	37	
RICH0005	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0019	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0036	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0065	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0067	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0083	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0101	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0134	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	4	
RICH0146	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0043	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0005	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0043	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0005	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0019	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0036	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0065	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0067	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0083	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0101	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0116	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0134	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	4	
RICH0146	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0005	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0043	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0005	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0019	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0036	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0065	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0067	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0083	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0101	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0134	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	4	
RICH0146	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0043	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0005	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0043	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0004	No	39329	O,P DDE IN TISSUE, WET WGT(UG/G)	04/06/79-04/06/79	0	1	
RICH0005	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0011	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0019	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0023	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0032	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0036	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0060	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0065	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0067	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0069	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0083	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0089	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0094	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0101	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/18/82-03/28/85	2	2	
RICH0105	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0116	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	4	
RICH0134	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	5	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0146	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-06/29/82	2	3	
RICH0005	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/04/82-05/04/82	0	1	
RICH0019	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0023	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0036	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0043	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0061	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-07/27/92	11	2	
RICH0067	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0083	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/08/94-08/08/94	0	1	
RICH0085	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-08/27/92	11	2	
RICH0101	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/18/82	1	2	
RICH0104	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-08/27/92	11	2	
RICH0130	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/12/81-07/21/92	11	2	
RICH0005	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/13/85-03/13/85	0	1	
RICH0019	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0036	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0065	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0067	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0083	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/14/89-08/08/94	4	2	
RICH0094	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0101	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0102	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0116	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0134	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/06/85-03/06/85	0	1	
RICH0005	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/13/85-03/13/85	0	1	
RICH0019	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0036	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0065	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0067	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0083	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/14/89-08/08/94	4	2	
RICH0094	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0101	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0102	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0116	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	0	1	
RICH0134	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/06/85-03/06/85	0	1	
RICH0005	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/06/85-03/06/85	0	1	
RICH0043	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0005	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/17/79-05/19/81	1	3	
RICH0019	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0036	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0065	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0067	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0083	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/08/94-08/08/94	0	1	
RICH0094	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0101	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0116	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	0	2	
RICH0134	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/16/79-05/12/81	1	3	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0146	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/16/79-09/08/80	0	2	
RICH0012	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/25/92-06/25/92	0	1	
RICH0023	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	09/23/91-09/23/91	0	1	
RICH0061	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/27/92-07/27/92	0	1	
RICH0083	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/14/89-08/08/94	4	2	
RICH0085	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/06/85-07/21/92	7	2	
RICH0012	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	0	1	
RICH0023	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0061	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/27/92	0	1	
RICH0083	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	4	2	
RICH0085	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0104	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0130	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	7	2	
RICH0012	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	0	1	
RICH0023	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0061	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/27/92	0	1	
RICH0083	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	4	2	
RICH0085	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0104	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0130	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	7	2	
RICH0109	No	39369	DDE IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	03/19/76-04/12/79	3	63	
RICH0012	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	0	1	
RICH0023	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0061	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/27/92	0	1	
RICH0083	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	4	2	
RICH0085	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0104	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0130	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	7	2	
RICH0109	No	39374	DDT IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	08/08/78-04/12/79	0	22	
RICH0005	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0019	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0032	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	06/13/71-06/13/71	0	1	
RICH0036	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0065	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	04/28/71-03/28/85	13	4	
RICH0067	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0083	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0089	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/06/71-05/06/71	0	1	
RICH0094	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0101	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0105	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/06/71-06/13/71	0	2	
RICH0116	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0120	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/71-06/27/71	0	2	
RICH0134	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	4	
RICH0146	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0012	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/92-06/25/92	0	1	
RICH0023	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/23/91-09/23/91	0	1	
RICH0043	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0052	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0061	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-09/12/97	5	2	
RICH0065	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/27/92	0	1	
RICH0083	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/14/89-08/08/94	4	2	
RICH0085	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	11/10/97-11/10/97	0	1	
RICH0094	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	0	1	
RICH0104	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	04/19/95-04/19/95	0	1	
RICH0116	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	0	1	
RICH0130	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	02/15/95-11/10/97	2	2	
RICH0134	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/21/92-07/21/92	0	1	
RICH0146	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/06/85-07/21/92	7	2	
RICH0005	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	5	4	
RICH0019	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0036	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0065	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0067	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0083	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0101	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0102	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	5	3	
RICH0134	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	4	
RICH0146	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0012	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	0	1	
RICH0023	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0043	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0061	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/27/92	0	1	
RICH0083	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	4	2	
RICH0085	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0104	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0130	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	7	2	
RICH0005	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0067	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0083	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0012	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/92-06/25/92	0	1	
RICH0023	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/23/91-09/23/91	0	1	
RICH0061	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-09/12/97	5	2	
RICH0065	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/27/92	0	1	
RICH0083	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/14/89-08/08/94	4	2	
RICH0085	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	11/10/97-11/10/97	0	1	
RICH0094	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	0	1	
RICH0104	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	04/19/95-04/19/95	0	1	
RICH0116	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	0	1	
RICH0130	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	02/15/95-11/10/97	2	2	
RICH0134	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/21/92-07/21/92	0	1	
RICH0146	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/06/85-07/21/92	7	2	
RICH0012	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	06/25/92-06/25/92	0	2	
RICH0004	No	39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	04/06/79-04/06/79	0	1	
RICH0005	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0067	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0083	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0012	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	0	1	
RICH0023	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	0	1	
RICH0043	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0061	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	5	2	
RICH0065	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/27/92	0	1	
RICH0083	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	4	2	
RICH0085	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	0	1	
RICH0094	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0104	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	0	1	
RICH0116	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	0	1	
RICH0130	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2	2	
RICH0134	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/21/92-07/21/92	0	1	
RICH0146	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	7	2	
RICH0005	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0067	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0083	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	4	2	
RICH0094	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0043	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	2	
RICH0056	Yes	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	0	1	
RICH0039	Yes	39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0042	Yes	39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0039	Yes	39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0042	Yes	39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0005	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0005	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	0	1	
RICH0005	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	0	1	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0019	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	0	1	
RICH0005	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	0	1	
RICH0005	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	0	1	
RICH0005	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0083	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	4	2	
RICH0094	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	0	1	
RICH0004	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	04/06/79-04/06/79	0	6	
RICH0007	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	04/06/79-04/06/79	0	4	
RICH0012	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	06/25/92-06/25/92	0	2	
RICH0005	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	03/15/71-09/11/80	9	3	
RICH0067	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0083	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/08/94-08/08/94	0	1	
RICH0094	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0109	No	39520	PCBS IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	02/24/76-04/12/79	3	84	
RICH0012	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	06/25/92-06/25/92	0	1	
RICH0023	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	09/23/91-09/23/91	0	1	
RICH0061	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/27/92-07/27/92	0	1	
RICH0083	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/14/89-08/08/94	4	2	
RICH0085	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	03/06/85-07/21/92	7	2	
RICH0039	Yes	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0042	Yes	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0011	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0019	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	0	1	
RICH0023	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0032	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0036	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	0	1	
RICH0060	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0065	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/08/75-05/18/82	7	2	
RICH0067	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	0	1	
RICH0069	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0089	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	0	2	
RICH0094	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	0	1	
RICH0102	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	0	1	
RICH0105	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/13/71-10/28/82	11	3	
RICH0116	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	08/15/82-08/15/82	0	1	
RICH0134	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/29/82-06/29/82	0	1	
RICH0146	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/29/82-06/29/82	0	1	
RICH0005	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/04/82-05/04/82	0	1	
RICH0019	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0036	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0065	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0067	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0094	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0101	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/18/82	1	2	
RICH0116	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	0	1	
RICH0146	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/12/81-05/12/81	0	1	
RICH0005	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	1	3	
RICH0019	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0036	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0065	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0067	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0094	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0101	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0116	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	0	2	
RICH0134	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	1	3	
RICH0146	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	0	2	
RICH0039	Yes	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	0	1	
RICH0042	Yes	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	0	1	
RICH0005	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0067	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0094	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0005	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0067	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0094	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0043	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0045	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0048	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0052	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0055	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0056	Yes	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	0	1	
RICH0005	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	0	1	
RICH0019	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0036	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0065	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0067	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0094	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0101	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0102	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0116	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	0	1	
RICH0134	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	0	1	
RICH0129	No	39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	10/01/86-10/01/86	0	3	
RICH0012	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	10/01/77-10/01/84	7	12	
RICH0039	Yes	39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0042	Yes	39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0039	Yes	45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	0	1	
RICH0012	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	06/25/92-06/25/92	0	2	
RICH0039	Yes	46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0041	Yes	46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0042	Yes	46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0049	Yes	46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	0	1	
RICH0061	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	04/24/91-04/19/93	1	8	
RICH0065	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	04/24/91-04/19/93	1	8	
RICH0083	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	08/08/94-08/08/94	0	1	
RICH0134	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	03/13/91-06/01/93	2	8	
RICH0146	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	03/13/91-06/01/93	2	7	
RICH0032	No	49567	PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	3	90	
RICH0069	No	49567	PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	3	88	
RICH0116	No	49567	PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	3	47	
RICH0032	No	49569	CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	3	86	
RICH0069	No	49569	CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	3	85	
RICH0116	No	49569	CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	3	45	
RICH0032	No	49570	NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	3	86	
RICH0069	No	49570	NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	3	85	
RICH0116	No	49570	NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	3	45	
RICH0032	No	49571	NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	3	90	
RICH0069	No	49571	NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	3	88	
RICH0116	No	49571	NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	3	47	
RICH0032	No	49572	PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	3	90	
RICH0069	No	49572	PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	3	90	
RICH0116	No	49572	PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	3	47	
RICH0043	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0052	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0001	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		12/07/73-10/23/74	0	4	
RICH0011	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-10/03/83	8	5	
RICH0019	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0023	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-09/27/83	8	4	
RICH0029	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	
RICH0032	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-10/03/83	8	3	
RICH0060	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-09/27/83	8	4	
RICH0064	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		09/20/83-10/03/83	0	2	
RICH0065	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	
RICH0066	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-08/03/74	0	2	
RICH0067	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-08/03/74	0	2	
RICH0069	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-09/27/83	8	4	
RICH0079	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	
RICH0080	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	
RICH0081	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-07/11/74	0	1	
RICH0089	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-09/20/83	8	3	
RICH0094	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/22/74-08/22/74	0	1	
RICH0096	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/11/74-08/11/74	0	1	
RICH0101	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/22/74-08/22/74	0	1	
RICH0102	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/22/74-08/22/74	0	1	
RICH0105	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-05/01/75	0	1	
RICH0113	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		07/28/83-09/27/83	0	3	
RICH0116	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/22/74-10/03/83	9	3	
RICH0120	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		12/05/73-08/22/74	0	2	
RICH0130	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/11/74-08/11/74	0	1	
RICH0134	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/11/74-08/11/74	0	1	
RICH0143	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)		08/11/74-08/11/74	0	1	
RICH0044	Yes	50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50120	ARSENIC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0047	Yes	50120	ARSENIC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0044	Yes	50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0047	Yes	50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0044	Yes	50138	SELENIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0047	Yes	50138	SELENIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0044	Yes	50140	STRONTIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0047	Yes	50140	STRONTIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0044	Yes	50141	TITANIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0047	Yes	50141	TITANIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0044	Yes	50142	VANADIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0047	Yes	50142	VANADIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	0	1	
RICH0044	Yes	50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0047	Yes	50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	1	2	
RICH0051	Yes	50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0053	Yes	50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	1	
RICH0054	Yes	50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	0	2	
RICH0043	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0048	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	0	1	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0048	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	0	1	
RICH0027	No	60050	ALGAE, TOTAL (CELLS/ML)		01/15/75-01/15/75	0	1	
RICH0043	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	0	1	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0045	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	0	1	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0045	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0056	Yes	61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0043	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0045	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0048	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0052	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0055	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	1	
RICH0056	Yes	61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	0	2	
RICH0039	Yes	61290	BENZENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	61290	BENZENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	61290	BENZENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	61290	BENZENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	61291	TOLUENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	61291	TOLUENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	61291	TOLUENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	61291	TOLUENE, TOTAL WATER	UG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0056	Yes	61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICHQ055	Yes	61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0052	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0055	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	

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Station	In Park	Code	Name		Start - End	Years	Obs	Plots
RICH0056	Yes	61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0043	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0027	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/12/74-02/27/79	4	113	
RICH0050	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/30/76-07/25/78	1	2	
RICH0082	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/30/45-05/09/69	23	45	
RICH0027	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/22/74-05/22/74	0	1	
RICH0050	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/30/76-07/25/78	1	2	
RICH0082	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/09/69-05/09/69	0	1	
RICH0027	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/12/74-02/27/79	4	114	
RICH0082	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/09/69-05/09/69	0	1	
RICH0027	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/12/74-02/27/79	4	114	
RICH0050	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/30/76-07/25/78	1	2	
RICH0082	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/09/69-05/09/69	0	1	
RICH0129	No	70320	MOISTURE CONTENT (PERCENT OF TOTAL WET WEIGHT)	10/01/77-10/01/86	9	15	
RICH0027	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/08/78-06/08/78	0	1	
RICH0084	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/13/89	1	4	
RICH0100	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0121	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	08/12/80-08/12/80	0	1	
RICH0131	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0132	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0136	Yes	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0144	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0145	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	1	4	
RICH0001	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/26/73-11/25/74	1	11	
RICH0002	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/08/72-03/24/78	5	32	
RICH0003	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	6	65	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0005	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	6	64	
RICH0006	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/29/74-06/22/79	5	51	
RICH0008	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	09/10/74-06/12/79	4	41	
RICH0010	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-09/19/73	0	4	
RICH0011	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/26/74-04/24/79	4	26	
RICH0015	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-08/30/74	4	34	
RICH0019	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	9	71	
RICH0023	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0028	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-01/10/74	0	8	
RICH0029	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	6	60	
RICH0032	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	9	50	
RICH0035	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/31/72-07/08/74	1	10	
RICH0036	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/02/74-06/21/79	4	42	
RICH0060	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/01/75-04/24/79	3	20	
RICH0065	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	10	74	
RICH0066	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	6	64	
RICH0067	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	6	63	
RICH0069	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0079	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	6	62	
RICH0080	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	6	62	
RICH0081	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	6	63	
RICH0089	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0094	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	6	63	
RICH0096	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	9	99	
RICH0101	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	6	63	
RICH0102	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/27/74-06/07/79	5	50	
RICH0103	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-07/21/74	1	14	
RICH0105	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-04/24/79	9	54	
RICH0116	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	10	99	
RICH0120	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	9	84	
RICH0130	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	9	99	
RICH0134	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	9	98	
RICH0143	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	9	95	
RICH0146	No	70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/20/75-06/14/79	4	41	
RICH0001	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/26/73-11/25/74	1	11	
RICH0002	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/08/72-03/24/78	5	32	
RICH0003	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	6	65	
RICH0005	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	6	64	
RICH0006	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/29/74-06/22/79	5	51	
RICH0008	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/10/74-06/12/79	4	41	
RICH0010	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-09/19/73	0	4	
RICH0011	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	24	80	
RICH0015	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-08/30/74	4	34	
RICH0019	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	9	71	
RICH0023	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0028	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-01/10/74	0	8	
RICH0029	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	6	60	
RICH0032	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-06/01/95	25	61	S
RICH0035	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/31/72-07/08/74	1	10	
RICH0036	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/02/74-06/21/79	4	41	
RICH0059	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0060	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/01/75-04/24/79	3	20	
RICH0061	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/24/91-11/19/98	7	32	
RICH0064	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0065	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	28	116	S
RICH0066	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	6	64	
RICH0067	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	6	62	
RICH0069	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0077	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0079	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	6	62	
RICH0080	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	6	62	
RICH0081	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	6	62	
RICH0083	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/08/94-08/08/94	0	1	
RICH0084	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/04/91-09/04/91	0	1	
RICH0085	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/29/96-12/14/98	2	32	
RICH0089	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	9	55	
RICH0091	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/06/97-12/07/98	1	9	
RICH0093	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	0	11	
RICH0094	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-12/07/98	26	84	S
RICH0096	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	9	100	
RICH0101	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/07/79	6	62	
RICH0102	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/27/74-06/07/79	5	49	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0103	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-07/21/74	1	14	
RICH0104	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/94-11/23/98	4	20	
RICH0105	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	25	65	S
RICH0108	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0110	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0115	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0116	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	25	109	S
RICH0118	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0119	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0120	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	9	83	
RICH0125	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	12	
RICH0126	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	0	11	
RICH0130	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	28	153	S
RICH0131	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	1	23	
RICH0134	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	28	130	S
RICH0143	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	9	95	
RICH0145	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	1	22	
RICH0146	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	23	110	
RICH0147	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	1	25	
RICH0027	No	70953	CHLOROPHYLL-A,PHYTOPLANKTON UG/L,CHROMO-FLUORO	04/19/78-02/27/79	0	19	
RICH0027	No	70954	CHLOROPHYLL-B,PHYTOPLANKTON UG/L,CHROMO-FLUORO	04/19/78-02/27/79	0	19	
RICH0082	No	71835	OXYGEN CONSUMED, FILTERED MG/L	10/01/45-09/21/46	0	36	
RICH0082	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	10/01/45-09/21/46	0	36	
RICH0050	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/30/76-07/25/78	1	2	
RICH0082	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/30/45-05/09/69	23	45	
RICH0149	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/03/86-04/03/86	0	1	
RICH0050	Yes	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	11/30/76-07/25/78	1	2	
RICH0082	No	71885	IRON (UG/L AS FE)	07/30/45-01/11/56	10	44	
RICH0149	No	71885	IRON (UG/L AS FE)	04/03/86-04/03/86	0	1	
RICH0121	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/24/79-09/03/81	1	24	
RICH0027	No	71887	NITROGEN, TOTAL, AS NO3 - MG/L	03/12/74-02/27/79	4	120	
RICH0121	No	71887	NITROGEN, TOTAL, AS NO3 - MG/L	10/24/79-09/03/81	1	23	
RICH0044	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/06/89-07/24/91	1	2	
RICH0047	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	12/06/89-07/24/91	1	2	
RICH0051	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/24/91-07/24/91	0	1	
RICH0053	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/24/91-07/24/91	0	1	
RICH0054	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/24/91-07/24/91	0	2	
RICH0084	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0100	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0131	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0132	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0136	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0144	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0145	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	0	2	
RICH0001	No	71900	MERCURY, TOTAL (UG/L AS HG)	12/07/73-12/07/73	0	1	
RICH0002	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/02/72-05/27/76	4	8	
RICH0003	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/14/73-05/24/79	6	12	
RICH0005	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/14/73-03/13/85	11	13	
RICH0006	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/21/75-05/24/79	4	10	
RICH0008	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/17/75-05/15/78	3	7	
RICH0011	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/04/75-10/28/82	7	7	
RICH0015	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/03/73	2	7	
RICH0019	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-03/28/85	14	19	
RICH0023	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	12	14	
RICH0028	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/29/73-12/12/73	0	3	
RICH0029	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	4	7	
RICH0032	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	12	15	
RICH0035	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/31/72-05/03/73	0	4	
RICH0036	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/26/75-03/28/85	10	5	
RICH0039	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	0	1	
RICH0041	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	0	1	
RICH0042	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	0	1	
RICH0044	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	12/06/89-12/06/89	0	1	
RICH0047	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	12/06/89-12/06/89	0	1	
RICH0049	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	0	1	
RICH0060	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/04/75-10/28/82	7	7	
RICH0061	No	71900	MERCURY, TOTAL (UG/L AS HG)	01/17/91-04/19/93	2	10	
RICH0065	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/19/93	22	31	
RICH0066	No	71900	MERCURY, TOTAL (UG/L AS HG)	01/29/73-11/17/77	4	8	
RICH0067	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/29/73-03/28/85	11	9	
RICH0069	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	12	15	
RICH0079	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	4	7	

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From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0080	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/26/72-11/17/77	5	9	
RICH0081	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	4	7	
RICH0083	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/08/94-08/08/94	0	1	
RICH0084	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/04/91	3	5	
RICH0089	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	12	15	
RICH0094	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/06/72-04/28/93	20	23	
RICH0096	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	8	19	
RICH0100	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	1	4	
RICH0101	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/26/72-03/28/85	12	14	
RICH0102	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/24/75-03/28/85	10	11	
RICH0103	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/26/72-01/29/73	0	2	
RICH0105	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	12	14	
RICH0116	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/08/93	22	28	
RICH0120	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/15/71-11/01/78	7	19	
RICH0121	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/24/79-09/03/81	1	11	
RICH0130	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	8	21	
RICH0131	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/04/91	3	27	
RICH0132	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	1	4	
RICH0134	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-06/01/93	22	29	
RICH0136	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	1	4	
RICH0143	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	8	19	
RICH0144	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	1	4	
RICH0145	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/04/91	3	24	
RICH0146	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/20/75-06/01/93	18	17	
RICH0147	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/89-09/04/91	1	25	
RICH0016	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	10/26/79-09/17/80	0	6	
RICH0090	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/26/71-04/27/71	0	13	
RICH0098	No	71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0005	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/30/80-05/19/81	0	2	
RICH0012	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/25/92-06/25/92	0	1	
RICH0019	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	1	2	
RICH0023	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/23/91-09/23/91	0	1	
RICH0036	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	1	2	
RICH0043	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	1	
RICH0044	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	12/06/89-07/24/91	1	2	
RICH0045	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	2	
RICH0047	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	12/06/89-07/24/91	1	2	
RICH0048	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	1	
RICH0051	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/24/91-07/24/91	0	1	
RICH0052	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	1	
RICH0053	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/24/91-07/24/91	0	1	
RICH0054	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/24/91-07/24/91	0	2	
RICH0055	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	1	
RICH0056	Yes	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	0	1	
RICH0061	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/27/92-09/12/97	5	2	
RICH0065	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-07/27/92	12	3	
RICH0067	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	1	3	
RICH0083	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/26/80-08/14/89	8	3	
RICH0085	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	11/10/97-11/10/97	0	1	
RICH0094	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-08/27/92	12	4	
RICH0101	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	1	3	
RICH0102	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-10/25/79	0	1	
RICH0104	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	04/19/95-04/19/95	0	1	
RICH0116	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-08/27/92	12	4	
RICH0130	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	02/15/95-11/10/97	2	2	
RICH0134	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/12/81-07/21/92	11	2	
RICH0146	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/12/81-07/21/92	11	2	
RICH0012	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-09/17/80	0	6	
RICH0090	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/27/71	0	14	
RICH0098	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0129	No	71935	MERCURY, TOTAL IN FISH (PPM,WET WEIGHT BASIS)	10/01/77-10/01/86	9	15	
RICH0012	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	0	6	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0090	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	4	25	
RICH0098	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0109	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	0	1	
RICH0129	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/77-10/01/86	9	15	
RICH0012	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	0	6	
RICH0090	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	4	25	
RICH0098	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0109	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	0	1	
RICH0129	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	7	12	
RICH0012	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0090	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	4	25	
RICH0098	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0109	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	0	1	
RICH0129	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	7	12	
RICH0012	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	0	6	
RICH0090	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	4	25	
RICH0098	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0109	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	0	1	
RICH0012	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	06/25/92-06/25/92	0	3	
RICH0016	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	0	16	
RICH0023	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-10/26/79	0	3	
RICH0024	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-09/17/80	0	6	
RICH0090	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/26/71	0	13	
RICH0097	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-08/27/75	4	25	
RICH0098	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	0	20	
RICH0109	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	05/08/75-05/08/75	0	1	
RICH0129	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/01/77-10/01/86	9	15	
RICH0050	Yes	72008	DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	11/30/76-11/30/76	0	1	
RICH0149	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/03/86-04/03/86	0	1	
RICH0039	Yes	73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0039	Yes	73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0012	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	06/25/92-06/25/92	0	1	
RICH0023	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	09/23/91-09/23/91	0	1	
RICH0061	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/27/92-07/27/92	0	1	
RICH0083	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/14/89-08/14/89	0	1	
RICH0085	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/21/92-07/21/92	0	1	
RICH0043	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	2	
RICH0043	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0048	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	0	2	
RICH0039	Yes	76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0039	Yes	77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	0	1	
RICH0005	No	77825	ALACHLOR WHOLE WATER,UG/L	03/13/85-03/13/85	0	1	
RICH0019	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0036	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0065	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0067	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0094	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0101	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0102	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0116	No	77825	ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	0	1	
RICH0134	No	77825	ALACHLOR WHOLE WATER,UG/L	03/06/85-03/06/85	0	1	
RICH0039	Yes	78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	78200	N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78200	N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	78200	N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78200	N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	78206	N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78206	N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	78206	N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78206	N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	78207	N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78207	N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	78207	N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78207	N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	78300	3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	78300	3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0042	Yes	78300	3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	78300	3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0043	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	1	
RICH0056	Yes	78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	0	2	
RICH0129	No	79178	PCB-1242 TISDRYWTMG/KG	10/01/73-10/01/77	4	11	
RICH0129	No	79179	PCB-1254 TISDRYWTMG/KG	10/01/70-10/01/86	16	37	
RICH0129	No	79182	PCB-1248 TISDRYWTMG/KG	10/01/77-10/01/86	9	15	
RICH0129	No	79183	PCB-1260 TISDRYWTMG/KG	10/01/73-10/01/86	13	23	
RICH0043	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0043	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0045	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0048	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0052	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0055	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	2	
RICH0056	Yes	79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	0	1	
RICH0012	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	06/25/92-06/25/92	0	1	
RICH0023	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	09/23/91-09/23/91	0	1	
RICH0061	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/27/92-09/12/97	5	2	
RICH0065	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/27/92-07/27/92	0	1	
RICH0085	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	11/10/97-11/10/97	0	1	
RICH0094	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	0	1	
RICH0104	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	04/19/95-04/19/95	0	1	
RICH0116	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	0	1	
RICH0130	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	02/15/95-11/10/97	2	2	
RICH0134	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/21/92-07/21/92	0	1	
RICH0146	No	79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/21/92-07/21/92	0	1	
RICH0027	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	4	113	
RICH0084	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/04/91	3	5	
RICH0100	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	1	4	
RICH0121	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/25/80-09/03/81	1	17	
RICH0131	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-08/02/91	3	24	
RICH0132	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	1	4	
RICH0136	Yes	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	1	4	
RICH0144	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	1	4	
RICH0145	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/04/91	3	25	
RICH0147	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/31/89-07/29/91	1	23	
RICH0027	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	4	112	
RICH0121	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/25/80-09/03/81	1	17	
RICH0149	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	04/03/86-04/03/86	0	1	
RICH0039	Yes	81281	KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81281	KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81281	KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81281	KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81302	DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81302	DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0042	Yes	81302	DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81302	DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81309	CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81309	CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81309	CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81309	CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0129	No	81312	POLYCHLORINATEDBIPHENYLS FISH TISSUE WET WGT MG/KG	10/01/86-10/01/86	0	3	
RICH0043	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	1	
RICH0045	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	2	
RICH0048	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	1	
RICH0052	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	1	
RICH0055	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	2	
RICH0056	Yes	81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	0	2	
RICH0039	Yes	81520	CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81520	CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81520	CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81520	CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81551	XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81551	XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81551	XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81551	XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81552	ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81552	ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81552	ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81552	ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81553	ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81553	ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81553	ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81553	ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81593	METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81593	METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81593	METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81593	METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81595	METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81595	METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81595	METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81595	METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81596	METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81596	METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81596	METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81596	METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	81597	METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81597	METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81597	METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81597	METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	0	1	
RICH0004	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	0	6	
RICH0007	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	0	4	
RICH0012	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	06/25/92-06/25/92	0	3	
RICH0016	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	0	16	
RICH0023	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	10/26/79-10/26/79	0	3	
RICH0024	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	10/26/79-09/17/80	0	6	
RICH0090	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/26/71-04/26/71	0	13	
RICH0097	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/26/71-08/27/75	4	25	
RICH0098	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	0	20	
RICH0109	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	3	120	
RICH0012	No	81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	06/25/92-06/25/92	0	2	
RICH0012	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	06/25/92-06/25/92	0	2	
RICH0129	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	10/01/81-10/01/86	5	9	
RICH0097	No	81665	VANADIUM IN FISH TISSUE WET WEIGHT MG/KG	05/23/75-08/27/75	0	11	
RICH0109	No	81665	VANADIUM IN FISH TISSUE WET WEIGHT MG/KG	05/08/75-05/08/75	0	1	
RICH0012	No	81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	06/25/92-06/25/92	0	3	
RICH0012	No	81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	10/01/81-10/01/86	5	9	
RICH0039	Yes	81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	0	1	
RICH0004	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	04/06/79-04/06/79	0	6	
RICH0007	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	04/06/79-04/06/79	0	4	
RICH0012	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	10/01/70-10/01/86	16	37	
RICH0012	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	06/25/92-06/25/92	0	2	

Station/Parameter Period of Record Tabulation
From 07/30/45 To 12/15/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots
RICH0129	No	81944	DDT(INCLUDES DDE & DDD) IN TISSUE WET WEIGHT MG/KG	10/01/86-10/01/86	0	3	
RICH0129	No	81987	TOTAL SEDIMENT PARTICLE SIZE %COARSER THAN 9.00PHI	10/01/70-10/01/86	16	37	
RICH0129	No	82004	DACTHAL IN TISSUE SAMPLE WET WEIGHT MG/KG	10/01/79-10/01/86	7	12	
RICH0061	No	82007	PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	09/12/97-09/12/97	0	1	
RICH0085	No	82007	PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	11/10/97-11/10/97	0	1	
RICH0104	No	82007	PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	04/19/95-04/19/95	0	1	
RICH0130	No	82007	PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	02/15/95-11/10/97	2	2	
RICH0061	No	82008	SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	09/12/97-09/12/97	0	1	
RICH0085	No	82008	SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	11/10/97-11/10/97	0	1	
RICH0104	No	82008	SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	04/19/95-04/19/95	0	1	
RICH0130	No	82008	SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	02/15/95-11/10/97	2	2	
RICH0061	No	82009	SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	09/12/97-09/12/97	0	1	
RICH0085	No	82009	SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	11/10/97-11/10/97	0	1	
RICH0104	No	82009	SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	04/19/95-04/19/95	0	1	
RICH0130	No	82009	SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	02/15/95-11/10/97	2	2	
RICH0012	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	06/25/92-06/25/92	0	2	
RICH0129	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	10/01/79-10/01/86	7	12	
RICH0061	No	82032	CALCIUM - TOTAL UG/L (AS CA)	07/15/92-01/21/93	0	2	
RICH0065	No	82032	CALCIUM - TOTAL UG/L (AS CA)	07/15/92-01/21/93	0	2	
RICH0116	No	82032	CALCIUM - TOTAL UG/L (AS CA)	11/02/92-11/02/92	0	1	
RICH0134	No	82032	CALCIUM - TOTAL UG/L (AS CA)	09/02/92-03/03/93	0	3	
RICH0146	No	82032	CALCIUM - TOTAL UG/L (AS CA)	09/02/92-03/03/93	0	3	
RICH0061	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	04/02/92-04/05/94	2	8	
RICH0065	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	04/02/92-04/05/94	2	9	
RICH0134	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/04/91-06/08/94	2	12	
RICH0146	No	82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/04/91-06/08/94	2	12	
RICH0149	No	82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/03/86-04/03/86	0	1	
RICH0039	Yes	82191	2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	82191	2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	82191	2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	82191	2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	82204	2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	82204	2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	82204	2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	82204	2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	0	1	
RICH0039	Yes	82213	DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0041	Yes	82213	DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0042	Yes	82213	DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0049	Yes	82213	DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	0	1	
RICH0027	No	82398	SAMPLING METHOD (CODES)	01/13/75-01/13/75	0	1	
RICH0149	No	83509	STREAM, WIDTH METER	04/03/86-04/03/86	0	1	
RICH0050	Yes	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/30/76-07/25/78	1	2	
RICH0050	Yes	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/30/76-07/25/78	1	2	
RICH0004	No	84007	ANATOMY ALPHA CODE	04/06/79-04/06/79	0	6	
RICH0007	No	84007	ANATOMY ALPHA CODE	04/06/79-04/06/79	0	4	
RICH0012	No	84007	ANATOMY ALPHA CODE	06/25/92-06/25/92	0	3	
RICH0016	No	84007	ANATOMY ALPHA CODE	04/27/71-04/27/71	0	16	
RICH0023	No	84007	ANATOMY ALPHA CODE	10/26/79-10/26/79	0	3	
RICH0024	No	84007	ANATOMY ALPHA CODE	10/26/79-09/17/80	0	6	
RICH0090	No	84007	ANATOMY ALPHA CODE	04/26/71-04/26/71	0	13	
RICH0097	No	84007	ANATOMY ALPHA CODE	04/26/71-08/27/75	4	25	
RICH0098	No	84007	ANATOMY ALPHA CODE	04/27/71-04/27/71	0	20	
RICH0109	No	84007	ANATOMY ALPHA CODE	05/08/75-04/12/79	3	120	
RICH0004	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	0	6	
RICH0007	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	0	4	
RICH0016	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	0	16	
RICH0023	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	10/26/79-10/26/79	0	3	
RICH0024	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	10/26/79-09/17/80	0	6	
RICH0090	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/26/71-04/26/71	0	13	
RICH0097	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/26/71-08/27/75	4	25	
RICH0098	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	0	20	
RICH0109	No	84008	LIFE STYLE/HABITAT OF THEINDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	3	120	

Station-By-Station Results

Station Inventory for Station: RICH0001

NPS Station ID: RICH0001 LAT/LON: 37.311893/ -77.396588 Agency: 21VASWCB Date Created: / /
Location: AER-O-FLOW TERTIARY TREATMENT PACKAGE AT SUNOCO FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-XHF000.38 /VA2-02BX0266/VA2-4X0266
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004510.25 RF3 Mile Point: 10.38 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: UNNAME ASHTON CRK SECTION: 02B TOPO MAP #: 0133 TOPO MAP NAME: CHESTER, VA

Parameter Inventory for Station: RICH0001

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-11/25/74	11	18.3	17.009	24.4	7.2	24.493	4.949	8.2	13.9	21.1	23.96
00300	OXYGEN, DISSOLVED MG/L	10/26/73-11/25/74	11	11.2	10.536	15.4	6.2	10.225	3.198	6.26	7.8	13.6	15.04
00310	BOD, 5 DAY, 20 DEG C MG/L	10/26/73-11/25/74	11	2.	4.227	11.	0.5	14.918	3.862	0.5	0.5	7.	10.6
00400	PH (STANDARD UNITS)	10/26/73-11/25/74	10	5.55	5.66	7.	4.	1.065	1.032	4.	5.125	6.55	6.97
00400	CONVERTED PH (STANDARD UNITS)	10/26/73-11/25/74	10	5.547	4.671	7.	4.	2.151	1.467	4.	5.125	6.55	6.97
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/26/73-11/25/74	10	2.837	21.312	100.	0.1	1721.654	41.493	0.11	0.287	27.372	100.
00403	PH, LAB, STANDARD UNITS SU	10/26/73-11/25/74	11	6.3	5.982	7.	3.2	1.756	1.325	3.28	5.9	6.8	6.98
00403	CONVERTED PH, LAB, STANDARD UNITS	10/26/73-11/25/74	11	6.3	4.094	7.	3.2	5.676	2.382	3.28	5.9	6.8	6.98
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/26/73-11/25/74	11	0.501	80.522	630.957	0.1	38988.416	197.455	0.105	0.158	1.259	555.004
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/26/73-11/25/74	11	27.	32.455	84.	8.	529.073	23.002	8.4	16.	50.	78.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/26/73-11/25/74	11	0.3	5.041	26.	0.05	70.101	8.373	0.05	0.05	11.	23.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/26/73-11/25/74	11	0.02	0.068	0.29	0.005	0.008	0.092	0.005	0.005	0.12	0.262
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/26/73-11/25/74	11	2.649	9.775	48.19	0.6	248.189	15.754	0.67	1.5	9.	45.126
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/26/73-11/25/74	11	0.7	7.327	42.	0.05	170.45	13.056	0.05	0.1	16.	36.8
00940	CHLORIDE,TOTAL IN WATER MG/L	11/28/73-05/29/74	2	56.	56.	84.	28.	1568.	39.598	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	12/07/73-12/07/73	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	12/07/73-12/07/73	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	12/07/73-12/07/73	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	12/07/73-12/07/73	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/07/73-12/07/73	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	12/07/73-12/07/73	1	30.	30.	30.	30.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/28/73-11/25/74	10##	50.	695.	6000.	50.	3485250.	1866.882	50.	50.	300.	5430.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/28/73-11/25/74	10##	1.699	2.063	3.778	1.699	0.468	0.684	1.699	1.699	2.477	3.648
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	115.483								
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	12/07/73-10/23/74	4	3.	3.	3.	3.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/26/73-11/25/74	11	0.6	1.845	9.	0.2	6.759	2.6	0.22	0.4	2.	7.94
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/26/73-11/25/74	11	0.7	1.759	9.	0.1	6.822	2.612	0.13	0.3	2.	7.9
71900	MERCURY, TOTAL (UG/L AS HG)	12/07/73-12/07/73	1##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0001

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	11	0	0.00	2	0	0.00	7	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	10	0	0.00	2	0	0.00	7	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	10	8	0.80	2	1	0.50	7	6	0.86	1	1	1.00			
00403 PH, LAB	Fresh Chronic	9.	11	0	0.00	2	0	0.00	7	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	11	6	0.55	2	0	0.00	7	5	0.71	2	1	0.50			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	2	0	0.00	7	0	0.00	2	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	2	0.18	2	0	0.00	7	1	0.14	2	1	0.50			
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			
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.	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						
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						
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	10	3	0.30	2	2	1.00	6	0	0.00	2	1	0.50			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	4	4	1.00				4	4	1.00						
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

Station Inventory for Station: RICH0002

NPS Station ID: RICH0002 LAT/LON: 37.312226/ -77.350309 Agency: 21VASWCB Date Created: / /
Location: BUOY 9 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-APP004.69 /VA2-02AX0005/VA2-4X0005
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207001 RF1 Mile Point: 4.090 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080207000314.00 RF3 Mile Point: 17.28 Distance from RF3: 0.13 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: APPOMATTOX RIVER SECTION: 02A TOPO MAP #: 0138 TOPO MAP NAME: HOPEWELL, VA
THIS STATION IS ALSO USED FOR SURVEY 835108

Parameter Inventory for Station: RICH0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/02/72-03/24/78	33	26.1	23.409	30.	4.4	36.298	6.025	14.48	20.3	27.8	28.9
00300 OXYGEN, DISSOLVED MG/L	05/02/72-03/24/78	36	8.	8.344	16.8	5.8	4.133	2.033	6.	7.05	9.35	10.69
00400 PH (STANDARD UNITS)	05/02/72-03/24/78	36	7.2	7.325	8.5	6.5	0.214	0.463	6.91	7.	7.5	8.
00400 CONVERTED PH (STANDARD UNITS)	05/02/72-03/24/78	36	7.2	7.139	8.5	6.5	0.25	0.5	6.91	7.	7.5	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/02/72-03/24/78	36	0.063	0.073	0.316	0.003	0.004	0.064	0.01	0.032	0.1	0.13
00510 RESIDUE, TOTAL FIXED (MG/L)	08/09/72-08/09/72	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/05/72-09/05/72	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/09/72-09/05/72	2	6.	6.	6.	6.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/09/72-09/05/72	2	19.5	19.5	20.	19.	0.5	0.707	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/08/72-03/24/78	32	0.1	0.119	0.5	0.05	0.008	0.092	0.05	0.05	0.19	0.2
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/08/72-03/24/78	32##	0.005	0.009	0.05	0.005	0.	0.009	0.005	0.005	0.01	0.017
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/08/72-08/13/76	31	0.15	0.173	0.41	0.01	0.008	0.088	0.06	0.12	0.21	0.31
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/08/72-03/24/78	32	0.4	0.441	0.7	0.2	0.013	0.116	0.3	0.4	0.5	0.6
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/24/78-03/24/78	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	08/09/72-09/05/72	2	6.	6.	9.	3.	18.	4.243	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	05/02/72-05/27/76	2##	1.75	1.75	2.5	1.	1.125	1.061	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/02/72-05/27/76	5##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/02/72-05/27/76	8##	7.5	7.5	10.	5.	7.143	2.673	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/02/72-05/27/76	8##	5.	5.625	10.	5.	3.125	1.768	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/02/72-05/27/76	7##	5.	6.	11.	1.	11.667	3.416	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/27/76	3##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/02/72-05/27/76	8##	5.	5.625	10.	5.	3.125	1.768	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/02/72-03/24/78	35##	50.	325.714	4500.	50.	624172.269	790.046	50.	50.	200.	1000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/02/72-03/24/78	35##	1.699	2.07	3.653	1.699	0.264	0.513	1.699	1.699	2.301	3.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	117.43								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/08/72-03/24/78	32##	0.075	0.081	0.2	0.05	0.002	0.04	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/08/72-03/24/78	32	0.05	0.053	0.11	0.01	0.001	0.023	0.03	0.043	0.05	0.097
71900 MERCURY, TOTAL (UG/L AS HG)	05/02/72-05/27/76	8##	0.25	0.638	2.5	0.25	0.655	0.809	**	**	**	**

** - Less 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: RICH0002

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	36	0	0.00	19	0	0.00	2	0	0.00	15	0	0.00			
00400 PH	Fresh Chronic	9.	36	0	0.00	19	0	0.00	2	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	36	1	0.03	19	0	0.00	2	0	0.00	15	1	0.07			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	32	0	0.00	16	0	0.00	2	0	0.00	14	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	31	0	0.00	16	0	0.00	2	0	0.00	13	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00							1	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									
01002 ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00							2	0	0.00			
	Drinking Water	50.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1&	1	1.00							1	1	1.00			
	Drinking Water	5.	1&	1	1.00							1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	8	0	0.00	3	0	0.00				5	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	8	0	0.00	3	0	0.00				5	0	0.00			
	Drinking Water	1300.	8	0	0.00	3	0	0.00				5	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00	3	0	0.00				4	0	0.00			
	Drinking Water	15.	7	0	0.00	3	0	0.00				4	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			
01092 ZINC, TOTAL	Fresh Acute	120.	8	0	0.00	3	0	0.00				5	0	0.00			
	Drinking Water	5000.	8	0	0.00	3	0	0.00				5	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	35	11	0.31	19	7	0.37	2	0	0.00	14	4	0.29			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7&	0	0.00	2	0	0.00				5	0	0.00			
	Drinking Water	2.	7&	0	0.00	2	0	0.00				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: RICH0003

NPS Station ID: RICH0003 LAT/LON: 37.314781/ -77.395782 Agency: 21VASWCB Date Created: / /
Location: RT. 620 BRIDGE NEAR WALTHALL FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ASH002.73 /VA2-02BX0028/VA2-4X0028
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080207116800.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: ASHTON CREEK SECTION: 02B TOPO MAP #: 0133 TOPO MAP NAME: CHESTER, VA

Parameter Inventory for Station: RICH0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-06/22/79	63	17.8	15.749	31.1	0.6	62.68	7.917	4.4	7.8	23.	25.36
00300 OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	63	8.4	8.365	13.2	0.6	6.809	2.609	5.38	6.8	10.4	11.84
00400 PH (STANDARD UNITS)	04/19/73-06/22/79	61	6.9	6.818	7.5	4.5	0.174	0.417	6.5	6.5	7.	7.3
00400 CONVERTED PH (STANDARD UNITS)	04/19/73-06/22/79	61	6.9	6.163	7.5	4.5	0.609	0.781	6.5	6.5	7.	7.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/73-06/22/79	61	0.126	0.686	31.623	0.032	16.228	4.028	0.05	0.1	0.316	0.316
00403 PH, LAB, STANDARD UNITS SU	01/03/75-01/03/75	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	01/03/75-01/03/75	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/03/75-01/03/75	1	0.398	0.398	0.398	0.398	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	01/03/75-01/03/75	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	65	0.5	0.711	4.399	0.05	0.516	0.718	0.1	0.2	1.	1.599
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	65	0.02	0.044	0.31	0.005	0.004	0.062	0.005	0.005	0.05	0.142
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-05/26/78	51	0.34	0.365	1.279	0.05	0.044	0.209	0.122	0.24	0.42	0.59
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	65	1.2	1.538	6.599	0.2	1.69	1.3	0.5	0.7	1.8	3.699
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	14	0.42	0.509	1.2	0.14	0.075	0.274	0.195	0.318	0.7	1.
00940 CHLORIDE,TOTAL IN WATER MG/L	01/23/78-01/23/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	11/24/75-05/24/79	7##	1.	1.071	1.5	1.	0.036	0.189	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/12/76-05/24/79	6##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/14/73-05/24/79	12##	5.	5.833	10.	5.	3.788	1.946	5.	5.	5.	10.
01042 COPPER, TOTAL (UG/L AS CU)	05/14/73-05/24/79	12##	5.	5.833	10.	5.	3.788	1.946	5.	5.	5.	10.
01045 IRON, TOTAL (UG/L AS FE)	11/02/78-05/24/79	2	1810.	1810.	2120.	1500.	192200.	438.406	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	12/07/73-05/24/79	10	4.	5.7	20.	1.	34.678	5.889	1.	1.75	7.25	19.1
01055 MANGANESE, TOTAL (UG/L AS MN)	11/02/78-05/24/79	2	80.	80.	100.	60.	800.	28.284	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/14/73-05/24/79	11##	50.	41.818	50.	5.	331.364	18.203	5.	50.	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)	05/14/73-05/24/79	12##	7.5	10.	20.	5.	40.909	6.396	5.	5.	17.5	20.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	66##	50.	226.515	2300.	50.	182170.746	426.815	50.	50.	100.	830.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	66##	1.699	1.978	3.362	1.699	0.226	0.475	1.699	1.699	2.	2.918
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	94.968								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	65	0.4	0.806	3.8	0.05	0.943	0.971	0.1	0.2	0.85	2.5
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	65	0.38	0.692	3.599	0.03	0.7	0.837	0.096	0.17	0.8	2.319
71900 MERCURY, TOTAL (UG/L AS HG)	05/14/73-05/24/79	12##	0.25	0.206	0.25	0.025	0.005	0.072	0.063	0.15	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: RICH0003

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	63	4	0.06	16	3	0.19	26	0	0.00	21	1	0.05			
00400 PH	Fresh Chronic	9.	61	0	0.00	16	0	0.00	24	0	0.00	21	0	0.00			
	Other-Lo Lim.	6.5	61	18	0.30	16	3	0.19	24	5	0.21	21	10	0.48			
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						
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	65	0	0.00	16	0	0.00	27	0	0.00	22	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	51	0	0.00	13	0	0.00	22	0	0.00	16	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	3	0	0.00	5	0	0.00	6	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						
01002 ARSENIC, TOTAL	Fresh Acute	360.	7	0	0.00				3	0	0.00	4	0	0.00			
	Drinking Water	50.	7	0	0.00				3	0	0.00	4	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.	12	0	0.00				5	0	0.00	7	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	12	0	0.00				5	0	0.00	7	0	0.00			
	Drinking Water	1300.	12	0	0.00				5	0	0.00	7	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	10	0	0.00				5	0	0.00	5	0	0.00			
	Drinking Water	15.	10	1	0.10				5	0	0.00	5	1	0.20			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	11	0	0.00				4	0	0.00	7	0	0.00			
	Drinking Water	100.	11	0	0.00				4	0	0.00	7	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	12	0	0.00				5	0	0.00	7	0	0.00			
	Drinking Water	5000.	12	0	0.00				5	0	0.00	7	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	65&	13	0.20	16	3	0.19	27	2	0.07	22	8	0.36			
71900 MERCURY, TOTAL	Fresh Acute	2.4	12	0	0.00				5	0	0.00	7	0	0.00			
	Drinking Water	2.	12	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

Annual Analysis for 1973 - Station RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	8	7.4	7.7	11.	6.	2.869	1.694	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	8	0.25	0.431	1.799	0.05	0.33	0.575	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	8##	0.008	0.034	0.2	0.005	0.005	0.068	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	8	1.199	1.5	4.099	0.7	1.214	1.102	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	8##	50.	62.5	100.	50.	535.714	23.146	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	8##	1.699	1.774	2.	1.699	0.019	0.139	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	8	0.7	0.938	2.5	0.3	0.523	0.723	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	8	0.6	0.85	2.5	0.2	0.566	0.752	**	**	**	**

** - Less 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 RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	12	9.1	8.733	11.6	4.2	4.759	2.181	4.92	6.85	10.35	11.54
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	13	0.5	0.707	1.799	0.1	0.25	0.5	0.14	0.3	1.05	1.599
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	13	0.02	0.04	0.13	0.005	0.002	0.048	0.005	0.005	0.085	0.126
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	13	1.299	1.492	3.699	0.5	0.867	0.931	0.54	0.7	2.199	3.219
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	13##	50.	65.385	200.	50.	1826.923	42.743	50.	50.	50.	160.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	13##	1.699	1.768	2.301	1.699	0.033	0.18	1.699	1.699	1.699	2.181
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		58.673									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	13	0.9	1.092	3.6	0.2	0.964	0.982	0.24	0.3	1.35	3.16
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	13	0.6	0.988	3.599	0.05	1.076	1.037	0.07	0.25	1.35	3.159

** - Less 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 RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	9	8.2	7.711	12.	0.6	10.871	3.297	0.6	6.5	10.1	12.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	10	0.5	0.54	1.599	0.1	0.209	0.457	0.11	0.2	0.7	1.539
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	10##	0.008	0.015	0.04	0.005	0.	0.013	0.005	0.005	0.023	0.039
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	10	0.8	0.88	1.599	0.3	0.239	0.489	0.3	0.375	1.324	1.579
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	10##	50.	195.	1100.	50.	113027.778	336.196	50.	50.	175.	1030.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	10##	1.699	1.954	3.041	1.699	0.229	0.478	1.699	1.699	2.151	2.997
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		89.872									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	10	0.2	0.31	0.6	0.1	0.041	0.202	0.11	0.2	0.6	0.6
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	10	0.1	0.232	0.6	0.05	0.047	0.217	0.055	0.1	0.45	0.6

** - 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 1976 - Station RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	12	9.25	8.6	13.2	3.	11.204	3.347	3.3	5.7	11.6	12.96
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	12	0.75	0.983	2.599	0.2	0.532	0.729	0.23	0.45	1.449	2.419
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	12	0.035	0.055	0.2	0.005	0.004	0.063	0.005	0.009	0.08	0.188
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	12	1.349	2.349	5.799	0.7	3.315	1.821	0.73	0.925	4.224	5.529
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	12##	50.	308.333	2300.	50.	417196.97	645.908	50.	50.	325.	1760.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	12##	1.699	2.021	3.362	1.699	0.311	0.558	1.699	1.699	2.452	3.163
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		105.005									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	12	0.55	1.367	3.8	0.2	2.079	1.442	0.23	0.325	2.85	3.8

** - 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 1976 - Station RICH0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	12	0.42	0.989	2.549	0.17	0.946	0.973	0.173	0.283	2.112	2.534

** - Less 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 RICH0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	8	8.1	8.525	13.2	3.6	11.019	3.32	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	8	0.75	1.175	4.399	0.1	1.861	1.364	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	8	0.03	0.065	0.22	0.005	0.007	0.081	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	8	1.4	2.	6.599	0.6	3.987	1.997	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	9##	50.	272.222	1000.	50.	135694.444	368.367	50.	50.	550.	1000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	9##	1.699	2.097	3.	1.699	0.301	0.549	1.699	1.699	2.69	3.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		125.092									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	8	0.5	0.925	3.5	0.05	1.361	1.167	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	8	0.49	0.875	3.5	0.08	1.328	1.152	**	**	**	**

** - Less 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 RICH0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	9	8.2	8.656	12.8	6.8	4.053	2.013	6.8	7.05	9.9	12.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	9	0.4	0.567	1.5	0.1	0.285	0.534	0.1	0.15	1.1	1.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	9	0.02	0.059	0.31	0.005	0.009	0.097	0.005	0.01	0.06	0.31
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	9	0.9	1.211	2.5	0.5	0.651	0.807	0.5	0.55	2.1	2.5
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	9##	50.	305.556	1400.	50.	245277.778	495.255	50.	50.	500.	1400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	9##	1.699	2.066	3.146	1.699	0.33	0.574	1.699	1.699	2.477	3.146
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		116.449									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	9	0.2	0.261	0.8	0.05	0.055	0.234	0.05	0.1	0.35	0.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	9	0.17	0.286	0.8	0.03	0.059	0.242	0.03	0.115	0.435	0.8

** - 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 1979 - Station RICH0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED MG/L	04/19/73-06/22/79	5	7.8	8.38	11.4	6.	4.832	2.198	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/22/79	5	0.3	0.37	0.8	0.05	0.085	0.291	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/22/79	5	0.05	0.043	0.1	0.005	0.001	0.038	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/22/79	5	1.2	0.94	1.3	0.2	0.208	0.456	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	5	200.	550.	1700.	50.	480000.	692.82	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/22/79	5	2.301	2.415	3.23	1.699	0.387	0.622	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		260.081									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	5	0.2	0.29	0.8	0.05	0.091	0.301	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	5	0.18	0.314	0.8	0.06	0.084	0.291	**	**	**	**

** - Less 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 10/14 - Station RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/22/79	15	23.9	22.627	26.7	17.8	8.894	2.982	18.46	18.9	25.	26.58
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/22/79	16	6.45	6.1	10.4	0.6	5.631	2.373	2.28	4.525	7.55	9.14
00400 PH (STANDARD UNITS)		04/19/73-06/22/79	16	7.	6.95	7.5	6.5	0.085	0.292	6.5	6.725	7.075	7.36
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/22/79	16	7.	6.858	7.5	6.5	0.094	0.307	6.5	6.725	7.075	7.36
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/22/79	16	0.1	0.139	0.316	0.032	0.009	0.097	0.045	0.085	0.189	0.316
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/22/79	16	0.75	1.15	4.399	0.2	1.296	1.139	0.2	0.225	1.749	3.139
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/22/79	16	0.05	0.098	0.31	0.005	0.009	0.095	0.005	0.02	0.19	0.247
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/22/79	16	2.	2.562	6.599	0.3	4.041	2.01	0.37	0.925	3.999	6.039
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	16##	50.	153.125	1000.	50.	59156.25	243.221	50.	50.	100.	580.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	16##	1.699	1.95	3.	1.699	0.149	0.385	1.699	1.699	2.	2.721
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	89.046								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-06/22/79	16	1.05	1.663	3.8	0.2	2.075	1.44	0.2	0.375	3.375	3.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-06/22/79	16	0.95	1.408	3.599	0.1	1.496	1.223	0.1	0.333	2.5	3.53

** - Less 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: 10/15 to 3/15 - Station RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/22/79	26	7.5	8.523	18.9	0.6	22.311	4.723	2.64	4.85	12.2	14.65
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/22/79	26	10.9	10.504	13.2	6.6	2.962	1.721	8.08	9.	11.7	12.92
00400 PH (STANDARD UNITS)		04/19/73-06/22/79	24	6.8	6.85	7.3	6.4	0.069	0.262	6.5	6.7	7.	7.3
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/22/79	24	6.8	6.777	7.3	6.4	0.074	0.272	6.5	6.7	7.	7.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/22/79	24	0.158	0.167	0.398	0.05	0.01	0.099	0.05	0.1	0.2	0.316
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/22/79	27	0.7	0.705	1.599	0.05	0.182	0.427	0.1	0.4	1.	1.32
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/22/79	27##	0.005	0.017	0.07	0.005	0.	0.018	0.005	0.005	0.02	0.05
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/22/79	27	1.299	1.225	2.4	0.3	0.338	0.581	0.5	0.7	1.599	2.219
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	28##	50.	208.929	2300.	50.	269824.735	519.447	50.	50.	50.	620.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	28##	1.699	1.87	3.362	1.699	0.203	0.45	1.699	1.699	1.699	2.752
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	74.176								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-06/22/79	27	0.4	0.444	1.1	0.05	0.086	0.294	0.09	0.2	0.6	0.92
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-06/22/79	27	0.34	0.38	1.	0.03	0.06	0.245	0.082	0.18	0.5	0.74

** - Less 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: 3/16 to 6/30 - Station RICH0003

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/22/79	22	20.3	19.6	31.1	2.1	38.596	6.213	10.9	17.075	23.9	25.88
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/22/79	21	7.2	7.443	10.2	4.	2.239	1.496	5.44	6.7	8.6	9.68
00400 PH (STANDARD UNITS)		04/19/73-06/22/79	21	6.8	6.681	7.5	4.5	0.344	0.586	6.42	6.5	7.	7.24
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/22/79	21	6.8	5.77	7.5	4.5	1.214	1.102	6.42	6.5	7.	7.24
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/22/79	21	0.158	1.697	31.623	0.032	47.029	6.858	0.06	0.1	0.316	0.382
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/22/79	22	0.3	0.398	2.	0.05	0.17	0.412	0.1	0.1	0.5	0.7
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/22/79	22	0.02	0.038	0.16	0.005	0.002	0.042	0.005	0.009	0.063	0.1
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/22/79	22	0.9	1.177	4.399	0.2	0.786	0.887	0.53	0.675	1.324	2.269
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	22##	75.	302.273	1400.	50.	164161.255	405.168	50.	50.	475.	1040.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/22/79	22##	1.849	2.134	3.146	1.699	0.291	0.54	1.699	1.699	2.663	3.015
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	136.299								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-06/22/79	22	0.3	0.627	2.5	0.05	0.525	0.724	0.065	0.2	0.875	2.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-06/22/79	22	0.2	0.554	2.5	0.05	0.454	0.674	0.066	0.1	0.875	1.744

** - Less 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: RICH0004

NPS Station ID: RICH0004 LAT/LON: 37.314781/ -77.395782 Agency: 21VASWCB Date Created: 11/08/80
Location: SHTON CK, NEAR RT 620 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XQL8937
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004103.91 RF3 Mile Point: 5.31 Distance from RF3: 0.34 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED
SPECIAL STUDY B79-014 DES 8-30-79/

Parameter Inventory for Station: RICH0004

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34686	HEPTACHLOR EPOXIDE WET WGTTISMG/KG	04/06/79-04/06/79	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
39329	O,P DDE IN TISSUE, WET WGT(UG/G)	04/06/79-04/06/79	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	04/06/79-04/06/79	1	50.	50.	50.	50.	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	04/06/79-04/06/79	6	0.17	0.215	0.49	0.08	0.025	0.158	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	6	1.5	1.667	3.	1.	0.667	0.816	**	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	04/06/79-04/06/79	6	0.035	0.045	0.09	0.02	0.001	0.029	**	**	**	**

** - Less 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: RICH0005

NPS Station ID: RICH0005 LAT/LON: 37.316865/ -77.373142 Agency: 21VASWCB Date Created: / /
Location: RT. 746 BRIDGE, CONF. WITH APPOMATTOX RIVER FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ASH001.26 /VA2-02BX0027/VA2-4X0027
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207002 RF1 Mile Point: 0.390 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080207000506.25 RF3 Mile Point: 6.25 Distance from RF3: 0.02 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: ASHTON CREEK SECTION: 02B TOPO MAP #: 0138 TOPO MAP NAME: HOPEWELL, VA

Parameter Inventory for Station: RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-06/19/90	184	14.5	14.342	28.2	0.5	59.536	7.716	4.	7.5	21.9	24.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/05/83-04/09/85	13	13.	11.923	29.	3.	51.41	7.17	3.4	5.	15.5	24.6
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-06/19/90	18	15.2	18.639	87.	5.7	306.639	17.511	8.67	12.75	17.75	29.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/14/79-10/19/89	110	78.	86.718	536.	1.	2710.461	52.062	56.	67.75	90.	107.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/24/89-06/19/90	10	84.	87.2	151.	59.	591.511	24.321	60.1	76.75	88.25	144.8
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/19/90	184	9.15	9.097	14.5	1.6	5.518	2.349	6.1	7.2	10.8	12.45
00310	BOD, 5 DAY, 20 DEG C MG/L	08/14/79-06/19/90	119	1.	1.647	10.	0.5	1.353	1.163	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	08/14/79-06/19/90	119	15.	15.324	50.	0.5	48.82	6.987	8.	11.	19.	24.
00400	PH (STANDARD UNITS)	04/19/73-06/19/90	182	6.55	6.734	8.7	5.	0.412	0.642	6.	6.3	7.1	7.5
00400	CONVERTED PH (STANDARD UNITS)	04/19/73-06/19/90	182	6.547	6.322	8.7	5.	0.583	0.764	6.	6.3	7.1	7.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/73-06/19/90	182	0.284	0.477	10.	0.002	1.023	1.012	0.032	0.079	0.501	1.
00403	PH, LAB, STANDARD UNITS SU	01/03/75-06/19/90	21	6.4	6.371	6.9	5.8	0.062	0.249	6.02	6.25	6.5	6.76
00403	CONVERTED PH, LAB, STANDARD UNITS	01/03/75-06/19/90	21	6.4	6.302	6.9	5.8	0.067	0.259	6.02	6.25	6.5	6.76
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/03/75-06/19/90	21	0.398	0.499	1.585	0.126	0.104	0.322	0.177	0.316	0.566	0.959
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/03/75-06/19/90	21	9.	8.762	13.	4.	5.59	2.364	5.	7.5	10.	11.8
00500	RESIDUE, TOTAL (MG/L)	08/14/79-06/19/90	20	77.	85.65	226.	47.	1501.503	38.749	55.5	68.	89.75	138.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	08/14/79-06/19/90	20	20.	24.2	44.	12.	80.589	8.977	16.	19.	30.	41.4
00510	RESIDUE, TOTAL FIXED (MG/L)	08/14/79-06/19/90	21	54.	60.619	184.	31.	978.548	31.282	40.6	46.	60.	93.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/79-06/19/90	119	6.	9.235	142.	0.5	226.135	15.038	2.5	2.5	10.	15.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/14/79-06/19/90	120	2.5	3.883	22.	0.	9.411	3.068	1.	2.5	5.	6.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/14/79-06/19/90	120	3.	6.079	126.	0.	159.714	12.638	1.	2.5	5.75	11.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/19/90	183##	0.05	0.162	1.399	0.02	0.052	0.229	0.05	0.05	0.2	0.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	182##	0.005	0.017	0.18	0.005	0.001	0.028	0.005	0.005	0.01	0.047
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	169	0.33	0.369	1.419	0.	0.053	0.231	0.15	0.21	0.47	0.6
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/19/90	180	0.5	0.556	1.699	0.05	0.114	0.338	0.2	0.3	0.7	1.
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	13	0.6	0.762	1.6	0.26	0.151	0.389	0.336	0.5	1.	1.48
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/14/79-06/19/90	117	0.1	0.099	0.5	0.005	0.005	0.069	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/14/79-06/19/90	119	0.04	0.051	0.3	0.01	0.002	0.044	0.02	0.03	0.06	0.09
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/14/79-06/19/90	112	6.	6.701	17.	2.	7.636	2.763	3.36	5.	8.825	10.49
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/13/85-06/19/90	16	18.	19.188	28.	14.	10.296	3.209	15.4	18.	20.75	23.8
00940	CHLORIDE,TOTAL IN WATER MG/L	10/18/88-06/19/90	18	11.	13.5	47.	7.	76.735	8.76	7.9	10.	14.5	19.1
00945	SULFATE, TOTAL (MG/L AS SO4)	02/27/89-06/19/90	16	8.	8.813	14.	5.	5.363	2.316	5.7	7.25	10.75	12.6
00951	FLUORIDE, TOTAL (MG/L AS F)	02/27/89-06/19/90	16##	0.05	0.075	0.12	0.05	0.001	0.03	0.05	0.05	0.1	0.12

** - 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 time series plot

Parameter Inventory for Station: RICH0005

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955 SILICA, DISSOLVED (MG/L AS SIO2)	05/23/89-06/19/90	13	10.4	10.192	13.2	5.2	4.119	2.03	6.64	9.15	11.3	13.08
01002 ARSENIC, TOTAL (UG/L AS AS)	11/24/75-03/13/85	8##	1.	0.938	1.5	0.5	0.103	0.32	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/30/80-05/19/81	2##	1.075	1.075	1.6	0.55	0.551	0.742	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/24/75-03/13/85	8##	5.	3.875	5.	0.5	4.339	2.083	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	2##	0.068	0.068	0.08	0.055	0.	0.018	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	2	2.095	2.095	2.3	1.89	0.084	0.29	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/14/73-03/13/85	13##	5.	6.962	20.	0.5	22.519	4.745	2.3	5.	10.	16.
01042 COPPER, TOTAL (UG/L AS CU)	05/14/73-03/13/85	13##	5.	5.385	10.	5.	1.923	1.387	5.	5.	5.	8.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/30/80-05/19/81	2	0.65	0.65	0.97	0.33	0.205	0.453	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	05/24/79-05/24/79	1	2400.	2400.	2400.	2400.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	12/07/73-03/13/85	11	7.	35.955	312.	1.	8460.023	91.978	1.1	2.	15.	256.
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/30/80-05/19/81	2##	2.675	2.675	4.8	0.55	9.031	3.005	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	05/24/79-05/24/79	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/14/73-05/24/79	10##	50.	45.5	50.	5.	202.5	14.23	9.5	50.	50.	50.
01067 NICKEL, TOTAL (UG/L AS NI)	05/04/82-03/13/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/30/80-05/19/81	2##	2.065	2.065	3.33	0.8	3.2	1.789	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/14/73-03/13/85	12##	12.5	16.667	50.	5.	210.606	14.512	5.	5.	27.5	44.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	09/30/80-05/19/81	2	4.48	4.48	4.66	4.3	0.065	0.255	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/19/90	180##	50.	184.406	8000.	0.	406806.566	637.814	50.	50.	100.	390.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/19/90	180##	1.699	1.92	3.903	0.	0.171	0.414	1.699	1.699	2.	2.59
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	83.233								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/13/85-03/13/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/13/85-03/13/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/13/85-03/13/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/04/82-05/04/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/17/79-03/13/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/13/85-03/13/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/04/82-05/04/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/17/79-05/19/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	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: RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/13/85-03/13/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	64	0.3	0.434	1.7	0.05	0.127	0.357	0.1	0.2	0.575	0.95
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	64	0.255	0.359	1.449	0.01	0.096	0.309	0.09	0.125	0.5	0.9
71900	MERCURY, TOTAL (UG/L AS HG)	05/14/73-03/13/85	13##	0.25	0.219	0.25	0.15	0.002	0.048	0.15	0.15	0.25	0.25
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/30/80-05/19/81	2##	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
77825	ALACHLOR WHOLE WATER,UG/L	03/13/85-03/13/85	1##	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

EPA Water Quality Criteria Analysis for Station: RICH0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	18	1	0.06	3	0	0.00	7	1	0.14	8	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	184	1	0.01	45	1	0.02	79	0	0.00	60	0	0.00			
00400	PH	Fresh Chronic	9.	182	0	0.00	45	0	0.00	77	0	0.00	60	0	0.00			
		Other-Lo Lim.	6.5	182	91	0.50	45	24	0.53	77	35	0.45	60	32	0.53			
00403	PH, LAB	Fresh Chronic	9.	21	0	0.00	3	0	0.00	10	0	0.00	8	0	0.00			
		Other-Lo Lim.	6.5	21	17	0.81	3	2	0.67	10	10	1.00	8	5	0.63			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	182	0	0.00	44	0	0.00	78	0	0.00	60	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	169	0	0.00	41	0	0.00	74	0	0.00	54	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	13	0	0.00	3	0	0.00	4	0	0.00	6	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	18	0	0.00	2	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	250.	18	0	0.00	2	0	0.00	8	0	0.00	8	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	16	0	0.00	2	0	0.00	6	0	0.00	8	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	16	0	0.00	2	0	0.00	6	0	0.00	8	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	8	0	0.00				3	0	0.00	5	0	0.00			
		Drinking Water	50.	8	0	0.00				3	0	0.00	5	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.	13	0	0.00				5	0	0.00	8	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	13	0	0.00				5	0	0.00	8	0	0.00			
		Drinking Water	1300.	13	0	0.00				5	0	0.00	8	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	11	1	0.09				5	0	0.00	6	1	0.17			
		Drinking Water	15.	11	3	0.27				5	1	0.20	6	2	0.33			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00				3	0	0.00	7	0	0.00			
		Drinking Water	100.	10	0	0.00				3	0	0.00	7	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00				1	0	0.00	1	0	0.00			
		Drinking Water	100.	2	0	0.00				1	0	0.00	1	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	12	0	0.00				5	0	0.00	7	0	0.00			
		Drinking Water	5000.	12	0	0.00				5	0	0.00	7	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	180	34	0.19	44	6	0.14	77	10	0.13	59	18	0.31			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00				1	0	0.00						
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00				1	0	0.00						
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	1.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00				1	0	0.00						
		Drinking Water	0.2	1	0	0.00				1	0	0.00						
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00				1	0	0.00						
		Drinking Water	3.	1	0	0.00				1	0	0.00						
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
		Drinking Water	0.4	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: RICH0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
		Drinking Water	0.2	1	0	0.00				1	0	0.00						
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00				1	0	0.00						
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00				1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	13	0	0.00				5	0	0.00	8	0	0.00			
		Drinking Water	2.	13	0	0.00				5	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

Annual Analysis for 1973 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	8	18.35	18.7	26.7	5.6	41.26	6.423	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	8	7.5	7.913	11.	6.1	2.747	1.657	**	**	**	**
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	8	6.5	6.538	6.8	6.3	0.023	0.151	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	8	6.5	6.516	6.8	6.3	0.023	0.152	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	8	0.316	0.305	0.501	0.158	0.01	0.101	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.1	0.188	0.5	0.05	0.029	0.171	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.01	0.029	0.12	0.005	0.002	0.041	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.465	0.517	1.139	0.06	0.098	0.313	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	8	0.95	1.1	1.699	0.7	0.125	0.354	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	8##	75.	112.5	200.	50.	5535.714	74.402	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	8##	1.849	1.962	2.301	1.699	0.089	0.298	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		91.7									

** - 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 1974 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	13	17.2	15.9	25.6	5.	56.995	7.55	5.24	9.15	23.3	25.12
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	13	9.6	9.408	14.4	6.	6.414	2.533	6.	7.	11.	13.68
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	13	6.5	6.608	7.2	6.	0.092	0.304	6.2	6.5	6.8	7.12
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	13	6.5	6.514	7.2	6.	0.102	0.319	6.2	6.5	6.8	7.12
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	13	0.316	0.306	1.	0.063	0.053	0.23	0.078	0.176	0.316	0.726
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	13	0.2	0.265	0.6	0.05	0.029	0.17	0.07	0.1	0.4	0.56
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	13##	0.005	0.017	0.12	0.005	0.001	0.032	0.005	0.005	0.015	0.084
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	13	0.49	0.591	1.299	0.31	0.066	0.257	0.346	0.405	0.69	1.099
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	13	0.7	0.746	1.399	0.5	0.051	0.226	0.54	0.6	0.8	1.199
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	13##	50.	76.923	300.	50.	4839.744	69.568	50.	50.	75.	220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	13##	1.699	1.805	2.477	1.699	0.053	0.231	1.699	1.699	1.849	2.286
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		63.847									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	9	18.3	15.867	25.6	4.4	68.735	8.291	4.4	6.95	24.2	25.6
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	10	8.45	9.15	12.4	6.2	4.041	2.01	6.31	7.825	11.125	12.31
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	9	6.5	6.433	7.5	5.	0.407	0.638	5.	6.4	6.55	7.5
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	9	6.5	5.862	7.5	5.	0.775	0.88	5.	6.4	6.55	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	9	0.316	1.374	10.	0.032	10.478	3.237	0.032	0.284	0.409	10.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	10	0.4	0.455	1.399	0.05	0.149	0.386	0.055	0.175	0.55	1.329
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10	0.01	0.016	0.06	0.005	0.	0.016	0.005	0.009	0.02	0.056
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10	0.41	0.382	0.59	0.11	0.023	0.153	0.122	0.26	0.502	0.585
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	10	0.6	0.71	1.399	0.3	0.132	0.363	0.3	0.375	1.025	1.369
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	11##	50.	236.364	1200.	50.	136545.455	369.521	50.	50.	400.	1080.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	11##	1.699	2.005	3.079	1.699	0.286	0.535	1.699	1.699	2.602	3.019
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		101.077									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	12	13.35	14.133	27.2	2.2	79.344	8.908	2.86	5.25	22.475	27.05
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	9.2	8.958	12.6	5.2	7.646	2.765	5.32	6.1	11.65	12.6
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	10	7.	6.91	7.3	6.5	0.065	0.256	6.51	6.675	7.05	7.29
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	10	7.	6.842	7.3	6.5	0.071	0.266	6.51	6.675	7.05	7.29
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	10	0.1	0.144	0.316	0.05	0.008	0.087	0.051	0.091	0.212	0.31
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.4	0.446	0.8	0.05	0.068	0.261	0.065	0.225	0.7	0.8
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.025	0.05	0.18	0.005	0.003	0.057	0.005	0.013	0.065	0.171
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.635	0.689	1.419	0.025	0.173	0.416	0.066	0.483	1.062	1.368
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	11	0.9	0.954	1.399	0.6	0.076	0.277	0.62	0.7	1.299	1.379
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	50.	116.667	500.	50.	19696.97	140.346	50.	50.	100.	440.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	1.699	1.897	2.699	1.699	0.12	0.346	1.699	1.699	2.	2.632
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		78.944									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	8	2.45	6.888	22.	0.6	82.361	9.075	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	8	8.6	8.913	13.	5.9	7.101	2.665	**	**	**	**
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	8	6.9	6.75	7.3	6.	0.177	0.421	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	8	6.889	6.556	7.3	6.	0.22	0.469	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	8	0.129	0.278	1.	0.05	0.1	0.316	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.4	0.5	1.199	0.1	0.163	0.403	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.035	0.049	0.14	0.005	0.002	0.049	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	5	0.59	0.578	1.	0.18	0.088	0.297	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	8	0.75	0.912	1.599	0.3	0.246	0.496	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	9##	50.	72.222	200.	50.	2569.444	50.69	50.	50.	75.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	9##	1.699	1.799	2.301	1.699	0.045	0.213	1.699	1.699	1.849	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		62.996									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	8	17.5	17.375	26.5	7.	59.268	7.699	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	8	9.25	9.275	12.8	6.6	3.579	1.892	**	**	**	**
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	8	7.	7.063	7.5	6.6	0.068	0.262	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	8	7.	6.993	7.5	6.6	0.074	0.272	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	8	0.1	0.102	0.251	0.032	0.004	0.066	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.1	0.125	0.3	0.05	0.007	0.085	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	7	0.02	0.03	0.12	0.01	0.002	0.04	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	2	0.365	0.365	0.42	0.31	0.006	0.078	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	8	0.65	0.663	1.	0.4	0.046	0.213	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	7##	50.	107.143	400.	50.	17023.81	130.475	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	7##	1.699	1.871	2.602	1.699	0.117	0.341	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		74.3									

** - 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 1979 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	7	19.	17.357	22.	12.5	13.06	3.614	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	3	69.	66.667	71.	60.	34.333	5.859	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	7	8.	8.271	10.5	6.2	2.682	1.638	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	3	16.	16.667	20.	14.	9.333	3.055	**	**	**	**
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	7	6.6	6.586	7.	6.	0.131	0.363	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	7	6.6	6.453	7.	6.	0.152	0.39	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	7	0.251	0.353	1.	0.1	0.101	0.317	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	3	13.	15.	27.	5.	124.	11.136	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	3	5.	6.167	11.	2.5	19.083	4.368	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	3	2.5	8.833	22.	2.	130.083	11.405	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.2	0.219	0.4	0.05	0.013	0.113	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	8	0.02	0.03	0.09	0.01	0.001	0.026	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	3	0.5	0.433	0.5	0.3	0.013	0.115	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	8	0.55	0.612	0.9	0.4	0.041	0.203	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	3	0.2	0.2	0.3	0.1	0.01	0.1	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	3	0.16	0.2	0.3	0.14	0.008	0.087	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	3	9.	9.333	11.	8.	2.333	1.528	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	8##	50.	106.25	500.	50.	25312.5	159.099	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	8##	1.699	1.824	2.699	1.699	0.125	0.354	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		66.676									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	10	13.	14.85	25.	6.5	54.947	7.413	6.6	7.875	23.25	24.9
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	10	73.5	77.6	126.	43.	454.711	21.324	45.4	67.	88.25	122.3
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	10	8.15	8.03	11.4	5.3	3.538	1.881	5.34	6.45	9.3	11.22
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	10	2.	2.7	10.	1.	7.122	2.669	1.	1.	3.	9.3
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	10	15.5	16.2	27.	7.	46.178	6.795	7.3	10.	21.25	26.8
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.4	6.5	7.3	5.9	0.16	0.4	5.94	6.3	6.775	7.27
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.4	6.366	7.3	5.9	0.18	0.424	5.94	6.3	6.775	7.27
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	10	0.398	0.431	1.259	0.05	0.112	0.335	0.055	0.175	0.501	1.183
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	8.5	14.3	64.	2.5	339.733	18.432	2.5	4.375	14.	59.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	4.5	5.8	22.	0.	36.789	6.065	0.25	2.5	6.25	20.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	4.5	9.	42.	2.	153.722	12.398	2.05	2.5	9.5	39.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	10##	0.05	0.075	0.3	0.05	0.006	0.079	0.05	0.05	0.05	0.275
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.006	0.019
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10	0.31	0.34	0.6	0.17	0.021	0.144	0.173	0.2	0.47	0.59
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	10	0.3	0.37	0.9	0.2	0.049	0.221	0.2	0.2	0.45	0.87
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	10	0.1	0.13	0.3	0.05	0.006	0.079	0.05	0.088	0.2	0.29
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	10	0.05	0.056	0.13	0.02	0.001	0.033	0.021	0.03	0.08	0.125
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	10	9.5	10.1	17.	7.	11.211	3.348	7.	7.	12.5	16.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	75.	935.	8000.	50.	6184472.222	2486.86	50.	50.	350.	7250.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	1.849	2.188	3.903	1.699	0.503	0.709	1.699	1.699	2.533	3.783
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		153.995									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	12	11.5	12.875	24.	2.	58.46	7.646	2.9	6.	21.5	23.55
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	12	84.	124.	536.	53.	17344.	131.697	55.4	71.5	118.75	413.
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	8.1	8.15	11.6	4.6	6.234	2.497	4.87	5.75	10.15	11.6
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	12	2.	1.917	4.	1.	0.992	0.996	1.	1.	2.75	3.7
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	12	15.5	14.667	24.	8.	20.788	4.559	8.3	10.5	16.	22.8
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.5	6.325	6.6	5.3	0.138	0.372	5.51	6.175	6.5	6.6
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.5	6.093	6.6	5.3	0.197	0.444	5.51	6.175	6.5	6.6
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	12	0.316	0.807	5.012	0.251	1.807	1.344	0.251	0.316	0.695	3.808
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	3.75	7.333	31.	2.5	69.379	8.329	2.5	2.5	10.5	25.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	2.5	3.167	7.	1.	3.47	1.863	1.	2.5	4.5	6.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	2.75	5.417	24.	2.5	37.402	6.116	2.5	2.5	5.75	19.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.05	0.067	0.2	0.05	0.002	0.044	0.05	0.05	0.05	0.17
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.005	0.006	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.016
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.295	0.29	0.5	0.	0.022	0.148	0.045	0.175	0.41	0.497
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	12	0.35	0.4	1.	0.2	0.049	0.222	0.2	0.225	0.5	0.85
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	12	0.1	0.079	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	12	0.045	0.053	0.1	0.02	0.	0.022	0.026	0.04	0.068	0.094
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	12	7.	7.25	13.	2.	11.114	3.334	2.3	4.25	9.75	12.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	50.	220.833	1400.	50.	156117.424	395.117	50.	50.	312.5	1100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	1.699	1.97	3.146	1.699	0.258	0.508	1.699	1.699	2.376	2.983
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		93.343									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	12	16.	14.208	23.5	4.	46.703	6.834	4.15	7.25	20.125	22.75
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	12	85.5	86.417	202.	1.	2058.629	45.372	19.	66.	95.75	173.5
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	7.8	7.783	9.5	5.8	1.614	1.271	5.92	6.45	9.1	9.38
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	12	1.	1.458	3.	0.5	0.521	0.722	0.65	1.	2.	2.7
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	12	17.5	17.667	31.	2.	59.515	7.715	4.1	13.	24.	29.2
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.4	6.35	6.8	6.	0.041	0.202	6.03	6.225	6.4	6.71
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.4	6.309	6.8	6.	0.043	0.207	6.03	6.225	6.4	6.71
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	12	0.398	0.491	1.	0.158	0.05	0.225	0.206	0.398	0.599	0.938
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	5.	7.292	22.	2.5	37.657	6.137	2.5	2.5	11.	19.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	3.75	4.375	8.	2.	4.869	2.207	2.15	2.5	6.75	7.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	2.5	3.958	17.	0.	19.839	4.454	0.	2.5	4.75	13.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.215	0.231	0.47	0.11	0.009	0.096	0.113	0.163	0.283	0.419
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	12	0.35	0.35	0.6	0.1	0.021	0.145	0.13	0.225	0.475	0.57
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	12	0.1	0.121	0.2	0.05	0.004	0.066	0.05	0.05	0.2	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	12	0.06	0.061	0.15	0.02	0.001	0.037	0.02	0.033	0.085	0.132
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	12	7.	6.75	9.	5.	2.386	1.545	5.	5.	8.	9.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12	100.	91.667	300.	0.	5378.788	73.34	15.	50.	100.	240.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12	2.	1.773	2.477	0.	0.361	0.601	0.51	1.699	2.	2.334
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		59.258									

** - 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

Annual Analysis for 1983 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	11	11.5	12.545	25.	3.	49.223	7.016	3.2	7.	18.	24.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	11	80.	84.	176.	53.	1107.6	33.281	53.2	65.	86.	160.
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	11	10.6	9.991	13.4	6.1	4.367	2.09	6.38	8.4	11.2	13.12
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	10	1.	1.4	2.	1.	0.267	0.516	1.	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	11	12.	14.636	28.	7.	37.055	6.087	7.8	11.	19.	26.4
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	11	6.3	6.355	6.5	6.	0.027	0.163	6.04	6.3	6.5	6.5
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	11	6.3	6.324	6.5	6.	0.028	0.167	6.04	6.3	6.5	6.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	11	0.501	0.474	1.	0.316	0.043	0.207	0.316	0.316	0.501	0.926
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	7.	8.5	29.	2.5	57.556	7.587	2.5	4.375	8.5	27.1
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	4.	4.5	14.	2.	11.6	3.406	2.	2.5	5.	12.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	3.	4.136	15.	1.	14.855	3.854	1.2	2.5	5.	13.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	11##	0.05	0.164	1.3	0.05	0.142	0.377	0.05	0.05	0.05	1.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11##	0.005	0.009	0.05	0.005	0.	0.014	0.005	0.005	0.005	0.041
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.35	0.313	0.5	0.13	0.014	0.119	0.142	0.2	0.41	0.488
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	11	0.3	0.532	1.6	0.05	0.293	0.541	0.06	0.1	1.2	1.52
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	11	0.02	0.028	0.09	0.01	0.001	0.024	0.01	0.01	0.03	0.082
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	11	6.	6.455	13.	2.	12.273	3.503	2.2	3.	9.	12.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	75.	135.	700.	50.	40027.778	200.069	50.	50.	100.	640.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	1.849	1.934	2.845	1.699	0.125	0.353	1.699	1.699	2.	2.761
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		85.9									

** - 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 1984 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	10	16.	13.75	22.	4.	52.792	7.266	4.	5.875	21.25	22.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	10	62.5	64.4	83.	52.	112.933	10.627	52.2	55.5	73.5	82.5
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	10	9.55	9.81	14.	6.2	6.743	2.597	6.29	7.1	12.05	13.85
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	10	1.5	1.55	3.	0.5	0.581	0.762	0.55	1.	2.	2.9
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	10	10.5	13.3	21.	8.	30.233	5.498	8.	8.75	20.	20.9
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.05	5.92	6.36	5.38	0.133	0.365	5.392	5.5	6.215	6.35
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.047	5.782	6.36	5.38	0.154	0.393	5.392	5.5	6.215	6.35
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	10	0.897	1.653	4.169	0.437	1.884	1.372	0.448	0.611	3.162	4.068
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	5.5	8.7	36.	2.5	107.011	10.345	2.5	2.5	9.75	33.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	2.75	3.4	7.	1.	3.267	1.807	1.15	2.5	4.5	6.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	2.75	6.3	29.	2.	72.344	8.506	2.05	2.5	6.	27.3
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	10	0.245	0.255	0.46	0.1	0.012	0.108	0.104	0.17	0.34	0.451
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	10	0.35	0.33	0.5	0.1	0.013	0.116	0.11	0.275	0.4	0.49
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	10	0.1	0.103	0.2	0.05	0.003	0.059	0.05	0.05	0.148	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	10	0.05	0.05	0.13	0.01	0.001	0.037	0.01	0.018	0.07	0.124
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	10	6.5	6.9	12.	4.	6.989	2.644	4.1	5.	8.	11.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	75.	95.	200.	50.	3583.333	59.861	50.	50.	125.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10##	1.849	1.91	2.301	1.699	0.061	0.248	1.699	1.699	2.075	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		81.225									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	10	9.	12.13	22.5	0.7	75.965	8.716	0.78	4.5	21.825	22.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	10	78.	85.6	163.	48.	998.044	31.592	49.8	67.5	98.75	157.4
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	10	11.1	10.25	13.2	5.7	7.165	2.677	5.88	7.575	12.9	13.2
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	10	1.	1.1	2.	0.5	0.267	0.516	0.5	0.875	1.25	2.
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	10	15.	16.9	50.	7.	154.989	12.449	7.1	8.	19.	46.9
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.4	6.38	7.1	5.4	0.262	0.512	5.46	6.	6.775	7.09
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	10	6.389	6.094	7.1	5.4	0.353	0.594	5.46	6.	6.775	7.09
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	10	0.409	0.806	3.981	0.079	1.358	1.165	0.081	0.175	1.	3.683
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	6.	9.25	44.	2.5	154.458	12.428	2.5	2.5	8.25	40.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	3.5	4.45	14.	2.5	11.969	3.46	2.5	2.5	4.25	13.1
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	10	2.75	5.55	30.	1.	75.858	8.71	1.	2.125	4.5	27.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	9	0.31	0.353	0.54	0.21	0.016	0.127	0.21	0.25	0.495	0.54
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	7	0.3	0.329	0.5	0.1	0.022	0.15	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	7##	0.05	0.071	0.1	0.05	0.001	0.027	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	9	0.04	0.041	0.08	0.02	0.	0.02	0.02	0.025	0.055	0.08
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	10	4.5	5.	9.	2.	5.333	2.309	2.1	3.	7.25	8.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10	100.	220.	600.	50.	49555.556	222.611	50.	50.	500.	590.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	10	2.	2.127	2.778	1.699	0.208	0.456	1.699	1.699	2.699	2.77
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		134.06									

** - 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

Annual Analysis for 1986 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	12	11.6	12.808	25.	0.5	66.804	8.173	1.1	6.25	20.75	24.7
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	12	74.5	82.417	145.	55.	529.174	23.004	58.6	70.25	89.75	131.5
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	9.9	9.667	13.6	5.9	6.013	2.452	6.05	7.325	11.55	13.36
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	12	1.	1.125	2.	0.5	0.188	0.433	0.65	1.	1.	2.
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	12	14.5	12.792	24.	0.5	61.248	7.826	1.25	4.25	18.	23.4
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.9	6.927	8.51	5.4	0.779	0.882	5.58	6.3	7.64	8.282
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	12	6.855	6.253	8.51	5.4	1.274	1.129	5.58	6.3	7.64	8.282
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	12	0.139	0.559	3.981	0.003	1.251	1.119	0.007	0.023	0.501	3.087
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	2.5	4.542	17.	2.5	19.521	4.418	2.5	2.5	5.125	14.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	2.5	3.125	6.	2.5	1.46	1.208	2.5	2.5	3.625	5.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	12##	2.5	3.292	12.	0.	8.657	2.942	0.75	2.5	2.5	9.9
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.305	0.316	0.57	0.09	0.025	0.158	0.102	0.163	0.468	0.549
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	12	0.3	0.371	0.7	0.05	0.032	0.179	0.095	0.3	0.5	0.67
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	12	0.1	0.108	0.3	0.05	0.005	0.073	0.05	0.05	0.1	0.27
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	12	0.035	0.038	0.06	0.02	0.	0.013	0.02	0.03	0.05	0.057
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	12	6.	6.	9.	3.	3.273	1.809	3.3	5.	7.	9.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	50.	270.25	2400.	43.	451857.114	672.203	45.1	50.	100.	1740.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	1.699	1.959	3.38	1.633	0.241	0.491	1.653	1.699	2.	3.056
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		91.001									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	13	14.	14.431	25.	4.	76.406	8.741	4.	4.75	22.65	25.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	12	72.5	75.75	95.	59.	168.932	12.997	59.6	64.	90.25	94.7
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	9.75	9.592	12.5	4.6	6.421	2.534	5.35	7.55	11.9	12.47
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	12	1.	1.5	3.	1.	0.455	0.674	1.	1.	2.	2.7
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	12	12.5	12.75	17.	9.	5.841	2.417	9.3	11.	14.75	16.7
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	13	7.41	7.436	8.49	5.99	0.637	0.798	5.99	7.18	8.13	8.482
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	13	7.41	6.733	8.49	5.99	1.174	1.083	5.99	7.18	8.13	8.482
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	13	0.039	0.185	1.023	0.003	0.139	0.373	0.003	0.008	0.066	1.023
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	8.	7.667	18.	2.5	23.242	4.821	2.5	2.5	10.5	16.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	3.25	3.875	8.	0.	4.824	2.196	0.75	2.5	5.75	7.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	12	3.5	4.542	12.	2.5	7.975	2.824	2.5	2.5	5.75	10.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.05	0.052	0.1	0.025	0.	0.017	0.033	0.05	0.05	0.085
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	12	0.215	0.218	0.36	0.05	0.009	0.093	0.065	0.158	0.305	0.351
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	12	0.4	0.4	0.7	0.1	0.022	0.148	0.16	0.3	0.5	0.64
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	12##	0.075	0.083	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.17
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	12	0.035	0.037	0.05	0.01	0.	0.012	0.016	0.03	0.05	0.05
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	8	6.	6.25	9.	4.	2.786	1.669	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	50.	75.	200.	50.	2045.455	45.227	50.	50.	100.	170.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	12##	1.699	1.824	2.301	1.699	0.041	0.201	1.699	1.699	2.	2.211
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		66.742									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	13	12.6	13.262	25.	2.	53.644	7.324	3.28	7.	21.	24.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	11	86.	96.727	203.	54.	1433.018	37.855	59.	79.	97.	184.
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	13	10.1	9.654	12.8	6.7	4.769	2.184	6.74	7.1	11.65	12.56
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	11	1.	1.227	3.	0.5	0.468	0.684	0.6	1.	1.	2.8
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	11	12.	12.455	20.	7.	14.273	3.778	7.2	10.	16.	19.2
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	13	7.5	7.535	8.7	6.69	0.395	0.629	6.714	6.975	8.14	8.508
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	13	7.5	7.209	8.7	6.69	0.511	0.715	6.714	6.975	8.14	8.508
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	13	0.032	0.062	0.204	0.002	0.005	0.068	0.004	0.007	0.107	0.194
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	5.	5.727	14.	2.5	10.768	3.281	2.5	3.	7.	12.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	2.5	2.818	6.	0.	3.314	1.82	0.2	1.	4.	5.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	2.5	3.273	10.	0.	10.918	3.304	0.1	0.5	6.	9.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.06	0.063	0.11	0.02	0.001	0.027	0.024	0.04	0.08	0.108
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.01	0.02	0.07	0.005	0.001	0.023	0.005	0.01	0.02	0.068
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.34	0.334	0.65	0.05	0.026	0.161	0.076	0.22	0.46	0.612
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	11	0.4	0.436	0.7	0.3	0.019	0.136	0.3	0.3	0.5	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	11	0.1	0.091	0.2	0.005	0.004	0.062	0.014	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	11	0.05	0.048	0.11	0.02	0.001	0.026	0.02	0.03	0.06	0.1
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	8	4.75	4.613	6.	2.1	1.644	1.282	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	11##	50.	59.091	100.	50.	409.091	20.226	50.	50.	50.	100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	11##	1.699	1.754	2.	1.699	0.015	0.122	1.699	1.699	1.699	2.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		56.716									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	12	17.1	16.425	28.2	2.5	51.266	7.16	4.39	10.85	22.325	26.73
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	7	80.	93.143	174.	67.	1319.476	36.325	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	12	8.9	9.292	14.5	1.6	10.594	3.255	3.25	8.35	11.85	13.99
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	11	2.	2.455	5.	1.	1.873	1.368	1.	1.	4.	4.8
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	11	19.	21.364	34.	11.	67.255	8.201	11.4	13.	31.	33.8
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	12	7.285	7.368	7.91	6.87	0.153	0.392	6.897	7.	7.83	7.889
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	12	7.27	7.228	7.91	6.87	0.175	0.418	6.897	7.	7.83	7.889
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	12	0.054	0.059	0.135	0.012	0.002	0.043	0.013	0.015	0.1	0.127
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	8.	19.773	142.	0.5	1655.868	40.692	1.4	5.	12.	116.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	2.	3.636	16.	0.5	19.005	4.359	0.5	1.	4.	13.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	11	7.	16.227	126.	0.5	1335.568	36.545	0.6	2.	9.	102.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.04	0.067	0.23	0.02	0.004	0.063	0.02	0.02	0.1	0.204
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.01	0.014	0.06	0.005	0.	0.016	0.005	0.005	0.01	0.052
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	11	0.21	0.234	0.41	0.05	0.011	0.104	0.07	0.16	0.32	0.396
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	11	0.4	0.509	1.	0.2	0.055	0.234	0.22	0.4	0.7	0.96
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	11##	0.05	0.109	0.5	0.05	0.017	0.132	0.05	0.05	0.1	0.42
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	11	0.04	0.062	0.3	0.02	0.006	0.08	0.02	0.03	0.06	0.252
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	11	6.8	7.191	10.7	3.3	6.193	2.489	3.5	5.1	9.7	10.54
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	9##	50.	166.667	800.	50.	63125.	251.247	50.	50.	200.	800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	9##	1.699	1.953	2.903	1.699	0.196	0.443	1.699	1.699	2.239	2.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		89.675									

** - Less 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 RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	4	19.1	18.375	27.	8.3	68.109	8.253	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	4	9.	8.95	10.3	7.5	1.737	1.318	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	6	1.	1.833	4.	1.	1.767	1.329	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	5	17.	16.4	19.	11.	10.8	3.286	**	**	**	**
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	4	7.005	6.893	7.26	6.3	0.176	0.42	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	4	6.995	6.722	7.26	6.3	0.215	0.464	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	4	0.101	0.19	0.501	0.055	0.044	0.21	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	6	7.	7.333	13.	2.	13.467	3.67	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	6	2.5	2.667	5.	1.	2.667	1.633	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	6	4.5	4.667	9.	1.	7.467	2.733	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	6	0.045	0.057	0.1	0.02	0.001	0.031	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	6	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	6	0.34	0.337	0.45	0.25	0.004	0.066	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	6	0.45	0.45	0.6	0.3	0.011	0.105	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	6	0.1	0.092	0.1	0.05	0.	0.02	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	6	0.03	0.033	0.04	0.03	0.	0.005	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	5	4.9	5.1	6.6	4.3	0.775	0.88	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	4	200.	287.5	700.	50.	87291.667	295.452	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	4	2.239	2.255	2.845	1.699	0.257	0.507	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		180.01									

** - Less 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 10/14 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	44	22.5	21.866	28.2	2.7	16.797	4.098	17.6	20.	24.875	25.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	27	70.	69.778	97.	48.	215.333	14.674	53.	56.	79.	96.
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	45	7.	7.051	14.4	1.6	3.549	1.884	5.42	5.95	7.8	9.24
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	29	1.	1.638	10.	0.5	2.837	1.684	1.	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	29	16.	16.034	34.	4.	32.606	5.71	11.	12.	18.	25.
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	45	6.5	6.728	7.69	6.	0.196	0.443	6.284	6.4	7.035	7.484
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	45	6.5	6.55	7.69	6.	0.228	0.478	6.284	6.4	7.035	7.484
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	45	0.316	0.282	1.	0.02	0.054	0.231	0.033	0.092	0.398	0.521
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	29	6.	9.017	36.	2.5	65.866	8.116	2.5	5.	9.5	27.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	29	4.	4.121	14.	0.	6.994	2.645	2.	2.5	5.5	7.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	29	3.	5.328	29.	0.	41.201	6.419	0.5	2.5	5.5	15.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	44##	0.05	0.14	0.7	0.02	0.03	0.174	0.05	0.05	0.2	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	44##	0.005	0.028	0.18	0.005	0.002	0.044	0.005	0.005	0.02	0.12
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	41	0.3	0.381	1.419	0.06	0.09	0.299	0.108	0.2	0.48	0.674
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	44	0.5	0.591	1.699	0.2	0.127	0.356	0.3	0.325	0.7	1.25
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	28	0.1	0.112	0.3	0.005	0.004	0.061	0.05	0.1	0.123	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	28	0.05	0.066	0.3	0.02	0.003	0.053	0.03	0.04	0.068	0.132
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	28	7.	7.246	14.	4.	6.204	2.491	4.54	5.15	8.	12.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	44##	50.	101.136	600.	50.	10521.934	102.576	50.	50.	100.	250.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	44##	1.699	1.893	2.778	1.699	0.075	0.274	1.699	1.699	2.	2.389
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	78.138								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-06/22/79	16	0.6	0.65	1.4	0.1	0.128	0.358	0.17	0.325	0.975	1.12
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-06/22/79	16	0.45	0.533	1.	0.05	0.114	0.337	0.092	0.255	0.9	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: 10/15 to 3/15 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-06/19/90	79	7.	7.624	18.9	0.5	18.954	4.354	2.	4.4	10.1	14.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/14/79-10/19/89	49	86.	95.571	203.	56.	1210.167	34.787	68.	74.5	98.5	163.
00300 OXYGEN, DISSOLVED	MG/L	04/19/73-06/19/90	79	10.8	10.659	14.5	5.7	3.548	1.884	8.4	9.3	12.2	12.8
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/14/79-06/19/90	52	1.	1.596	4.	0.5	0.775	0.88	1.	1.	2.	3.
00340 COD, .25N K2CR2O7	MG/L	08/14/79-06/19/90	52	12.	13.279	31.	0.5	35.161	5.93	7.3	9.	18.	20.7
00400 PH (STANDARD UNITS)		04/19/73-06/19/90	77	6.6	6.758	8.7	5.3	0.521	0.722	6.	6.3	7.2	7.84
00400 CONVERTED PH (STANDARD UNITS)		04/19/73-06/19/90	77	6.6	6.29	8.7	5.3	0.743	0.862	6.	6.3	7.2	7.84
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-06/19/90	77	0.251	0.513	5.012	0.002	0.901	0.949	0.014	0.063	0.501	1.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/14/79-06/19/90	52##	2.5	8.067	142.	0.5	382.834	19.566	2.5	2.5	6.75	13.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/14/79-06/19/90	53##	2.5	3.255	16.	0.	6.458	2.541	1.	2.5	3.5	6.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/14/79-06/19/90	53##	2.5	5.962	126.	0.5	293.624	17.135	1.	2.5	4.	8.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-06/19/90	79##	0.05	0.194	1.399	0.02	0.073	0.269	0.05	0.05	0.23	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	78##	0.005	0.01	0.07	0.005	0.	0.012	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-06/19/90	74	0.395	0.406	1.299	0.05	0.054	0.232	0.15	0.21	0.5	0.675
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-06/19/90	79	0.4	0.504	1.599	0.05	0.118	0.343	0.2	0.3	0.7	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/14/79-06/19/90	53##	0.05	0.09	0.5	0.05	0.005	0.073	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/14/79-06/19/90	53	0.03	0.044	0.3	0.01	0.002	0.047	0.02	0.02	0.05	0.086
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/14/79-06/19/90	46	5.	5.4	10.7	2.	4.882	2.21	3.	3.875	7.	9.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	77##	50.	111.597	1200.	43.	31584.112	177.719	50.	50.	100.	220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-06/19/90	77##	1.699	1.858	3.079	1.633	0.102	0.319	1.699	1.699	2.	2.336
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	72.058								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-06/22/79	26	0.25	0.352	1.7	0.05	0.124	0.353	0.05	0.175	0.4	0.9
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-06/22/79	26	0.2	0.298	1.449	0.01	0.09	0.3	0.057	0.14	0.353	0.655

** - Less 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: 3/16 to 6/30 - Station RICH0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/73-06/19/90	61	18.5	17.615	27.2	2.2	33.083	5.752	9.	13.25	22.3	24.32
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/14/79-10/19/89	34	73.5	87.412	536.	1.	6671.159	81.677	53.	66.75	85.	96.5
00300	OXYGEN, DISSOLVED MG/L	04/19/73-06/19/90	60	8.4	8.575	12.2	4.6	3.039	1.743	6.22	7.2	10.025	11.34
00310	BOD, 5 DAY, 20 DEG C MG/L	08/14/79-06/19/90	38	1.	1.724	5.	0.5	1.091	1.044	1.	1.	2.	3.1
00340	COD, .25N K2CR2O7 MG/L	08/14/79-06/19/90	38	17.	17.579	50.	2.	71.061	8.43	8.8	11.75	20.	28.3
00400	PH (STANDARD UNITS)	04/19/73-06/19/90	60	6.5	6.708	8.49	5.	0.445	0.667	5.991	6.4	7.075	7.77
00400	CONVERTED PH (STANDARD UNITS)	04/19/73-06/19/90	60	6.5	6.239	8.49	5.	0.669	0.818	5.991	6.4	7.075	7.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/73-06/19/90	60	0.316	0.577	10.	0.003	1.898	1.378	0.017	0.085	0.398	1.021
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/79-06/19/90	38	8.	11.	64.	2.5	138.5	11.769	2.5	5.75	12.	18.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/14/79-06/19/90	38	4.	4.579	22.	0.	14.791	3.846	1.	2.5	5.	8.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/14/79-06/19/90	38	5.	6.816	42.	0.	68.817	8.296	1.9	2.5	8.	13.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/73-06/19/90	60	0.05	0.136	1.3	0.02	0.041	0.202	0.041	0.05	0.1	0.39
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	60	0.01	0.017	0.14	0.005	0.001	0.024	0.005	0.005	0.02	0.049
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/73-06/19/90	54	0.3	0.309	0.68	0.	0.021	0.145	0.17	0.2	0.373	0.505
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/73-06/19/90	57	0.5	0.601	1.6	0.05	0.098	0.313	0.3	0.4	0.8	1.02
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/14/79-06/19/90	36	0.1	0.101	0.3	0.05	0.004	0.067	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/14/79-06/19/90	38	0.04	0.048	0.11	0.01	0.001	0.025	0.02	0.03	0.06	0.09
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/14/79-06/19/90	38	8.	7.874	17.	2.1	8.7	2.95	4.88	5.7	9.3	11.2
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/19/90	59##	50.	341.525	8000.	0.	1168892.461	1081.153	50.	50.	200.	600.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/19/73-06/19/90	59##	1.699	2.022	3.903	0.	0.323	0.569	1.699	1.699	2.301	2.778
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	105.312								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/19/73-06/22/79	22	0.3	0.373	1.3	0.05	0.094	0.307	0.065	0.2	0.5	0.87
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/19/73-06/22/79	22	0.205	0.304	1.	0.05	0.068	0.261	0.086	0.1	0.478	0.74

** - Less 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: RICH0006

NPS Station ID: RICH0006 LAT/LON: 37.321670/ -77.405837 Agency: 21VASWCB Date Created: / /
Location: AT RT. 1/301 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ASH003.50 /VA2-02BX0029/VA2-4X0029
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 15.20 On/Off RF1:
RF3 Index: 02080207116900.70 RF3 Mile Point: 1.10 Distance from RF3: 0.00 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: ASHTON CREEK SECTION: 02B TOPO MAP #: 0133 TOPO MAP NAME: CHESTER, VA

Parameter Inventory for Station: RICH0006

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	51	14.4	14.837	28.	0.6	72.472	8.513	2.34	6.7	22.	26.24
00300	OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	53	8.	8.111	13.2	1.6	8.157	2.856	4.02	6.45	10.3	11.8
00400	PH (STANDARD UNITS)	05/29/74-06/22/79	49	6.8	6.753	7.5	5.	0.149	0.386	6.5	6.5	7.	7.1
00400	CONVERTED PH (STANDARD UNITS)	05/29/74-06/22/79	49	6.8	6.399	7.5	5.	0.277	0.527	6.5	6.5	7.	7.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/29/74-06/22/79	49	0.158	0.399	10.	0.032	1.975	1.405	0.079	0.1	0.316	0.316
00403	PH, LAB, STANDARD UNITS SU	01/03/75-06/22/79	2	6.6	6.6	6.8	6.4	0.08	0.283	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/03/75-06/22/79	2	6.555	6.555	6.8	6.4	0.084	0.29	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/03/75-06/22/79	2	0.278	0.278	0.398	0.158	0.029	0.169	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/03/75-06/22/79	2	17.5	17.5	23.	12.	60.5	7.778	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	11/24/75-06/22/79	35	95.	122.914	906.	50.	19661.022	140.218	67.2	77.	114.	171.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/24/75-06/22/79	35	46.	47.229	96.	13.	504.593	22.463	21.6	29.	66.	84.6
00510	RESIDUE, TOTAL FIXED (MG/L)	11/24/75-06/22/79	35	47.	74.829	816.	10.	17377.146	131.822	20.6	38.	71.	108.4
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/27/76-08/29/77	2	76.	76.	148.	4.	10368.	101.823	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/24/75-06/22/79	34	8.5	9.676	26.	0.5	52.013	7.212	0.5	4.	14.25	21.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/24/75-06/22/79	35	3.	3.557	12.	0.	8.953	2.992	0.	0.5	5.	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/24/75-06/22/79	36	4.	6.528	26.	0.	38.113	6.174	0.5	2.	11.	15.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/29/74-06/22/79	51	0.6	0.909	4.099	0.05	0.631	0.794	0.2	0.4	1.099	2.079
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/29/74-06/22/79	51	0.01	0.026	0.16	0.005	0.001	0.03	0.005	0.005	0.04	0.07
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/29/74-05/26/78	37	0.27	0.266	0.64	0.025	0.021	0.146	0.08	0.125	0.365	0.48
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/29/74-06/22/79	51	1.299	1.86	7.399	0.2	2.828	1.682	0.5	0.8	2.199	4.939
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/77-06/22/79	14	0.215	0.242	0.6	0.025	0.024	0.156	0.063	0.118	0.36	0.515
01002	ARSENIC, TOTAL (UG/L AS AS)	11/24/75-05/24/79	7##	1.	1.071	1.5	1.	0.036	0.189	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	11/24/75-05/24/79	7##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	03/21/75-05/24/79	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01042	COPPER, TOTAL (UG/L AS CU)	03/21/75-05/24/79	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01045	IRON, TOTAL (UG/L AS FE)	11/02/78-05/24/79	2	2005.	2005.	2410.	1600.	328050.	572.756	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/21/75-05/24/79	9	7.	10.167	39.	1.	149.5	12.227	1.	1.75	14.	39.
01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-05/24/79	2	110.	110.	110.	110.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/21/75-05/24/79	10##	50.	41.	50.	5.	360.	18.974	5.	38.75	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	03/21/75-05/24/79	10	20.	21.	50.	5.	265.556	16.296	5.	5.	32.5	49.
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	52##	50.	113.462	800.	50.	21285.822	145.897	50.	50.	100.	300.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	52##	1.699	1.876	2.903	1.699	0.111	0.334	1.699	1.699	2.	2.477
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	75.244								

** - Less 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: RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/29/74-06/22/79	51	0.5	0.912	5.	0.05	1.372	1.172	0.1	0.2	0.9	3.18
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/29/74-06/22/79	51	0.38	0.787	5.	0.03	1.061	1.03	0.084	0.2	0.8	2.319
71900 MERCURY, TOTAL (UG/L AS HG)	03/21/75-05/24/79	10##	0.25	0.22	0.25	0.15	0.002	0.048	0.15	0.15	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: RICH0006

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	53	5	0.09	13	4	0.31	24	0	0.00	16	1	0.06			
00400 PH	Fresh Chronic	9.	49	0	0.00	12	0	0.00	21	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	49	20	0.41	12	4	0.33	21	5	0.24	16	11	0.69			
00403 PH, LAB	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	1	0.50				1	1	1.00	1	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	51	0	0.00	13	0	0.00	22	0	0.00	16	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	37	0	0.00	10	0	0.00	17	0	0.00	10	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	3	0	0.00	5	0	0.00	6	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	7	0	0.00				3	0	0.00	4	0	0.00			
	Drinking Water	50.	7	0	0.00				3	0	0.00	4	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.	10	0	0.00				4	0	0.00	6	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	10	0	0.00				4	0	0.00	6	0	0.00			
	Drinking Water	1300.	10	0	0.00				4	0	0.00	6	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	9	0	0.00				4	0	0.00	5	0	0.00			
	Drinking Water	15.	9	2	0.22				4	1	0.25	5	1	0.20			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00				4	0	0.00	6	0	0.00			
	Drinking Water	100.	10	0	0.00				4	0	0.00	6	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	10	0	0.00				4	0	0.00	6	0	0.00			
	Drinking Water	5000.	10	0	0.00				4	0	0.00	6	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	52	9	0.17	13	2	0.15	23	2	0.09	16	5	0.31			
71900 MERCURY, TOTAL	Fresh Acute	2.4	10	0	0.00				4	0	0.00	6	0	0.00			
	Drinking Water	2.	10	0	0.00				4	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 1974 - Station RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	7	16.7	15.157	24.4	5.6	58.046	7.619	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	7	8.	7.857	11.7	3.	7.693	2.774	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	7##	50.	92.857	300.	50.	8690.476	93.223	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	7##	1.699	1.853	2.477	1.699	0.088	0.297	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		71.308									

** - Less 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 RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	10	15.55	15.24	26.7	4.4	70.078	8.371	4.63	7.075	24.025	26.47
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	11	8.4	8.9	12.	6.	5.146	2.268	6.08	6.5	11.	11.88
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	11##	50.	136.364	500.	50.	24545.455	156.67	50.	50.	300.	460.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	11##	1.699	1.931	2.699	1.699	0.162	0.402	1.699	1.699	2.477	2.655
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		85.381									

** - Less 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 RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	12	16.35	15.283	26.7	3.3	74.476	8.63	3.99	6.15	23.45	26.7
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	12	8.9	7.858	12.4	1.6	15.241	3.904	1.84	3.425	11.45	12.22
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	12##	50.	70.833	200.	50.	2026.515	45.017	50.	50.	87.5	170.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	12##	1.699	1.799	2.301	1.699	0.038	0.196	1.699	1.699	1.925	2.211
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		62.996									

** - Less 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 RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	9	3.9	10.178	27.	0.6	113.814	10.668	0.6	1.5	22.	27.
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	9	8.	8.222	13.2	3.9	9.592	3.097	3.9	5.5	10.75	13.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	9##	50.	88.889	400.	50.	13611.111	116.667	50.	50.	50.	400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	9##	1.699	1.799	2.602	1.699	0.091	0.301	1.699	1.699	1.699	2.602
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		62.996									

** - Less 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 RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	9	13.	16.244	28.	0.7	72.35	8.506	0.7	11.5	23.25	28.
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	9	6.7	7.689	13.	5.5	5.966	2.443	5.5	6.05	9.25	13.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	9##	50.	205.556	800.	50.	66527.778	257.93	50.	50.	350.	800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	9##	1.699	2.053	2.903	1.699	0.229	0.479	1.699	1.699	2.54	2.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		112.983									

** - Less 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 RICH0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/74-06/22/79	4	20.25	19.25	22.5	14.	13.417	3.663	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/29/74-06/22/79	5	7.9	7.9	10.8	4.2	6.105	2.471	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	4##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/29/74-06/22/79	4##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									

** - Less 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: RICH0007

NPS Station ID: RICH0007 LAT/LON: 37.321670/ -77.405837 Agency: 21VASWCB Date Created: 11/08/80
Location: ASHTON CK, NEAR RT1/301 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XQL9344
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 15.20 On/Off RF1:
RF3 Index: 02080207116900.70 RF3 Mile Point: 1.10 Distance from RF3: 0.00 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED
SPECIAL STUDY B79-014 DES 8-30-79/

Parameter Inventory for Station: RICH0007

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34686 HEPTACHLOR EPOXIDE WET WGTTISMG/KG	04/06/79-04/06/79	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39515 PCBS (MG/KG) FISH TISSUE MG/KG	04/06/79-04/06/79	4	0.115	0.113	0.18	0.04	0.005	0.073	**	**	**	**
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	04/06/79-04/06/79	4	1.	1.	1.	1.	0.	0.	**	**	**	**
81896 DDE TOTAL IN TISSUE WET WEIGHT MG/KG	04/06/79-04/06/79	4	0.05	0.05	0.06	0.04	0.	0.008	**	**	**	**

** - Less 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: RICH0008

NPS Station ID: RICH0008 LAT/LON: 37.328892/ -77.317782 Agency: 21VASWCB Date Created: / /
Location: RT. 724 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JOD001.96 /VA2-02BX0159/VA2-4X0159
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004508.68 RF3 Mile Point: 10.85 Distance from RF3: 0.05 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JOHNSON CREEK SECTION: 02B TOPO MAP #: 0138 TOPO MAP NAME: HOPEWELL, VA

Parameter Inventory for Station: RICH0008

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/10/74-06/12/79	42	16.85	15.	27.5	1.	60.155	7.756	3.3	7.975	22.	23.79
00300 OXYGEN, DISSOLVED	MG/L	09/10/74-06/12/79	42	8.4	7.66	14.6	1.2	12.242	3.499	2.36	4.4	10.4	11.74
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/16/74-10/16/74	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		09/10/74-06/12/79	40	6.5	6.347	7.5	4.5	0.439	0.663	5.51	6.125	6.675	7.
00400 CONVERTED PH (STANDARD UNITS)		09/10/74-06/12/79	40	6.5	5.547	7.5	4.5	1.096	1.047	5.51	6.125	6.675	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/10/74-06/12/79	40	0.316	2.839	31.623	0.032	69.268	8.323	0.1	0.212	0.753	3.097
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		09/10/74-06/12/79	41	0.3	1.118	8.	0.05	3.611	1.9	0.1	0.1	0.7	3.379
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		09/10/74-06/12/79	41##	0.005	0.009	0.04	0.005	0.	0.008	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		09/10/74-05/15/78	26	0.07	0.159	1.799	0.025	0.128	0.358	0.025	0.05	0.09	0.301
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		09/10/74-06/12/79	41	1.199	3.012	13.79	0.2	13.37	3.657	0.32	0.65	4.2	8.
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		07/01/77-06/12/79	15	0.08	0.071	0.13	0.025	0.001	0.038	0.025	0.025	0.1	0.124
01002 ARSENIC, TOTAL (UG/L AS AS)		11/25/75-05/15/78	4##	1.	1.125	1.5	1.	0.063	0.25	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)		11/25/75-05/15/78	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/17/75-05/15/78	7##	5.	5.714	10.	5.	3.571	1.89	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)		03/17/75-05/15/78	7##	5.	7.143	20.	5.	32.143	5.669	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		03/17/75-05/15/78	7	6.	10.614	32.	0.8	133.375	11.549	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		03/17/75-05/15/78	7##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		03/17/75-05/15/78	7	20.	32.857	90.	10.	823.81	28.702	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/10/74-06/12/79	39##	50.	424.359	6000.	50.	1070904.184	1034.845	50.	50.	300.	1300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/10/74-06/12/79	39##	1.699	2.1	3.778	1.699	0.337	0.581	1.699	1.699	2.477	3.114
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	125.856								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		09/10/74-06/12/79	41	0.3	1.363	8.8	0.05	5.106	2.26	0.05	0.1	1.85	3.84
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		09/10/74-06/12/79	41	0.24	1.099	7.5	0.005	2.819	1.679	0.032	0.1	1.8	3.519
71900 MERCURY, TOTAL (UG/L AS HG)		03/17/75-05/15/78	7##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0008

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	42	8	0.19	10	5	0.50	17	1	0.06	15	2	0.13			
00400 PH	Fresh Chronic	9.	40	0	0.00	10	0	0.00	16	0	0.00	14	0	0.00			
	Other-Lo Lim.	6.5	40	28	0.70	10	5	0.50	16	12	0.75	14	11	0.79			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	41	0	0.00	10	0	0.00	16	0	0.00	15	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	26	0	0.00	5	0	0.00	9	0	0.00	12	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	15	0	0.00	5	0	0.00	7	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00				1	0	0.00	3	0	0.00			
	Drinking Water	50.	4	0	0.00				1	0	0.00	3	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.	7	0	0.00				2	0	0.00	5	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	1	0.14				2	0	0.00	5	1	0.20			
	Drinking Water	1300.	7	0	0.00				2	0	0.00	5	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	15.	7	2	0.29				2	0	0.00	5	2	0.40			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	100.	7	0	0.00				2	0	0.00	5	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	5000.	7	0	0.00				2	0	0.00	5	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	39	14	0.36	10	6	0.60	16	3	0.19	13	5	0.38			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	2.	7	0	0.00				2	0	0.00	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: RICH0009

NPS Station ID: RICH0009 LAT/LON: 37.340281/ -77.338059 Agency: 21MDEXP Date Created: 06/27/81
Location: J-76 KINGSLAND CREEK / JAMES RIVER FIPS State/County: 24990 MARYLAND/
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 73077722002157
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: CHESAPEAKE BAY ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 13.20 On/Off RF1:
RF3 Index: 02080206147202.89 RF3 Mile Point: 3.68 Distance from RF3: 0.02 On/Off RF3:
Description:
J-76 KINGSLAND CREEK / JAMES RIVER

Parameter Inventory for Station: RICH0009

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: RICH0010

NPS Station ID: RICH0010 LAT/LON: 37.341392/ -77.442503 Agency: 21VASWCB Date Created: / /
Location: RT. 616 BRIDGE S OF CHESTER FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ASH006.38 /VA2-02BX0030/VA2-4X0030
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 22.50 On/Off RF1:
RF3 Index: 02080207116900.70 RF3 Mile Point: 1.73 Distance from RF3: 0.00 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: ASHTON CREEK SECTION: 02B TOPO MAP #: 0133 TOPO MAP NAME: CHESTER, VA

Parameter Inventory for Station: RICH0010

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/19/73-09/19/73	4	21.95	20.975	25.6	14.4	24.709	4.971	**	**	**	**
00300	OXYGEN, DISSOLVED	MG/L	04/19/73-09/19/73	4	6.7	6.65	9.2	4.	4.837	2.199	**	**	**	**
00400	PH (STANDARD UNITS)		04/19/73-09/19/73	4	6.5	6.575	6.8	6.5	0.022	0.15	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)		04/19/73-09/19/73	4	6.5	6.558	6.8	6.5	0.023	0.151	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/19/73-09/19/73	4	0.316	0.277	0.316	0.158	0.006	0.079	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/19/73-09/19/73	4	0.8	0.812	1.599	0.05	0.64	0.8	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		04/19/73-09/19/73	4##	0.005	0.041	0.15	0.005	0.005	0.073	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		04/19/73-09/19/73	4	0.145	0.699	2.5	0.005	1.447	1.203	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/19/73-09/19/73	4	1.5	2.05	4.599	0.6	3.308	1.819	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-09/19/73	4	250.	262.5	500.	50.	48958.333	221.265	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/19/73-09/19/73	4	2.301	2.25	2.699	1.699	0.231	0.48	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	177.828								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/19/73-09/19/73	4##	0.175	0.8	2.8	0.05	1.792	1.339	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/19/73-09/19/73	4	0.2	0.812	2.799	0.05	1.766	1.329	**	**	**	**

** - Less 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: RICH0010

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	1	0.25	2	1	0.50				2	0	0.00			
00400	PH	Fresh Chronic	9.	4	0	0.00	2	0	0.00				2	0	0.00			
		Other-Lo Lim.	6.5	4	3	0.75	2	1	0.50				2	2	1.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	2	0	0.00				2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00	2	0	0.00				2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	4	2	0.50	2	0	0.00				2	2	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: RICH0011

NPS Station ID: RICH0011 LAT/LON: 37.357504/ -77.302782 Agency: 21VASWCB Date Created: / /
Location: BUOY 137 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS087.01 /VA2-02AX0134/VA2-4X0134
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 2.770 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004500.00 RF3 Mile Point: 0.20 Distance from RF3: 0.21 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02A TOPO MAP #: 0138 TOPO MAP NAME: HOPEWELL, VA

Parameter Inventory for Station: RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	147	22.8	21.646	32.6	0.	67.904	8.24	7.88	17.2	28.5	30.8
00070	TURBIDITY, (JACKSON CANDLE UNITS)	06/04/75-07/07/94	20	12.	13.26	33.	7.1	41.28	6.425	7.4	8.025	15.	21.8
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/07/94-12/15/98	54	16.6	20.428	154.	5.8	409.31	20.231	10.6	12.975	22.	27.65
00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	9##	0.105	0.221	0.7	0.09	0.06	0.245	0.09	0.09	0.353	0.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	109	217.	231.073	464.	106.	5859.328	76.546	138.	169.5	290.5	337.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/94-12/15/98	54	186.5	209.111	419.	106.	5379.346	73.344	121.5	154.25	256.75	321.5
00096	SALINITY AT 25 DEGREES C (MG/ML)	09/08/94-11/18/98	33	0.	0.006	0.2	0.	0.001	0.035	0.	0.	0.	0.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-12/15/98	102	8.35	8.732	14.2	4.9	4.138	2.034	6.6	7.275	9.65	12.
00300	OXYGEN, DISSOLVED MG/L	05/26/74-07/07/94	44	7.55	7.655	12.6	4.1	2.353	1.534	5.6	6.625	8.575	9.5
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	69	2.	2.036	5.	0.5	1.444	1.202	0.5	1.	3.	4.
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	85	12.	13.304	77.	0.3	83.937	9.162	5.	8.	18.	21.4
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	148	7.5	7.503	9.1	6.49	0.152	0.39	7.1	7.23	7.71	8.
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	148	7.5	7.353	9.1	6.49	0.175	0.418	7.1	7.23	7.71	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	148	0.032	0.044	0.324	0.001	0.002	0.043	0.01	0.019	0.059	0.079
00403	PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	55	7.2	7.269	8.	6.6	0.107	0.327	6.76	7.1	7.5	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	55	7.2	7.152	8.	6.6	0.121	0.348	6.76	7.1	7.5	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	55	0.063	0.071	0.251	0.01	0.003	0.055	0.02	0.032	0.079	0.175
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	58	48.	50.379	76.	28.	141.783	11.907	36.	41.75	59.	69.2
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	08/16/83-10/03/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	84	138.	145.726	263.	87.	1565.358	39.565	100.	116.25	168.	203.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	84	34.5	36.214	98.	9.	210.243	14.5	21.	27.25	42.75	57.5
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	84	107.	109.512	207.	21.	1495.265	38.669	67.	85.	131.5	166.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/81-10/03/83	4	176.	174.5	200.	146.	705.	26.552	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	93	19.	21.36	149.	1.5	343.317	18.529	8.	14.	24.	33.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	93	4.	4.892	15.	0.	10.282	3.207	1.5	3.	6.	8.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	90	14.	16.628	134.	0.	293.571	17.134	4.1	9.	20.	27.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	97	0.11	0.157	0.65	0.005	0.014	0.119	0.05	0.075	0.22	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	96	0.02	0.03	0.2	0.005	0.001	0.035	0.005	0.01	0.03	0.07
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	96	0.33	0.367	1.04	0.07	0.035	0.188	0.16	0.243	0.455	0.67
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	08/16/83-10/03/83	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	96	0.5	0.572	1.199	0.1	0.066	0.257	0.3	0.4	0.7	1.
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-10/03/83	3	0.8	0.8	1.	0.6	0.04	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: RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	70	0.1	0.109	0.4	0.05	0.003	0.052	0.06	0.08	0.12	0.17
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	08/16/83-10/03/83	3##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-07/07/94	17	0.07	0.135	0.8	0.	0.037	0.193	0.	0.04	0.155	0.44
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-08/20/96	42	5.5	5.829	10.	2.1	5.037	2.244	3.2	3.95	7.775	9.7
00900 HARDNESS, TOTAL (MG/L AS CACO3)	07/07/94-12/15/98	54	62.	64.222	116.	26.	298.063	17.264	43.	51.75	71.25	89.5
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	79	12.	14.329	41.	2.5	70.91	8.421	6.	8.	20.	27.
00945 SULFATE, TOTAL (MG/L AS SO4)	07/07/94-12/15/98	54	18.	22.426	62.	9.	151.042	12.29	10.	13.75	29.25	39.
01002 ARSENIC, TOTAL (UG/L AS AS)	05/04/76-10/28/82	3##	1.	1.167	2.	0.5	0.583	0.764	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/04/76-10/28/82	3##	5.	3.5	5.	0.5	6.75	2.598	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	06/04/75-10/28/82	7##	5.	3.071	5.	0.5	5.786	2.405	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	06/04/75-10/28/82	7	10.	11.429	20.	5.	39.286	6.268	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	06/04/75-10/28/82	7	3.	4.357	10.	0.5	13.56	3.682	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	06/04/75-05/22/78	3##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	12.5	20.	50.	5.	450.	21.213	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	06/04/75-10/28/82	7	20.	22.143	70.	5.	540.476	23.248	**	**	**	**
31503 COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	05/26/74-05/26/74	1	15000.	15000.	15000.	15000.	0.	0.	**	**	**	**
31503 LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	05/26/74-05/26/74	1	4.176	4.176	4.176	4.176	0.	0.	**	**	**	**
31503 GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35			GEOMETRIC MEAN =	15000.								
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-10/03/83	3	930.	1253.333	2400.	430.	1048633.333	1024.028	**	**	**	**
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-10/03/83	3	2.968	2.994	3.38	2.633	0.14	0.374	**	**	**	**
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	986.403								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	106	101.5	968.34	16000.	9.	8627910.322	2937.33	9.	20.	330.	2200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	106	2.005	2.083	4.204	0.954	0.697	0.835	0.954	1.301	2.519	3.342
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	121.013								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	41	50.	204.976	1500.	23.	125618.424	354.427	50.	50.	150.	700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	41	1.699	1.995	3.176	1.362	0.198	0.445	1.699	1.699	2.151	2.845
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	98.835								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/16/83-10/03/83	4	31.	31.025	38.5	23.6	48.763	6.983	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/83-10/03/83	4	18.25	16.85	20.2	10.7	18.87	4.344	**	**	**	**
39100 BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	10/21/97-10/21/97	2	8.	8.	8.	8.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-10/03/83	4	0.1	0.125	0.3	0.	0.022	0.15	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/26/74-04/24/79	26##	0.05	0.073	0.2	0.05	0.001	0.035	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	80	0.05	0.056	0.14	0.01	0.001	0.023	0.03	0.04	0.068	0.089
71900 MERCURY, TOTAL (UG/L AS HG)	06/04/75-10/28/82	7##	0.15	0.193	0.25	0.15	0.003	0.053	**	**	**	**

** - Less 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: RICH0011

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	20	0	0.00	10	0	0.00	3	0	0.00	7	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	54	2	0.04	15	0	0.00	23	2	0.09	16	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	102	0	0.00	43	0	0.00	28	0	0.00	31	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	44	0	0.00	20	0	0.00	8	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	148	1	0.01	65	1	0.02	36	0	0.00	47	0	0.00			
	Other-Lo Lim.	6.5	148	1	0.01	65	1	0.02	36	0	0.00	47	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	55	0	0.00	15	0	0.00	23	0	0.00	17	0	0.00			
	Other-Lo Lim.	6.5	55	0	0.00	15	0	0.00	23	0	0.00	17	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	96	0	0.00	33	0	0.00	31	0	0.00	32	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	96	0	0.00	33	0	0.00	31	0	0.00	32	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	3	0	0.00									
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	79	0	0.00	25	0	0.00	27	0	0.00	27	0	0.00			
	Drinking Water	250.	79	0	0.00	25	0	0.00	27	0	0.00	27	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	54	0	0.00	15	0	0.00	23	0	0.00	16	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00				1	0	0.00	2	0	0.00			
	Drinking Water	50.	3	0	0.00				1	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						

& - 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: RICH0011

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01034 CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00				2	0	0.00	5	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	2	0.29				2	1	0.50	5	1	0.20			
	Drinking Water	1300.	7	0	0.00				2	0	0.00	5	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	15.	7	0	0.00				2	0	0.00	5	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			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
	Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	5000.	7	0	0.00				2	0	0.00	5	0	0.00			
31503 COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	1	1	1.00							1	1	1.00			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	3	1	0.33	3	1	0.33									
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	106	41	0.39	47	14	0.30	28	15	0.54	31	12	0.39			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	41	10	0.24	19	4	0.21	7	2	0.29	15	4	0.27			
39100 BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	2	0	0.00				2	0	0.00						
	Drinking Water	6.	2	2	1.00				2	2	1.00						
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	4	2	0.50	3	2	0.67				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	2.	7	0	0.00				2	0	0.00	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

Annual Analysis for 1974 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	7	24.	24.386	28.9	17.2	16.311	4.039	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	7	7.5	7.386	7.5	7.1	0.025	0.157	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	7	7.5	7.359	7.5	7.1	0.026	0.16	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	7	0.032	0.044	0.079	0.032	0.	0.018	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	2	135.	135.	183.	87.	4608.	67.882	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	2	67.	67.	68.	66.	2.	1.414	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	2	68.	68.	115.	21.	4418.	66.468	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	6	15.	18.	35.	11.	74.4	8.626	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	6	7.	8.667	15.	5.	15.467	3.933	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	6	7.	9.333	28.	0.	95.467	9.771	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	6	0.2	0.183	0.3	0.1	0.006	0.075	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	6##	0.005	0.009	0.03	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	6	0.45	0.492	0.9	0.16	0.076	0.276	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	6	0.45	0.633	1.199	0.3	0.166	0.408	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	5	11.	11.	16.	5.	18.5	4.301	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	6##	0.05	0.067	0.1	0.05	0.001	0.026	**	**	**	**

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Annual Analysis for 1975 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	8	27.5	25.688	30.	17.2	21.007	4.583	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	7	20.	21.614	77.	0.3	683.808	26.15	**	**	**	**
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	9	7.5	7.4	7.5	7.2	0.017	0.132	7.2	7.25	7.5	7.5
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	9	7.5	7.381	7.5	7.2	0.018	0.134	7.2	7.25	7.5	7.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	9	0.032	0.042	0.063	0.032	0.	0.014	0.032	0.032	0.057	0.063
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	5	123.	121.8	149.	100.	387.7	19.69	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	5	54.	55.6	98.	21.	769.3	27.736	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	5	51.	66.2	110.	46.	746.2	27.317	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	7	15.	16.286	32.	6.	80.238	8.958	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	7	4.	5.143	14.	0.	19.81	4.451	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	7	8.	11.143	28.	4.	62.143	7.883	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	9	0.1	0.128	0.3	0.05	0.006	0.075	0.05	0.1	0.15	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	9	0.02	0.017	0.03	0.005	0.	0.008	0.005	0.01	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	9	0.3	0.277	0.4	0.07	0.013	0.112	0.07	0.185	0.385	0.4
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	9	0.4	0.367	0.7	0.1	0.043	0.206	0.1	0.2	0.55	0.7
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	9	9.	10.333	30.	4.	59.	7.681	4.	6.	10.	30.
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	9##	0.05	0.047	0.05	0.03	0.	0.007	0.03	0.045	0.05	0.05

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Annual Analysis for 1976 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	4	16.35	15.125	22.2	5.6	59.409	7.708	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	4##	2.	5.5	16.	2.	49.	7.	**	**	**	**
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	4	7.5	7.475	7.6	7.3	0.016	0.126	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	4	7.5	7.461	7.6	7.3	0.016	0.127	**	**	**	**

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Annual Analysis for 1976 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	4	0.032	0.035	0.05	0.025	0.	0.011	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	4	125.	124.25	130.	117.	29.583	5.439	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	4	58.	53.	62.	34.	164.667	12.832	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	4	68.5	71.25	90.	58.	180.917	13.451	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	4	7.	9.5	20.	4.	51.667	7.188	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	4	1.	1.5	4.	0.	3.667	1.915	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	4	5.	8.	20.	2.	66.667	8.165	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	4	0.01	0.009	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	4	0.38	0.355	0.5	0.16	0.025	0.16	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	4	0.4	0.4	0.5	0.3	0.007	0.082	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	4	8.5	8.5	10.	7.	1.667	1.291	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	4	0.055	0.058	0.07	0.05	0.	0.01	**	**	**	**

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Annual Analysis for 1978 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	6	6.5	10.817	28.5	0.	124.782	11.171	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	6	17.5	16.	24.	4.	53.2	7.294	**	**	**	**
00400 PH (STANDARD UNITS)	05/26/74-12/15/98	6	7.9	7.85	8.3	7.5	0.099	0.315	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	6	7.889	7.761	8.3	7.5	0.109	0.33	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	6	0.013	0.017	0.032	0.005	0.	0.012	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	5	145.	137.4	168.	88.	934.8	30.574	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	5	39.	38.8	64.	23.	250.7	15.834	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	5	104.	98.6	128.	65.	537.8	23.191	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	5	10.	12.6	22.	9.	28.8	5.367	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	5	3.	4.2	12.	1.	20.7	4.55	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	5	9.	8.4	19.	0.	48.8	6.986	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	6	0.1	0.117	0.2	0.1	0.002	0.041	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	6	0.02	0.022	0.04	0.01	0.	0.013	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	6	0.335	0.353	0.6	0.19	0.022	0.148	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	6	0.25	0.283	0.4	0.2	0.01	0.098	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	6	15.	13.833	21.	4.	40.567	6.369	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	6	0.05	0.062	0.14	0.02	0.002	0.047	**	**	**	**

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Annual Analysis for 1979 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	05/26/74-12/15/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	1	90.	90.	90.	90.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	1	47.	47.	47.	47.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

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Annual Analysis for 1979 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

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Annual Analysis for 1980 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	3	22.	23.	28.	19.	21.	4.583	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	3	225.	243.667	337.	169.	7317.333	85.541	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	3	2.	2.333	4.	1.	2.333	1.528	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	3	18.	15.	19.	8.	37.	6.083	**	**	**	**
00400 PH (STANDARD UNITS)	05/26/74-12/15/98	3	8.2	8.233	8.5	8.	0.063	0.252	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	3	8.2	8.188	8.5	8.	0.066	0.258	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	3	0.006	0.006	0.01	0.003	0.	0.003	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	3	142.	161.	231.	110.	3931.	62.698	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	3	28.	32.	43.	25.	93.	9.644	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	3	114.	129.	188.	85.	2821.	53.113	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	26.	27.667	34.	23.	32.333	5.686	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	8.	7.667	9.	6.	2.333	1.528	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	20.	20.	25.	15.	25.	5.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	3##	0.05	0.133	0.3	0.05	0.021	0.144	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	3	0.03	0.033	0.06	0.01	0.001	0.025	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	3	0.25	0.47	1.04	0.12	0.248	0.498	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	3	0.3	0.4	0.6	0.3	0.03	0.173	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	3##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**

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Annual Analysis for 1981 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	3	27.	23.5	31.	12.5	94.75	9.734	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	3	241.	252.	301.	214.	1983.	44.531	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	3	4.	3.667	5.	2.	2.333	1.528	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	3	17.	17.	22.	12.	25.	5.	**	**	**	**
00400 PH (STANDARD UNITS)	05/26/74-12/15/98	3	7.4	7.9	9.1	7.2	1.09	1.044	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	3	7.4	7.461	9.1	7.2	1.379	1.174	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	3	0.04	0.035	0.063	0.001	0.001	0.031	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	3	155.	165.333	197.	144.	782.333	27.97	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	3	41.	39.	48.	28.	103.	10.149	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	3	116.	126.333	149.	114.	386.333	19.655	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	9.	10.	16.	5.	31.	5.568	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	3.	3.	4.	2.	1.	1.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	3	5.	7.	14.	2.	39.	6.245	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	3	0.3	0.283	0.5	0.05	0.051	0.225	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	3	0.07	0.073	0.13	0.02	0.003	0.055	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	3	0.67	0.66	0.88	0.43	0.051	0.225	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	3	0.8	0.733	0.8	0.6	0.013	0.115	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	3	0.1	0.2	0.4	0.1	0.03	0.173	**	**	**	**

** - Less 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 RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	5	23.	20.5	29.5	11.5	56.625	7.525	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	5	192.	201.4	256.	165.	1236.3	35.161	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	5	3.	2.8	3.	2.	0.2	0.447	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	5	10.	14.	23.	8.	43.5	6.595	**	**	**	**
00400 PH (STANDARD UNITS)		05/26/74-12/15/98	5	7.2	7.2	7.5	6.7	0.11	0.332	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	5	7.2	7.091	7.5	6.7	0.125	0.353	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	5	0.063	0.081	0.2	0.032	0.005	0.069	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	5	140.	139.8	172.	100.	690.2	26.272	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	5	31.	30.6	36.	26.	14.8	3.847	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	5	112.	109.2	136.	74.	527.2	22.961	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	5	16.	18.4	29.	12.	43.3	6.58	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	5	3.	3.8	7.	2.	3.7	1.924	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	5	13.	14.6	25.	9.	36.8	6.066	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	5	0.3	0.32	0.4	0.2	0.007	0.084	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	5	0.02	0.028	0.05	0.01	0.	0.016	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	5	0.36	0.388	0.58	0.17	0.025	0.159	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/26/74-12/15/98	5	0.7	0.66	0.8	0.4	0.023	0.152	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/15/98	5	0.2	0.18	0.2	0.1	0.002	0.045	**	**	**	**

** - Less 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 RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	5	26.	24.7	28.	20.5	13.7	3.701	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	5	285.	246.6	325.	158.	6595.3	81.211	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	2	3.5	3.5	5.	2.	4.5	2.121	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	2	10.	10.	14.	6.	32.	5.657	**	**	**	**
00400 PH (STANDARD UNITS)		05/26/74-12/15/98	5	7.8	7.7	8.	7.1	0.125	0.354	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	5	7.8	7.56	8.	7.1	0.15	0.387	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	5	0.016	0.028	0.079	0.01	0.001	0.029	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	3	60.	58.333	62.	53.	22.333	4.726	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	2	138.5	138.5	161.	116.	1012.5	31.82	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	2	36.5	36.5	42.	31.	60.5	7.778	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	2	102.	102.	119.	85.	578.	24.042	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	5	21.	21.8	31.	15.	45.7	6.76	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	5	6.	6.2	10.	2.	9.2	3.033	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	2	21.	21.	23.	19.	8.	2.828	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	6##	0.05	0.084	0.2	0.005	0.006	0.074	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	5	0.1	0.106	0.2	0.01	0.009	0.093	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	5	0.4	0.49	0.8	0.18	0.065	0.254	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/26/74-12/15/98	5	0.7	0.76	1.1	0.6	0.043	0.207	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/15/98	5	0.1	0.09	0.1	0.05	0.001	0.022	**	**	**	**

** - Less 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 RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	14	26.5	24.3	32.1	12.5	45.045	6.712	12.7	18.8	30.025	31.8
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/07/94-12/15/98	6	12.5	14.667	25.	7.4	38.067	6.17	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	11	255.	256.	331.	182.	1901.4	43.605	187.2	223.	290.	323.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/07/94-12/15/98	6	227.	223.667	266.	178.	1144.667	33.833	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-12/15/98	13	8.8	8.169	10.9	5.3	3.042	1.744	5.42	6.6	9.25	10.58
00310 BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	6	2.65	3.017	4.6	1.9	1.046	1.023	**	**	**	**

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Annual Analysis for 1994 - Station RICH0011

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00340	COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	6	16.5	16.	19.	12.	7.6	2.757	**	**	**	**
00400	PH (STANDARD UNITS)		05/26/74-12/15/98	14	7.45	7.469	8.	7.13	0.096	0.309	7.135	7.15	7.718	7.96
00400	CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	14	7.441	7.378	8.	7.13	0.104	0.323	7.135	7.15	7.717	7.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	14	0.036	0.042	0.074	0.01	0.001	0.025	0.011	0.019	0.071	0.073
00403	PH, LAB, STANDARD UNITS	SU	05/26/74-12/15/98	6	7.15	7.167	7.3	7.1	0.007	0.082	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS		05/26/74-12/15/98	6	7.147	7.161	7.3	7.1	0.007	0.082	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	6	0.071	0.069	0.079	0.05	0.	0.012	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	6	50.	50.333	58.	44.	29.867	5.465	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	6	151.5	160.	202.	132.	765.2	27.662	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	6	37.	37.667	60.	23.	156.667	12.517	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	6	114.5	122.333	146.	108.	291.467	17.072	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	6	16.	14.25	22.	1.5	46.375	6.81	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	6	4.	3.333	5.	1.5	2.167	1.472	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	6	11.5	11.083	18.	1.5	30.042	5.481	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	6	0.265	0.355	0.65	0.22	0.033	0.182	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	6	0.07	0.055	0.08	0.02	0.001	0.027	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	6	0.285	0.292	0.4	0.16	0.007	0.082	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/26/74-12/15/98	6	1.	0.933	1.1	0.6	0.039	0.197	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/15/98	6	0.115	0.115	0.17	0.06	0.001	0.035	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/07/94-12/15/98	6	65.	65.5	71.	59.	23.1	4.806	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER	MG/L	05/26/74-12/15/98	6	21.5	21.	27.	15.	19.6	4.427	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)		07/07/94-12/15/98	6	25.	25.667	35.	18.	51.867	7.202	**	**	**	**
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/07/94-12/15/98	14	45.	91.	330.	9.	11659.692	107.98	9.	19.5	125.	325.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/07/94-12/15/98	14	1.653	1.701	2.519	0.954	0.248	0.498	0.954	1.29	2.089	2.512
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		50.182									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		05/26/74-12/15/98	6	0.05	0.055	0.1	0.03	0.001	0.027	**	**	**	**

** - Less 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 RICH0011

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	20	23.2	20.955	32.6	6.	68.949	8.304	7.33	15.85	27.525	31.07
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/07/94-12/15/98	12	17.15	19.033	32.	11.6	39.622	6.295	12.14	13.95	23.5	30.89
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	13	185.	228.	339.	156.	5639.	75.093	157.2	166.5	313.5	338.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/07/94-12/15/98	12	185.	209.917	369.	139.	4700.265	68.558	140.5	163.5	257.5	346.8
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-12/15/98	20	8.5	8.725	12.4	4.9	4.836	2.199	6.02	6.9	11.	12.
00310	BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	12	2.5	2.117	3.1	0.5	1.063	1.031	0.5	1.05	3.	3.07
00340	COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	12	16.	15.25	24.	9.	17.477	4.181	9.3	11.5	18.	22.2
00400	PH (STANDARD UNITS)		05/26/74-12/15/98	20	7.32	7.297	8.38	6.49	0.163	0.404	6.607	7.11	7.405	7.882
00400	CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	20	7.319	7.128	8.38	6.49	0.193	0.439	6.607	7.11	7.405	7.882
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	20	0.048	0.074	0.324	0.004	0.006	0.081	0.014	0.039	0.078	0.257
00403	PH, LAB, STANDARD UNITS	SU	05/26/74-12/15/98	12	7.15	7.25	7.8	6.7	0.119	0.345	6.76	6.95	7.5	7.77
00403	CONVERTED PH, LAB, STANDARD UNITS		05/26/74-12/15/98	12	7.147	7.133	7.8	6.7	0.134	0.366	6.76	6.95	7.5	7.77
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	12	0.071	0.074	0.2	0.016	0.003	0.055	0.017	0.032	0.114	0.177
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	12	45.5	49.833	71.	37.	123.424	11.11	37.9	41.75	61.	69.5
00500	RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	12	138.	146.333	227.	107.	1271.152	35.653	107.3	116.5	173.75	212.9
00505	RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	12	36.	33.333	50.	11.	127.515	11.292	14.	25.	42.75	47.9
00510	RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	12	109.	113.	184.	72.	1145.091	33.839	72.6	84.	140.75	172.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	12	23.	22.167	30.	15.	18.152	4.26	15.3	19.25	24.75	28.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	12	5.	5.25	9.	3.	4.205	2.05	3.	3.	6.75	8.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	12	16.	16.917	25.	12.	13.902	3.728	12.3	14.25	19.75	23.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	12	0.22	0.213	0.35	0.08	0.007	0.085	0.086	0.135	0.28	0.338
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	12	0.02	0.036	0.13	0.01	0.001	0.036	0.01	0.013	0.04	0.115
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	12	0.32	0.303	0.69	0.08	0.024	0.155	0.104	0.17	0.345	0.603
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/26/74-12/15/98	12	0.5	0.592	0.9	0.4	0.03	0.173	0.4	0.5	0.7	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/15/98	12	0.11	0.103	0.14	0.05	0.001	0.025	0.056	0.085	0.12	0.134

** - Less 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 RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/07/94-12/15/98	12	60.	66.	100.	40.	325.818	18.05	43.	52.	79.75	97.6
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	12	13.5	16.	35.	8.	70.	8.367	8.	9.5	21.75	32.6
00945	SULFATE, TOTAL (MG/L AS SO4)	07/07/94-12/15/98	12	19.	20.583	38.	12.	54.447	7.379	12.3	15.5	24.	35.6
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	21	230.	1588.762	16000.	9.	14994350.39	3872.254	11.2	42.5	745.	7840.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	21	2.362	2.323	4.204	0.954	0.819	0.905	1.024	1.628	2.871	3.847
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		210.22									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	12	0.065	0.067	0.11	0.02	0.001	0.026	0.026	0.05	0.087	0.107

** - Less 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 RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	24	21.9	20.275	30.1	4.4	69.091	8.312	5.25	16.85	28.2	29.55
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/07/94-12/15/98	12	18.2	28.317	154.	5.8	1600.709	40.009	7.03	12.3	24.25	115.3
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	24	176.5	183.75	303.	111.	2083.935	45.65	126.5	156.5	206.5	253.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/94-12/15/98	12	169.5	168.167	289.	106.	2592.879	50.92	109.	120.75	185.5	266.8
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-12/15/98	24	8.2	8.833	13.4	6.1	4.614	2.148	6.85	7.175	9.375	12.75
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	12##	0.75	1.25	3.	0.5	0.977	0.989	0.5	0.5	2.	3.
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	12	12.	11.917	23.	5.	23.356	4.833	5.3	7.75	13.75	20.9
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	24	7.29	7.346	8.32	6.83	0.093	0.305	7.07	7.123	7.518	7.715
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	24	7.29	7.266	8.32	6.83	0.1	0.316	7.07	7.123	7.517	7.715
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	24	0.051	0.054	0.148	0.005	0.001	0.031	0.019	0.03	0.076	0.085
00403	PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	12	7.35	7.408	8.	7.	0.088	0.297	7.03	7.2	7.65	7.94
00403	CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	12	7.347	7.329	8.	7.	0.095	0.308	7.03	7.2	7.65	7.94
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	12	0.045	0.047	0.1	0.01	0.001	0.027	0.012	0.023	0.063	0.094
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	12	45.5	44.583	69.	30.	117.356	10.833	30.6	35.	48.	65.1
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	12	124.	133.583	241.	88.	1842.447	42.924	89.5	102.25	142.5	224.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	12	26.5	26.583	42.	9.	100.083	10.004	10.2	21.	35.	41.4
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	12	100.5	107.	201.	67.	1362.364	36.91	68.5	78.75	113.25	185.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	21.	31.	149.	13.	1420.364	37.688	13.	14.75	24.	115.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	3.5	4.375	15.	1.5	11.96	3.458	1.95	3.	4.	12.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	16.5	26.583	134.	10.	1178.992	34.336	10.3	11.75	20.75	103.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.13	0.156	0.37	0.06	0.007	0.083	0.066	0.113	0.188	0.331
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.02	0.02	0.05	0.005	0.	0.013	0.007	0.01	0.02	0.047
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.335	0.318	0.44	0.1	0.009	0.097	0.139	0.248	0.4	0.434
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	12	0.5	0.533	0.9	0.3	0.026	0.161	0.33	0.4	0.6	0.84
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	12	0.095	0.102	0.19	0.07	0.001	0.032	0.073	0.08	0.11	0.169
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/07/94-12/15/98	12	59.5	57.	84.	26.	189.273	13.758	32.6	49.	63.5	78.9
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	12	10.5	10.792	22.	2.5	33.612	5.798	3.55	6.	13.5	21.4
00945	SULFATE, TOTAL (MG/L AS SO4)	07/07/94-12/15/98	12	14.	15.333	33.	9.	42.061	6.485	9.3	11.	16.75	29.4
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	24	230.	2316.5	16000.	9.	22126178.783	4703.847	14.5	34.5	1600.	12600.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	24	2.362	2.461	4.204	0.954	1.	1.	1.128	1.449	3.201	4.084
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		289.072									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	12	0.05	0.047	0.08	0.02	0.	0.015	0.023	0.04	0.05	0.074

** - 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 box-and-whisker plot

Annual Analysis for 1997 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	23	22.8	21.961	31.2	2.3	79.552	8.919	7.24	15.4	30.4	31.06
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/07/94-12/15/98	12	16.7	17.083	27.	10.7	20.167	4.491	11.36	13.825	19.275	25.77
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	21	238.	250.19	378.	131.	4969.162	70.492	146.6	204.	297.5	360.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/94-12/15/98	12	215.	222.833	351.	136.	3914.152	62.563	138.7	180.25	258.25	335.7

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Annual Analysis for 1997 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-12/15/98	21	7.9	8.648	14.2	6.1	5.543	2.354	6.24	7.	10.35	13.46
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	12	1.	1.333	2.	0.5	0.379	0.615	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	12	8.	8.75	18.	5.	12.932	3.596	5.	6.25	10.	16.2
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	23	7.44	7.466	8.16	6.8	0.095	0.309	7.004	7.32	7.71	7.842
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	23	7.44	7.36	8.16	6.8	0.107	0.327	7.004	7.32	7.71	7.842
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	23	0.036	0.044	0.158	0.007	0.001	0.035	0.015	0.019	0.048	0.101
00403	PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	12	7.5	7.475	8.	7.2	0.051	0.226	7.2	7.3	7.575	7.91
00403	CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	12	7.5	7.428	8.	7.2	0.054	0.231	7.2	7.3	7.575	7.91
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	12	0.032	0.037	0.063	0.01	0.	0.016	0.013	0.027	0.05	0.063
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	12	53.5	52.417	72.	28.	138.992	11.79	30.4	47.5	59.	69.3
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	12	141.	150.583	205.	102.	1141.356	33.784	105.9	120.	187.	201.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	12	37.	34.667	50.	14.	96.606	9.829	17.9	27.25	42.25	48.2
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	12	110.5	115.917	178.	75.	1015.72	31.87	76.2	88.75	138.75	170.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	20.	20.75	42.	5.	125.659	11.21	5.9	12.25	24.	41.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	4.	3.792	8.	1.5	3.566	1.888	1.5	1.875	5.	7.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	15.5	16.917	35.	4.	91.902	9.587	4.6	10.	19.75	34.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.095	0.109	0.25	0.02	0.005	0.073	0.02	0.055	0.148	0.244
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.01	0.018	0.04	0.005	0.	0.014	0.005	0.006	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.43	0.384	0.67	0.11	0.034	0.186	0.113	0.183	0.53	0.64
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	12	0.5	0.55	1.1	0.3	0.052	0.228	0.3	0.4	0.7	0.98
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	12	0.09	0.092	0.17	0.06	0.001	0.029	0.06	0.065	0.1	0.149
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/07/94-12/15/98	12	68.	66.417	87.	43.	113.72	10.664	46.6	61.25	71.5	82.8
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	12	14.	17.333	34.	7.	64.061	8.004	8.2	12.	23.5	32.2
00945	SULFATE, TOTAL (MG/L AS SO4)	07/07/94-12/15/98	12	22.5	23.083	40.	10.	96.811	9.839	10.3	14.5	32.	37.9
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	23	78.	310.261	2200.	9.	295004.292	543.143	12.6	40.	210.	1100.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	23	1.892	1.993	3.342	0.954	0.442	0.664	1.075	1.602	2.322	3.041
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		98.409									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	12	0.06	0.061	0.08	0.03	0.	0.018	0.033	0.043	0.08	0.08

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Annual Analysis for 1998 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	24	25.7	23.163	32.2	6.7	69.406	8.331	7.9	16.575	30.7	31.65
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/07/94-12/15/98	12	14.7	20.158	57.	8.7	193.928	13.926	9.24	12.475	23.9	51.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	24	244.	250.667	464.	106.	11473.623	107.115	121.	151.	326.25	413.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/94-12/15/98	12	205.5	228.25	419.	115.	11640.932	107.893	116.8	124.5	327.25	402.8
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-12/15/98	24	8.95	9.017	12.6	6.6	2.876	1.696	6.95	7.725	10.35	11.95
00310	BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	12##	1.5	2.	4.	1.	1.455	1.206	1.	1.	3.	4.
00340	COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	12	10.5	11.708	22.	2.5	28.294	5.319	4.15	9.	15.75	21.1
00400	PH (STANDARD UNITS)	05/26/74-12/15/98	24	7.75	7.76	8.6	7.03	0.13	0.361	7.295	7.575	7.9	8.395
00400	CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	24	7.75	7.631	8.6	7.03	0.147	0.384	7.295	7.575	7.9	8.395
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	24	0.018	0.023	0.093	0.003	0.	0.02	0.004	0.013	0.027	0.052
00403	PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	12	6.9	7.008	7.6	6.6	0.114	0.337	6.63	6.7	7.35	7.54
00403	CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	12	6.9	6.906	7.6	6.6	0.125	0.354	6.63	6.7	7.35	7.54
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	12	0.126	0.124	0.251	0.025	0.006	0.077	0.03	0.046	0.2	0.236
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	12	47.5	53.917	76.	37.	246.083	15.687	37.3	40.25	72.5	75.7
00500	RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	12	161.5	167.25	263.	94.	3340.568	57.798	96.7	117.	226.5	255.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	12	30.5	31.75	56.	16.	118.568	10.889	16.	27.25	37.75	51.8
00510	RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	12	130.5	135.5	207.	67.	2691.364	51.878	73.	88.25	196.	205.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	23.5	30.833	112.	11.	734.697	27.105	11.9	17.	34.	91.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	6.	6.375	14.	1.5	9.778	3.127	2.25	4.25	8.	12.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	12	18.	24.5	98.	9.	597.	24.434	9.	12.25	26.75	79.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.055	0.053	0.13	0.02	0.001	0.034	0.02	0.02	0.06	0.121
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.02	0.021	0.04	0.005	0.	0.012	0.007	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	12	0.325	0.373	0.7	0.19	0.025	0.157	0.196	0.258	0.493	0.664

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Annual Analysis for 1998 - Station RICH0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	12	0.7	0.667	1.1	0.2	0.084	0.29	0.23	0.425	0.95	1.07
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	12	0.095	0.104	0.17	0.06	0.001	0.038	0.06	0.073	0.128	0.17
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/07/94-12/15/98	12	56.5	66.833	116.	41.	722.879	26.886	41.6	43.	91.25	111.5
00940	CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	12	13.	17.125	41.	2.5	161.46	12.707	3.55	6.	27.75	38.3
00945	SULFATE, TOTAL (MG/L AS SO4)	07/07/94-12/15/98	12	20.5	29.083	62.	10.	397.72	19.943	10.	10.25	51.5	59.3
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	24	68.	219.75	2200.	9.	200414.891	447.677	9.	9.	327.5	440.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/07/94-12/15/98	24	1.833	1.804	3.342	0.954	0.526	0.725	0.954	0.954	2.515	2.641
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		63.656									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	12	0.06	0.051	0.08	0.01	0.	0.018	0.016	0.04	0.06	0.074

** - 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 box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0011

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	65	28.3	27.028	32.6	2.9	27.625	5.256	21.48	26.	30.4	31.28
00070	TURBIDITY, (JACKSON CANDLE UNITS)		06/04/75-07/07/94	10	9.75	13.63	33.	7.4	68.778	8.293	7.4	7.85	19.25	31.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	45	271.	262.089	361.	147.	3289.81	57.357	182.	222.5	304.	337.8
00300	OXYGEN, DISSOLVED	MG/L	05/26/74-07/07/94	20	7.3	7.03	8.8	5.1	1.209	1.099	5.3	6.125	7.75	8.59
00310	BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	20	2.9	2.81	5.	0.5	1.257	1.121	1.1	2.	3.975	4.
00340	COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	26	15.	16.358	77.	0.3	187.607	13.697	5.5	10.	19.	22.6
00400	PH (STANDARD UNITS)		05/26/74-12/15/98	65	7.5	7.564	9.1	6.49	0.192	0.439	7.1	7.295	7.765	8.09
00400	CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	65	7.5	7.373	9.1	6.49	0.229	0.479	7.1	7.295	7.765	8.09
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	65	0.032	0.042	0.324	0.001	0.003	0.051	0.008	0.017	0.051	0.079
00403	PH, LAB, STANDARD UNITS	SU	05/26/74-12/15/98	15	7.4	7.38	8.	6.7	0.1	0.317	6.94	7.2	7.6	7.82
00403	CONVERTED PH, LAB, STANDARD UNITS		05/26/74-12/15/98	15	7.4	7.269	8.	6.7	0.113	0.337	6.94	7.2	7.6	7.82
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	15	0.04	0.054	0.2	0.01	0.002	0.046	0.016	0.025	0.063	0.127
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	18	57.	55.889	71.	40.	83.634	9.145	43.6	46.5	63.25	69.2
00500	RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	23	155.	161.435	227.	123.	897.257	29.954	127.8	132.	186.	206.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	23	35.	34.609	50.	16.	82.067	9.059	21.8	28.	42.	47.6
00510	RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	23	115.	126.826	197.	76.	812.059	28.497	93.2	109.	147.	172.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	30	16.5	18.917	42.	1.5	77.76	8.818	9.	14.	22.5	33.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	30	5.	5.317	14.	0.	9.732	3.12	1.55	3.75	7.	9.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	27	13.	13.833	34.	1.5	61.981	7.873	5.	8.	17.	28.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	34	0.1	0.135	0.4	0.005	0.01	0.1	0.05	0.05	0.205	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	33	0.03	0.05	0.2	0.005	0.003	0.051	0.007	0.02	0.07	0.13
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	33	0.34	0.4	0.9	0.16	0.037	0.191	0.18	0.26	0.54	0.696
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/26/74-12/15/98	33	0.7	0.63	1.1	0.2	0.071	0.266	0.2	0.45	0.8	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/15/98	22	0.1	0.107	0.2	0.05	0.002	0.039	0.053	0.093	0.12	0.184
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		05/19/80-08/20/96	15	7.7	7.04	10.	3.	6.314	2.513	3.48	4.5	9.	10.
00940	CHLORIDE,TOTAL IN WATER	MG/L	05/26/74-12/15/98	25	17.	16.96	35.	4.	60.29	7.765	7.4	9.5	22.5	27.4
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/26/74-07/07/94	19	50.	142.316	700.	23.	40973.895	202.42	45.	50.	100.	700.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/26/74-07/07/94	19	1.699	1.923	2.845	1.362	0.158	0.397	1.653	1.699	2.	2.845
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	83.732								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		05/26/74-12/15/98	26	0.05	0.055	0.1	0.03	0.	0.017	0.037	0.04	0.06	0.083

** - Less 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: 10/15 to 3/15 - Station RICH0011

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/26/74-12/15/98	36	12.35	11.894	20.8	0.	33.971	5.828	4.82	6.9	17.875	19.79
00070	TURBIDITY, (JACKSON CANDLE UNITS)		06/04/75-07/07/94	3	14.	12.367	15.	8.1	13.903	3.729	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	31	241.	245.484	464.	106.	9812.725	99.059	127.	167.	331.	390.8
00300	OXYGEN, DISSOLVED	MG/L	05/26/74-07/07/94	8	9.4	9.45	12.6	6.1	3.16	1.778	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C	MG/L	05/26/74-12/15/98	27	1.	1.533	4.6	0.5	1.146	1.071	0.5	0.5	2.	3.
00340	COD, .25N K2CR2O7	MG/L	06/04/75-12/15/98	30	12.	12.467	23.	2.	33.775	5.812	5.1	8.	18.	20.8
00400	PH (STANDARD UNITS)		05/26/74-12/15/98	36	7.335	7.34	8.2	6.7	0.101	0.318	6.907	7.143	7.5	7.773
00400	CONVERTED PH (STANDARD UNITS)		05/26/74-12/15/98	36	7.335	7.236	8.2	6.7	0.112	0.335	6.907	7.142	7.5	7.773
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	36	0.046	0.058	0.2	0.006	0.002	0.042	0.017	0.032	0.072	0.125
00403	PH, LAB, STANDARD UNITS	SU	05/26/74-12/15/98	23	7.2	7.209	8.	6.6	0.09	0.3	6.74	7.1	7.4	7.56
00403	CONVERTED PH, LAB, STANDARD UNITS		05/26/74-12/15/98	23	7.2	7.113	8.	6.6	0.1	0.315	6.74	7.1	7.4	7.56
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/26/74-12/15/98	23	0.063	0.077	0.251	0.01	0.003	0.057	0.028	0.04	0.079	0.183
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		05/26/74-12/15/98	23	47.	50.13	76.	30.	197.209	14.043	33.6	40.	58.	75.
00500	RESIDUE, TOTAL (MG/L)		05/26/74-12/15/98	30	148.	158.733	263.	88.	2203.857	46.945	107.9	120.	189.25	238.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)		05/26/74-12/15/98	30	33.5	35.067	60.	13.	157.237	12.539	21.	26.5	42.25	56.9
00510	RESIDUE, TOTAL FIXED (MG/L)		05/26/74-12/15/98	30	117.	123.667	207.	58.	1890.437	43.479	69.5	87.5	143.	200.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/26/74-12/15/98	31	17.	24.065	149.	4.	869.129	29.481	5.6	13.	23.	27.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/26/74-12/15/98	31	3.	5.145	15.	1.5	15.953	3.994	1.5	3.	7.	13.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		05/26/74-12/15/98	31	13.	18.903	134.	0.	731.157	27.04	2.	9.	18.	21.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/26/74-12/15/98	31	0.15	0.197	0.65	0.02	0.024	0.154	0.024	0.08	0.29	0.48
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		05/26/74-12/15/98	31	0.02	0.021	0.08	0.005	0.	0.018	0.005	0.01	0.03	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: 10/15 to 3/15 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	31	0.4	0.455	1.04	0.2	0.034	0.185	0.292	0.33	0.5	0.7
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	31	0.4	0.565	1.1	0.3	0.066	0.256	0.32	0.4	0.7	1.08
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	27	0.1	0.118	0.4	0.05	0.005	0.069	0.06	0.08	0.12	0.2
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-08/20/96	14	4.95	5.364	10.	3.2	3.595	1.896	3.45	3.95	5.775	9.35
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	27	14.	16.426	41.	2.5	96.321	9.814	6.	8.	24.	32.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	7	100.	421.429	1500.	50.	374047.619	611.594	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	7	2.	2.188	3.176	1.699	0.415	0.645	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	154.089								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	27	0.06	0.068	0.14	0.01	0.001	0.028	0.038	0.05	0.08	0.102

** - Less 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: 3/16 to 6/30 - Station RICH0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/26/74-12/15/98	46	22.7	21.674	31.3	6.	36.689	6.057	10.66	19.3	25.5	28.99
00070 TURBIDITY, (JACKSON CANDLE UNITS)	06/04/75-07/07/94	7	12.	13.114	22.	7.1	22.268	4.719	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	33	171.	175.242	278.	119.	1283.877	35.831	127.	152.5	200.	217.6
00300 OXYGEN, DISSOLVED MG/L	05/26/74-07/07/94	16	7.9	7.538	9.4	4.1	1.485	1.219	5.78	6.7	8.3	8.84
00310 BOD, 5 DAY, 20 DEG C MG/L	05/26/74-12/15/98	22	2.	1.95	5.	0.5	1.217	1.103	0.65	1.	3.	3.07
00340 COD, .25N K2CR2O7 MG/L	06/04/75-12/15/98	29	10.	11.431	24.	2.	36.281	6.023	4.	7.	16.	20.
00400 PH (STANDARD UNITS)	05/26/74-12/15/98	47	7.5	7.544	8.38	7.03	0.114	0.337	7.108	7.3	7.8	8.
00400 CONVERTED PH (STANDARD UNITS)	05/26/74-12/15/98	47	7.5	7.436	8.38	7.03	0.125	0.354	7.108	7.3	7.8	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	47	0.032	0.037	0.093	0.004	0.001	0.023	0.01	0.016	0.05	0.078
00403 PH, LAB, STANDARD UNITS SU	05/26/74-12/15/98	17	7.3	7.253	7.8	6.7	0.133	0.364	6.7	6.9	7.5	7.8
00403 CONVERTED PH, LAB, STANDARD UNITS	05/26/74-12/15/98	17	7.3	7.117	7.8	6.7	0.152	0.39	6.7	6.9	7.5	7.8
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/26/74-12/15/98	17	0.05	0.076	0.2	0.016	0.004	0.06	0.016	0.032	0.126	0.2
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	05/26/74-12/15/98	17	45.	44.882	63.	28.	78.735	8.873	32.8	38.	50.	59.8
00500 RESIDUE, TOTAL (MG/L)	05/26/74-12/15/98	31	116.	121.484	183.	87.	576.791	24.016	90.6	100.	141.	153.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	05/26/74-12/15/98	31	34.	38.516	98.	9.	360.725	18.993	17.	26.	44.	65.6
00510 RESIDUE, TOTAL FIXED (MG/L)	05/26/74-12/15/98	31	87.	82.968	119.	21.	555.699	23.573	47.2	68.	103.	109.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/26/74-12/15/98	32	20.5	21.031	43.	6.	91.838	9.583	7.9	12.5	26.	35.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/26/74-12/15/98	32	4.	4.25	9.	0.	5.306	2.304	0.65	3.	6.	7.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/26/74-12/15/98	32	16.5	16.781	35.	4.	71.273	8.442	6.3	9.	20.	30.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/26/74-12/15/98	32	0.105	0.142	0.35	0.02	0.008	0.089	0.05	0.075	0.2	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	32	0.01	0.016	0.04	0.005	0.	0.01	0.005	0.01	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/26/74-12/15/98	32	0.225	0.248	0.5	0.07	0.014	0.117	0.103	0.16	0.338	0.436
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/26/74-12/15/98	32	0.5	0.519	1.199	0.1	0.06	0.244	0.2	0.3	0.675	0.77
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/15/98	21	0.1	0.1	0.2	0.05	0.001	0.036	0.06	0.08	0.11	0.164
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-08/20/96	13	5.	4.931	8.	2.1	2.991	1.729	2.46	3.3	6.3	7.48
00940 CHLORIDE,TOTAL IN WATER MG/L	05/26/74-12/15/98	27	9.	9.796	30.	2.5	28.197	5.31	4.8	6.	12.	15.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	15	100.	183.333	1400.	50.	116666.667	341.565	50.	50.	200.	680.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/26/74-07/07/94	15	2.	1.996	3.146	1.699	0.159	0.398	1.699	1.699	2.301	2.639
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	99.114								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/26/74-12/15/98	27	0.05	0.045	0.08	0.02	0.	0.017	0.02	0.03	0.05	0.064

** - Less 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: RICH0012

NPS Station ID: RICH0012 LAT/LON: 37.363059/ -77.267781 Agency: 21VASWCB Date Created: 10/16/93
Location: JAMES RIVER AVOBE GRAVELLY RUN (HPA 1) FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS084.63
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02A TOPO MAP #: 0138 TOPO MAP NAME: HOPEWELL, VA

Parameter Inventory for Station: RICH0012

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)	06/25/92-06/25/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01004 ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	06/25/92-06/25/92	3##	0.125	0.125	0.125	0.125	0.	0.	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	1	34.	34.	34.	34.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/25/92-06/25/92	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/25/92-06/25/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/25/92-06/25/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
01069 NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	06/25/92-06/25/92	3##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01073 THALLIUM,TISSUE,WET WEIGHT,MG/KG	06/25/92-06/25/92	3##	1.	4.5	11.5	1.	36.75	6.062	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/25/92-06/25/92	1	94.	94.	94.	94.	0.	0.	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/25/92-06/25/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01149 SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	06/25/92-06/25/92	3	0.45	0.433	0.57	0.28	0.021	0.146	**	**	**	**
34252 BERYLLIUM WET WGTTISMG/KG	06/25/92-06/25/92	3##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34258 B-BHC-BETA WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34263 DELTA BENZENE HEXACHLORIDE WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34360 ENDOSULFAN, BETA WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34365 ENDOSULFAN, ALPHA WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34664 PCB - 1221 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34667 PCB - 1232 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34669 PCB - 1248 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34670 PCB - 1260 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34674 PCB - 1016 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34680 ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34682 CHLORDANE(TECH MIX & METABS),TISSUEWET WGTT,MG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34685 ENDRIN WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34686 HEPTACHLOR EPOXIDE WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34687 HEPTACHLOR WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688 HEXACHLOROBENZENE WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34689 PCB - 1242 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34690 PCB - 1254 WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34691 TOXAPHENE WET WGTTISMG/KG	06/25/92-06/25/92	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
38744 CHLORPYRIFOS-METHYL TISWETWGTMG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/25/92-06/25/92	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

Parameter Inventory for Station: RICH0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39105	PERCENT FAT HEXANE EXTRACTION	06/25/92-06/25/92	2	2.1	2.1	2.6	1.6	0.5	0.707	**	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/25/92-06/25/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/92-06/25/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/25/92-06/25/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	06/25/92-06/25/92	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	06/25/92-06/25/92	1##	250.	250.	250.	250.	0.	0.	**	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	06/25/92-06/25/92	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/25/92-06/25/92	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	06/25/92-06/25/92	3##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	3##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	3	8.	12.333	22.	7.	70.333	8.386	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	06/25/92-06/25/92	3##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	06/25/92-06/25/92	3##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	06/25/92-06/25/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	06/25/92-06/25/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	06/25/92-06/25/92	3	6.	5.667	6.	5.	0.333	0.577	**	**	**	**
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	06/25/92-06/25/92	3##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	06/25/92-06/25/92	2##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	06/25/92-06/25/92	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

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

Station Inventory for Station: RICH0013

NPS Station ID: RICH0013 LAT/LON: 37.366670/ -77.250005 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION J71 - JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPA2050
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004512.50 RF3 Mile Point: 14.72 Distance from RF3: 0.05 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0013

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0014

NPS Station ID: RICH0014 LAT/LON: 37.368615/ -77.334171 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION B54 - JAMES RIVER
FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): XPA2196
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 5.620 Distance from RF1: 17.20 On/Off RF1: ON
RF3 Index: 02080206184600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0014

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/19/64-08/11/71	419	26.9	26.66	32.	21.8	4.936	2.222	23.4	25.	28.2	29.4
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/19/64-08/19/64	2	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/71-08/11/71	373	5.7	5.798	9.4	2.3	1.603	1.266	4.1	4.9	6.7	7.5

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: RICH0014

			Total	Exceed	Prop.	7/01-10/14			10/15- 3/15			3/16- 6/30			n/a		
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.	373	35	0.09	190	34	0.18				183	1	0.01			

& - 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: RICH0015

NPS Station ID: RICH0015 LAT/LON: 37.378115/ -77.353366 Agency: 21VASWCB Date Created: / /
Location: DUTCH GAP, BUOY 150 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS094.96 /VA2-02AX0135/VA2-4X0135
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 6.510 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004503.92 RF3 Mile Point: 5.21 Distance from RF3: 0.07 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02A TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	91	27.8	26.884	36.1	11.1	26.495	5.147	20.04	22.9	31.1	33.28
00078	TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-06/28/83	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/28/83-10/26/98	49	225.	242.49	470.	121.	6015.463	77.559	148.	183.	296.5	350.
00096	SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-10/26/98	50	7.5	7.552	9.8	5.8	1.025	1.012	6.21	6.875	8.4	8.99
00300	OXYGEN, DISSOLVED MG/L	07/22/68-06/28/83	42	6.8	6.888	12.	3.4	2.701	1.643	4.93	6.	7.85	8.94
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/28/83	15	1.9	2.413	6.2	1.	1.981	1.408	1.24	1.6	2.8	5.48
00340	COD, .25N K2CR2O7 MG/L	06/28/83-06/28/83	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/68-10/26/98	93	7.46	7.457	8.42	6.2	0.135	0.367	7.008	7.2	7.675	7.98
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	93	7.46	7.295	8.42	6.2	0.161	0.402	7.008	7.2	7.675	7.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	93	0.035	0.051	0.631	0.004	0.005	0.069	0.01	0.021	0.063	0.098
00403	PH, LAB, STANDARD UNITS SU	03/20/69-05/26/74	6	7.15	7.033	7.3	6.5	0.103	0.32	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/20/69-05/26/74	6	7.147	6.922	7.3	6.5	0.117	0.343	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-05/26/74	6	0.071	0.12	0.316	0.05	0.011	0.105	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-05/26/74	6	40.	37.167	45.	24.	64.967	8.06	**	**	**	**
00480	SALINITY - PARTS PER THOUSAND	06/28/83-06/28/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	8	150.5	191.75	509.	86.	17321.071	131.61	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	8	46.	77.625	312.	21.	9145.125	95.63	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	8	117.	114.125	197.	32.	2056.696	45.351	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/28/83	22	17.5	18.682	45.	6.	87.465	9.352	7.3	10.75	24.	31.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/28/83	22	4.	5.227	14.	0.	12.946	3.598	1.3	3.	7.25	12.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	22	13.5	13.727	35.	2.	71.827	8.475	2.3	6.	19.25	25.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/19/69-06/28/83	36	0.26	0.277	0.6	0.05	0.018	0.136	0.1	0.193	0.385	0.479
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/19/69-06/28/83	36	0.02	0.028	0.18	0.005	0.001	0.034	0.005	0.006	0.04	0.076
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/19/69-06/28/83	36	0.385	0.405	1.159	0.07	0.062	0.25	0.094	0.2	0.555	0.732
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/19/69-06/28/83	36	0.6	0.712	1.599	0.2	0.148	0.384	0.3	0.4	1.	1.289
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/28/83-06/28/83	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/28/83-06/28/83	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/28/83-06/28/83	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/05/70-08/30/74	17	9.	8.176	15.	3.	10.529	3.245	3.8	5.	9.5	13.4
01002	ARSENIC, TOTAL (UG/L AS AS)	05/02/72-05/02/72	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-08/20/72	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-05/03/73	8##	5.	5.625	10.	5.	3.125	1.768	**	**	**	**

** - Less 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: RICH0015

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01042 COPPER, TOTAL (UG/L AS CU)	04/21/70-05/03/73	8##	5.	7.5	20.	5.	28.571	5.345	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/02/72-10/04/72	5##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/03/73	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/21/70-05/03/73	8##	5.	7.5	20.	5.	28.571	5.345	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	13	1500.	7891.923	43000.	36.	158561714.077	12592.129	37.2	430.	11000.	35000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-09/09/70	13	3.176	3.186	4.633	1.556	0.976	0.988	1.57	2.633	4.041	4.525
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	1533.775								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	51	130.	1588.353	16000.	9.	18695104.353	4323.784	20.	20.	490.	4800.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	51	2.114	2.219	4.204	0.954	0.739	0.86	1.301	1.301	2.69	3.662
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	165.725								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	29	100.	2829.31	54000.	50.	99827592.365	9991.376	50.	50.	1250.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	29	2.	2.477	4.732	1.699	0.726	0.852	1.699	1.699	3.088	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	299.577								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-08/30/74	34##	0.05	0.087	0.3	0.05	0.003	0.058	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-08/30/74	34	0.05	0.055	0.1	0.01	0.001	0.023	0.03	0.04	0.07	0.1
71900 MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/03/73	7##	0.25	0.479	1.6	0.25	0.253	0.503	**	**	**	**

** - Less 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: RICH0015

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	42	2	0.05	25	1	0.04	1	0	0.00	16	1	0.06			
00400 PH	Fresh Chronic	9.	93	0	0.00	56	0	0.00	6	0	0.00	31	0	0.00			
	Other-Lo Lim.	6.5	93	1	0.01	56	0	0.00	6	0	0.00	31	1	0.03			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	1	0	0.00				5	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	1	0	0.00				5	1	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	36	0	0.00	20	0	0.00	1	0	0.00	15	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	36	0	0.00	20	0	0.00	1	0	0.00	15	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	17	0	0.00	10	0	0.00				7	0	0.00			
	Drinking Water	250.	17	0	0.00	10	0	0.00				7	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			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	0&	0	0.00												
	Drinking Water	5.	0&	0	0.00												
01034 CHROMIUM, TOTAL	Drinking Water	100.	8	0	0.00	4	0	0.00				4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	8	1	0.13	4	0	0.00				4	1	0.25			
	Drinking Water	1300.	8	0	0.00	4	0	0.00				4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	5	0	0.00	4	0	0.00				1	0	0.00			
	Drinking Water	15.	5	0	0.00	4	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			
01092 ZINC, TOTAL	Fresh Acute	120.	8	0	0.00	4	0	0.00				4	0	0.00			
	Drinking Water	5000.	8	0	0.00	4	0	0.00				4	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	7	0.54	8	3	0.38				5	4	0.80			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	51	22	0.43	32	12	0.38	5	3	0.60	14	7	0.50			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	29	14	0.48	17	9	0.53	1	1	1.00	11	4	0.36			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	5	0	0.00				2	0	0.00			
	Drinking Water	2.	7	0	0.00	5	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

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	25	6.4	6.616	10.	3.8	1.736	1.318	5.	5.8	7.3	8.52
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	18.	18.	32.	6.	68.8	8.295	6.8	10.	24.	31.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	4.	4.545	13.	0.	11.673	3.417	0.4	2.	6.	11.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	15.	14.	25.	2.	52.8	7.266	2.8	7.	20.	24.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		06/19/69-06/28/83	20	0.305	0.299	0.5	0.05	0.016	0.125	0.15	0.2	0.398	0.495
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	20	0.025	0.038	0.18	0.005	0.002	0.04	0.005	0.013	0.04	0.088
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	20	0.43	0.462	1.159	0.08	0.082	0.286	0.082	0.265	0.613	0.94
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		06/19/69-06/28/83	20	0.7	0.74	1.599	0.2	0.122	0.35	0.31	0.5	1.	1.199
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	17	200.	841.176	6000.	50.	2115386.029	1454.437	50.	50.	1000.	2800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	17	2.301	2.426	3.778	1.699	0.493	0.702	1.699	1.699	3.	3.396
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	266.918								

** - 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 box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		06/19/69-06/28/83	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		06/19/69-06/28/83	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	1	5100.	5100.	5100.	5100.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	1	3.708	3.708	3.708	3.708	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	5100.								

** - Less 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: 3/16 to 6/30 - Station RICH0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	16	7.2	7.206	12.	3.4	4.178	2.044	4.1	6.125	8.525	10.04
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	17.	19.364	45.	7.	113.855	10.67	7.2	11.	23.	41.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	5.	5.909	14.	1.	14.491	3.807	1.4	3.	8.	13.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	11	13.	13.455	35.	2.	97.873	9.893	2.2	6.	15.	33.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		06/19/69-06/28/83	15	0.24	0.26	0.6	0.1	0.021	0.146	0.1	0.1	0.3	0.522
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	15	0.01	0.017	0.09	0.005	0.	0.022	0.005	0.005	0.02	0.054
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		06/19/69-06/28/83	15	0.34	0.343	0.72	0.07	0.032	0.18	0.1	0.19	0.49	0.612
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		06/19/69-06/28/83	15	0.5	0.689	1.599	0.2	0.199	0.446	0.26	0.4	1.039	1.54
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	11	100.	5695.455	54000.	50.	259861227.273	16120.212	50.	50.	1800.	44400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-06/28/83	11	2.	2.442	4.732	1.699	1.087	1.043	1.699	1.699	3.255	4.542
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	276.736								

** - Less 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: RICH0016

NPS Station ID: RICH0016 LAT/LON: 37.378115/ -77.353366 Agency: 21VASWCB Date Created: 11/08/80
Location: JAMES RIVER, DUTCH GAP BUOY 150 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL2712
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 6.510 Distance from RF1: 13.30 On/Off RF1: OFF
RF3 Index: 02080206168802.83 RF3 Mile Point: 3.44 Distance from RF3: 0.07 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED
SPECIAL STUDY 70-040 DES LAB SHEETS 3946-3949,3952,3956-3965 APR-AUG 1971/

Parameter Inventory for Station: RICH0016

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71918 ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/27/71-04/27/71	16##	0.235	0.211	0.385	0.035	0.011	0.105	0.039	[illegible]	0.283	0.336
71930 MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	16	0.075	0.09	0.22	0.03	0.003	0.052	0.03	0.06	0.11	0.178
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	16	1.13	2.172	9.86	0.24	6.056	2.461	0.604	0.847	2.56	6.815
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	16	5.565	6.24	11.4	3.08	5.613	2.369	3.409	4.145	7.762	9.881
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	16	98.5	101.413	131.7	64.	307.54	17.537	73.8	91.5	112.8	130.65
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	16	2.65	2.959	7.69	0.78	2.748	1.658	1.004	2.125	3.29	5.639
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	16	1.18	1.466	4.09	0.16	1.116	1.056	0.216	0.823	1.888	3.411
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	16	1.	1.	1.	1.	0.	0.	1.	1.	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

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

Station Inventory for Station: RICH0017

NPS Station ID: RICH0017 LAT/LON: 37.379170/ -77.323059 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, BUOY 147 (OLD BUOY 145) FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS093.21
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02A TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0017

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/14/94-10/26/98	51	26.8	26.229	34.1	16.5	22.941	4.79	19.1	22.5	30.5	32.38
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		07/28/94-10/26/98	47	227.	243.319	473.	123.	5921.005	76.948	150.	182.	305.	349.8
00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	50	7.5	7.628	9.6	5.6	1.278	1.13	6.1	6.875	8.6	9.4
00400	PH (STANDARD UNITS)		07/14/94-10/26/98	51	7.48	7.529	8.56	6.85	0.139	0.372	7.124	7.23	7.77	7.948
00400	CONVERTED PH (STANDARD UNITS)		07/14/94-10/26/98	51	7.48	7.399	8.56	6.85	0.156	0.395	7.124	7.23	7.77	7.948
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/14/94-10/26/98	51	0.033	0.04	0.141	0.003	0.001	0.029	0.011	0.017	0.059	0.075
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	52	73.	1457.981	16000.	2.	18136485.274	4258.695	9.	20.	430.	1700.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	52	1.862	2.036	4.204	0.301	0.869	0.932	0.954	1.301	2.63	3.23
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				GEOMETRIC MEAN =	108.518								

** - Less 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: RICH0017

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400	PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	19	0.37	32	10	0.31	5	1	0.20	15	8	0.53			

& - 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 1994 - Station RICH0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	68.	120.875	460.	9.	23590.411	153.592	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	1.833	1.768	2.663	0.954	0.359	0.599	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		58.602									

** - Less 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 RICH0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	110.	3751.556	16000.	9.	48416035.528	6958.163	9.	30.	8700.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	2.041	2.361	4.204	0.954	1.467	1.211	0.954	1.452	3.675	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		229.817									

** - Less 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 RICH0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	285.	2946.417	16000.	2.	37401879.538	6115.708	7.4	20.	1397.5	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	2.352	2.298	4.204	0.301	1.457	1.207	0.601	1.301	3.095	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		198.784									

** - Less 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 RICH0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	110.	235.091	1300.	9.	137024.091	370.168	9.	18.	230.	1106.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	2.041	1.931	3.114	0.954	0.507	0.712	0.954	1.255	2.362	2.995
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		85.398									

** - 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

Annual Analysis for 1998 - Station RICH0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	45.	261.75	1700.	9.	256569.477	506.527	9.	20.	274.5	1427.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	1.653	1.802	3.23	0.954	0.53	0.728	0.954	1.301	2.372	3.131
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		63.386									

** - Less 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: RICH0018

NPS Station ID: RICH0018 LAT/LON: 37.379170/ -77.348615 Agency: 1113JAWQ Date Created: / /
Location: BELOW HATCHER ISLAND R"150" J06 FIPS State/County: 51000 VIRGINIA/
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): JAMES J06 /J06 /J6
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 1 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 6.380 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206004600.54 RF3 Mile Point: 2.62 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0018

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/27/68-11/04/71	21	25.6	23.205	28.9	7.8	26.072	5.106	14.96	21.05	26.7	27.68
00070 TURBIDITY, (JACKSON CANDLE UNITS)	05/11/71-07/23/71	4	12.	11.375	12.5	9.	2.563	1.601	**	**	**	**
00077 TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	4	21.	21.	24.	18.	6.667	2.582	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/27/68-11/02/71	20	7.7	7.87	12.	5.7	2.098	1.448	6.41	6.925	8.75	9.92
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-11/04/71	9	1.8	1.556	2.9	0.2	0.623	0.789	0.2	0.9	1.9	2.9
00400 PH (STANDARD UNITS)	07/27/68-11/02/71	19	8.1	8.095	9.	6.5	0.487	0.698	6.7	7.8	8.7	8.8
00400 CONVERTED PH (STANDARD UNITS)	07/27/68-11/02/71	19	8.1	7.442	9.	6.5	0.937	0.968	6.7	7.8	8.7	8.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/27/68-11/02/71	19	0.008	0.036	0.316	0.001	0.007	0.082	0.002	0.002	0.016	0.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/69-11/04/71	18	0.23	0.341	1.5	0.04	0.122	0.349	0.053	0.108	0.442	0.78
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-11/04/71	19	0.59	0.644	1.42	0.1	0.125	0.353	0.2	0.3	0.942	1.
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/20/69-11/04/71	19	0.4	0.408	0.8	0.02	0.064	0.252	0.02	0.14	0.64	0.7
00650 PHOSPHATE, TOTAL (MG/L AS PO4)	04/21/70-11/04/71	16	0.1	0.158	0.47	0.05	0.017	0.13	0.05	0.063	0.238	0.4
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	03/20/69-11/04/71	19	0.03	0.075	0.28	0.01	0.008	0.09	0.01	0.02	0.07	0.26
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	4	5.2	6.8	12.8	4.	16.347	4.043	**	**	**	**
00690 CARBON, TOTAL (MG/L AS C)	10/21/71-11/04/71	4	11.9	13.45	19.	11.	13.877	3.725	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-05/05/70	1	1272.	1272.	1272.	1272.	0.	0.	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/27/68-11/04/71	24	91.	43011.917	240000.	30.	8158297567.123	90323.295	30.	36.	23525.	240000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/27/68-11/04/71	24	1.959	2.747	5.38	1.477	2.282	1.51	1.477	1.556	4.371	5.38
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	558.263								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	9	700.	27711.111	240000.	100.	6339456111.111	79620.702	100.	100.	3500.	240000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	9	2.845	2.936	5.38	2.	1.282	1.132	2.	2.	3.543	5.38
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	863.413								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/02/71-11/02/71	1	240000.	240000.	240000.	240000.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/02/71-11/02/71	1	5.38	5.38	5.38	5.38	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	240000.								
32210 CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	3	8.3	6.3	8.3	2.3	12.	3.464	**	**	**	**

** - Less 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: RICH0018

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00				2	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	20	0	0.00	10	0	0.00	3	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: RICH0018

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400 PH	Fresh Chronic	9.	19	1	0.05	10	1	0.10	2	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	19	1	0.05	10	0	0.00	2	1	0.50	7	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	19	0	0.00	8	0	0.00	4	0	0.00	7	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	1	1.00							1	1	1.00			
	Drinking Water	250.	1	1	1.00							1	1	1.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	24	7	0.29	10	0	0.00	7	7	1.00	7	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	9	5	0.56	3	1	0.33	4	4	1.00	2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	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: RICH0019

NPS Station ID: RICH0019 LAT/LON: 37.380698/ -77.422503 Agency: 21VASWCB Date Created: / /
Location: RT. 1 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-PCT002.46 /VA2-07-X0187/VA2-4X0187
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 12.40 On/Off RF1:
RF3 Index: 02080207008003.51 RF3 Mile Point: 3.57 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: PROCTORS CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0019

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	221	15.4	14.901	31.	0.5	54.885	7.408	4.42	8.95	21.1	24.48
00061	FLOW, STREAM, INSTANTANEOUS	CFS	04/21/82-03/28/85	13	8.	10.	28.	1.	92.5	9.618	1.	2.5	17.5	26.8
00070	TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-06/20/90	22	20.	30.923	182.	3.	1387.49	37.249	8.39	13.725	33.	68.6
00091	FLOW, MINIMUM OF FLOW RANGE	CFS	05/18/82-05/18/82	1	58.	58.	58.	58.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	104	58.5	65.058	517.	36.	2435.938	49.355	41.5	47.	67.	76.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/27/89-06/20/90	8	64.	67.25	78.	61.	45.071	6.714	**	**	**	**
00300	OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	219	9.2	9.477	15.	0.8	4.473	2.115	7.	8.	10.9	12.2
00310	BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	161	2.	2.051	25.	0.5	4.893	2.212	1.	1.	2.	3.72
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	113	22.	22.628	48.	2.	63.825	7.989	11.4	18.	28.	32.6
00400	PH (STANDARD UNITS)		06/28/68-06/20/90	222	6.5	6.549	8.9	4.8	0.355	0.596	5.93	6.1	7.	7.3
00400	CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	222	6.5	6.146	8.9	4.8	0.518	0.72	5.93	6.1	7.	7.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	222	0.316	0.714	15.849	0.001	2.698	1.643	0.05	0.1	0.794	1.181
00403	PH, LAB, STANDARD UNITS	SU	10/24/68-06/20/90	30	6.1	6.123	7.1	4.8	0.288	0.537	5.5	5.675	6.5	6.8
00403	CONVERTED PH, LAB, STANDARD UNITS		10/24/68-06/20/90	30	6.1	5.782	7.1	4.8	0.409	0.639	5.5	5.675	6.5	6.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/24/68-06/20/90	30	0.794	1.654	15.849	0.079	8.592	2.931	0.158	0.316	2.124	3.162
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		10/24/68-06/20/90	30	6.5	7.033	24.	2.	21.62	4.65	2.	3.	9.25	11.
00500	RESIDUE, TOTAL (MG/L)		10/24/68-06/20/90	30	75.	94.433	532.	45.	7181.771	84.745	55.9	67.75	90.	116.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)		10/24/68-06/20/90	30	32.	34.133	80.	15.	253.637	15.926	19.	21.75	43.5	49.6
00510	RESIDUE, TOTAL FIXED (MG/L)		04/28/69-06/20/90	28	44.	60.25	452.	3.	6194.12	78.703	23.9	33.75	56.75	74.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	160	8.	13.016	248.	0.5	604.435	24.585	2.5	3.	12.75	23.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	160	3.	4.697	38.	0.	25.875	5.087	1.1	2.5	6.	9.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	160	4.	9.178	210.	0.	442.677	21.04	1.1	2.5	8.	16.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/20/90	178##	0.05	0.117	1.	0.01	0.019	0.139	0.05	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	180##	0.005	0.024	1.599	0.005	0.015	0.121	0.005	0.005	0.01	0.039
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	167	0.2	0.327	2.409	0.005	0.156	0.394	0.07	0.13	0.32	0.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/20/90	178	0.5	0.634	3.	0.05	0.232	0.482	0.2	0.3	0.8	1.21
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/23/77-06/21/79	13	0.13	0.29	0.9	0.025	0.079	0.282	0.051	0.11	0.53	0.82
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	107	0.1	0.117	0.7	0.05	0.012	0.111	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	109	0.04	0.063	0.55	0.005	0.005	0.074	0.01	0.02	0.06	0.15
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		04/27/75-06/20/90	148	10.	10.682	25.	1.	20.169	4.491	5.96	7.025	14.	17.1
00900	HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-06/20/90	18	17.	17.167	30.	12.	18.382	4.287	12.	14.	18.	22.8
00940	CHLORIDE,TOTAL IN WATER	MG/L	06/22/75-06/20/90	19	9.	10.421	34.	6.	37.702	6.14	7.	7.	11.	15.
00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-06/20/90	17	6.	6.941	17.	4.	11.684	3.418	4.	4.	8.5	12.2

** - 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: RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	18##	0.05	0.064	0.15	0.05	0.001	0.03	0.05	0.05	0.063	0.114
00955 SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	15	9.7	9.66	13.6	6.1	4.19	2.047	6.46	8.7	10.8	12.46
01002 ARSENIC, TOTAL (UG/L AS AS)	03/15/71-03/28/85	10##	1.75	1.65	2.5	0.5	0.836	0.914	0.5	0.875	2.5	2.5
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	2##	2.263	2.263	4.2	0.325	7.508	2.74	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-03/28/85	12##	5.	4.292	10.	0.5	7.248	2.692	0.5	1.625	5.	8.5
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2##	0.058	0.058	0.065	0.05	0.	0.011	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2	3.675	3.675	5.75	1.6	8.611	2.934	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	07/15/69-03/28/85	21##	5.	6.929	20.	0.5	15.857	3.982	5.	5.	10.	10.
01042 COPPER, TOTAL (UG/L AS CU)	07/15/69-03/28/85	20##	5.	7.5	30.	5.	40.789	6.387	5.	5.	5.	19.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	2	2.97	2.97	5.04	0.9	8.57	2.927	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	07/15/69-04/28/71	4	1429.	1446.75	2029.	900.	285460.25	534.285	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-03/28/85	18##	5.	7.472	30.	0.5	50.22	7.087	1.4	5.	10.	21.
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	2##	29.025	29.025	57.4	0.65	1610.281	40.128	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	03/24/70-04/28/71	3	60.	56.667	60.	50.	33.333	5.774	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/17/77	6##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2##	1.025	1.025	1.4	0.65	0.281	0.53	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	07/15/69-03/28/85	21	10.	16.905	50.	5.	198.69	14.096	5.	5.	25.	46.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	2	14.65	14.65	25.2	4.1	222.605	14.92	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/28/68-10/27/70	15	11000.	99452.667	1100000.	230.	80259073506.667	283300.324	350.	2100.	43000.	584000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/28/68-10/27/70	15	4.041	3.934	6.041	2.362	0.978	0.989	2.525	3.322	4.633	5.645
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	8581.719								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	197	100.	979.695	80000.	50.	33695912.152	5804.818	50.	50.	500.	1600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	197	2.	2.254	4.903	1.699	0.399	0.632	1.699	1.699	2.699	3.204
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	179.54								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	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

Parameter Inventory for Station: RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	71	0.2	0.465	4.	0.04	0.442	0.665	0.05	0.05	0.6	1.44
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	71	0.12	0.375	3.	0.005	0.292	0.54	0.012	0.07	0.4	1.
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-03/28/85	19##	0.25	0.239	0.25	0.15	0.001	0.032	0.15	0.25	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	2##	0.063	0.063	0.1	0.025	0.003	0.053	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: RICH0019

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	22	2	0.09	4	0	0.00	6	2	0.33	12	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	219	2	0.01	64	2	0.03	86	0	0.00	69	0	0.00			
00400 PH	Fresh Chronic	9.	222	0	0.00	64	0	0.00	86	0	0.00	72	0	0.00			
	Other-Lo Lim.	6.5	222	128	0.58	64	37	0.58	86	48	0.56	72	43	0.60			
00403 PH, LAB	Fresh Chronic	9.	30	0	0.00	5	0	0.00	11	0	0.00	14	0	0.00			
	Other-Lo Lim.	6.5	30	24	0.80	5	3	0.60	11	8	0.73	14	13	0.93			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	180	1	0.01	47	1	0.02	74	0	0.00	59	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	167	0	0.00	45	0	0.00	70	0	0.00	52	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	13	0	0.00	2	0	0.00	4	0	0.00	7	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	19	0	0.00	1	0	0.00	8	0	0.00	10	0	0.00			
	Drinking Water	250.	19	0	0.00	1	0	0.00	8	0	0.00	10	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	17	0	0.00	1	0	0.00	7	0	0.00	9	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	18	0	0.00	2	0	0.00	7	0	0.00	9	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	2	0	0.00	1	0	0.00	7	0	0.00			
	Drinking Water	50.	10	0	0.00	2	0	0.00	1	0	0.00	7	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	4&	1	0.25	1	0	0.00				3	1	0.33			
	Drinking Water	5.	4&	1	0.25	1	0	0.00				3	1	0.33			
01034 CHROMIUM, TOTAL	Drinking Water	100.	21	0	0.00	4	0	0.00	6	0	0.00	11	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	20	2	0.10	4	1	0.25	6	1	0.17	10	0	0.00			
	Drinking Water	1300.	20	0	0.00	4	0	0.00	6	0	0.00	10	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	18	0	0.00	3	0	0.00	7	0	0.00	8	0	0.00			
	Drinking Water	15.	18	2	0.11	3	0	0.00	7	1	0.14	8	1	0.13			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	100.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00							2	0	0.00			
	Drinking Water	100.	2	0	0.00							2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	21	0	0.00	4	0	0.00	6	0	0.00	11	0	0.00			
	Drinking Water	5000.	21	0	0.00	4	0	0.00	6	0	0.00	11	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	15	12	0.80	7	7	1.00	3	2	0.67	5	3	0.60			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	197	89	0.45	54	37	0.69	82	27	0.33	61	25	0.41			
34356 ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	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

EPA Water Quality Criteria Analysis for Station: RICH0019

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	3.	1	0	0.00							1	0	0.00			
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	19	0	0.00	4	0	0.00	7	0	0.00	8	0	0.00			
	Drinking Water	2.	19	0	0.00	4	0	0.00	7	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

Annual Analysis for 1968 - Station RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	5	25.6	24.56	27.8	18.3	15.713	3.964	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	5	7.5	7.7	10.	6.5	1.825	1.351	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-06/20/90	5	6.3	6.52	7.3	6.	0.357	0.597	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	5	6.3	6.276	7.3	6.	0.432	0.657	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	5	0.501	0.53	1.	0.05	0.214	0.463	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	1	6.	6.	6.	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 box-and-whisker plot

Annual Analysis for 1969 - Station RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	4	20.	18.2	26.1	6.7	70.273	8.383	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	4	8.5	8.8	11.2	7.	3.227	1.796	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	4	2.25	2.625	5.1	0.9	3.129	1.769	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-06/20/90	4	6.15	6.225	6.8	5.8	0.256	0.506	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	4	6.022	6.04	6.8	5.8	0.301	0.549	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	4	0.951	0.911	1.585	0.158	0.609	0.781	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	2	14.	14.	18.	10.	32.	5.657	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	3	3.	4.333	7.	3.	5.333	2.309	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	2	9.	9.	11.	7.	8.	2.828	**	**	**	**

** - Less 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 RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	11	14.4	13.364	22.2	4.4	43.251	6.577	4.52	6.1	20.	21.98
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	11	9.2	8.682	12.	0.8	9.262	3.043	2.04	7.6	11.2	11.86
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	6	2.25	6.017	25.	0.9	87.462	9.352	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-06/20/90	11	6.3	6.255	7.	5.5	0.297	0.545	5.52	5.8	6.7	7.
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	11	6.3	5.988	7.	5.5	0.375	0.612	5.52	5.8	6.7	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	11	0.501	1.028	3.162	0.1	1.117	1.057	0.1	0.2	1.585	3.032
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	5	12.	19.2	50.	9.	299.7	17.312	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	5	6.	12.6	38.	5.	202.8	14.241	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	5	5.	6.6	12.	4.	11.8	3.435	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/20/90	5	0.3	0.356	1.	0.07	0.141	0.375	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	5##	0.005	0.011	0.03	0.005	0.	0.011	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	5	0.15	0.148	0.22	0.07	0.004	0.064	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/20/90	5	0.8	0.9	2.	0.3	0.435	0.66	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	2	40100.	40100.	80000.	200.	3184020000.	56427.121	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	2	3.602	3.602	4.903	2.301	3.385	1.84	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		4000.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/21/79	5	0.1	0.258	0.9	0.04	0.13	0.361	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/21/79	5	0.1	0.292	0.85	0.05	0.118	0.344	**	**	**	**

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	11	17.8	15.764	26.1	2.8	67.029	8.187	3.02	7.8	23.3	25.54
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	12	8.6	9.158	11.9	7.2	2.239	1.496	7.38	8.	10.45	11.75
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.35	6.392	7.	5.9	0.154	0.392	5.9	6.	6.8	6.94
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.347	6.246	7.	5.9	0.177	0.42	5.9	6.	6.8	6.94
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	12	0.45	0.568	1.259	0.1	0.196	0.442	0.118	0.158	1.	1.259
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	12##	50.	1212.5	10000.	50.	8065056.818	2839.904	50.	50.	875.	7660.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	12##	1.699	2.303	4.	1.699	0.665	0.815	1.699	1.699	2.925	3.803
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		200.8									

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Annual Analysis for 1972 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	10	12.2	13.59	24.4	3.3	53.974	7.347	3.41	6.95	21.1	24.07
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	9	9.6	9.289	11.	6.2	3.021	1.738	6.2	7.8	10.8	11.
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.55	6.56	7.5	5.8	0.252	0.502	5.83	6.175	7.	7.45
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.547	6.341	7.5	5.8	0.305	0.552	5.83	6.175	7.	7.45
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	10	0.284	0.456	1.585	0.032	0.218	0.466	0.038	0.1	0.672	1.506
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10	150.	310.	1100.	50.	146555.556	382.826	50.	50.	525.	1080.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10	2.151	2.2	3.041	1.699	0.278	0.527	1.699	1.699	2.69	3.033
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		158.33									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

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Annual Analysis for 1973 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	11	13.3	13.782	22.8	2.2	60.218	7.76	2.42	5.	21.1	22.46
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	12	8.9	9.325	13.6	7.	4.726	2.174	7.03	7.55	10.45	13.42
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.1	6.158	6.5	5.7	0.068	0.261	5.76	6.	6.45	6.5
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.1	6.088	6.5	5.7	0.073	0.271	5.76	6.	6.45	6.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	12	0.794	0.816	1.995	0.316	0.24	0.49	0.316	0.362	1.	1.774
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	12	0.15	0.184	0.4	0.05	0.016	0.128	0.05	0.078	0.285	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	12##	0.008	0.01	0.04	0.005	0.	0.01	0.005	0.005	0.01	0.031
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	12	0.28	0.444	1.409	0.15	0.14	0.374	0.156	0.183	0.658	1.226
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	12	0.9	1.	1.799	0.6	0.141	0.376	0.6	0.65	1.299	1.679
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	12##	75.	150.	600.	50.	28636.364	169.223	50.	50.	250.	510.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	12##	1.849	1.994	2.778	1.699	0.146	0.382	1.699	1.699	2.358	2.688
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		98.594									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	12	0.3	0.454	1.2	0.05	0.144	0.38	0.065	0.2	0.8	1.14
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	12	0.3	0.382	1.	0.09	0.089	0.299	0.105	0.163	0.55	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 box-and-whisker plot

Annual Analysis for 1974 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	9	10.	13.144	22.8	4.4	45.07	6.713	4.4	8.35	20.55	22.8
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	9	9.	8.978	12.	5.8	4.314	2.077	5.8	7.3	10.9	12.
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.5	6.433	7.	6.	0.09	0.3	6.	6.2	6.5	7.
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.5	6.344	7.	6.	0.099	0.315	6.	6.2	6.5	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	9	0.316	0.453	1.	0.1	0.102	0.32	0.1	0.316	0.699	1.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	9	0.3	0.278	0.5	0.1	0.019	0.139	0.1	0.15	0.4	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.005	0.014	0.04	0.005	0.	0.013	0.005	0.005	0.023	0.039
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.28	0.594	1.759	0.13	0.392	0.626	0.132	0.15	0.96	1.751
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	1.149	1.15	2.	0.4	0.192	0.438	0.43	0.85	1.349	1.95
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	50.	280.	1600.	50.	235666.667	485.455	50.	50.	400.	1480.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	1.699	2.06	3.204	1.699	0.298	0.546	1.699	1.699	2.602	3.144
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		114.87									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	10	0.55	0.68	2.2	0.1	0.42	0.648	0.1	0.175	1.025	2.09
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	10	0.25	0.565	2.199	0.05	0.478	0.692	0.055	0.1	1.025	2.089

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	12	14.4	13.983	21.1	5.	25.256	5.026	6.17	9.325	18.35	20.95
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	12	9.8	9.392	11.4	6.6	2.604	1.614	6.66	8.25	10.875	11.28
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	9	2.	2.667	6.	1.	2.25	1.5	1.	2.	3.5	6.
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.5	6.275	7.3	5.	0.48	0.693	5.	6.	6.5	7.21
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.5	5.698	7.3	5.	0.843	0.918	5.	6.	6.5	7.21
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	12	0.316	2.004	10.	0.05	14.038	3.747	0.065	0.316	1.	10.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	7	6.	11.143	32.	2.	142.476	11.936	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	7	4.	6.286	16.	2.	31.238	5.589	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	7	2.	4.857	20.	0.	51.81	7.198	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.25	0.245	0.5	0.05	0.027	0.164	0.055	0.1	0.35	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.008	0.02	0.08	0.005	0.001	0.025	0.005	0.005	0.028	0.077
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.26	0.381	1.419	0.025	0.16	0.4	0.038	0.18	0.44	1.342
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.75	0.89	2.199	0.4	0.287	0.536	0.41	0.5	1.199	2.099
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	9	15.	16.111	25.	12.	16.361	4.045	12.	13.	18.	25.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11##	50.	395.455	3700.	50.	1201727.273	1096.233	50.	50.	100.	2980.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11##	1.699	1.951	3.568	1.699	0.307	0.554	1.699	1.699	2.	3.255
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		89.33									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	10	0.2	0.34	1.5	0.05	0.178	0.422	0.05	0.163	0.325	1.39
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	10	0.17	0.254	1.	0.05	0.08	0.282	0.052	0.093	0.308	0.939

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	8	18.9	18.275	30.	3.9	66.611	8.162	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	8	7.65	8.338	10.8	7.	2.186	1.478	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	6	4.	4.333	7.	2.	3.467	1.862	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	8	6.95	6.875	7.1	6.5	0.039	0.198	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	8	6.947	6.831	7.1	6.5	0.041	0.204	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	8	0.113	0.147	0.316	0.079	0.006	0.079	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	8	8.	8.875	28.	0.5	78.625	8.867	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	8	3.	3.375	10.	0.	11.625	3.41	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	8	4.	5.625	18.	0.	40.482	6.363	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	8	0.2	0.294	0.7	0.05	0.055	0.234	**	**	**	**

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Annual Analysis for 1976 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	8	0.095	0.263	1.599	0.005	0.295	0.543	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	8	0.795	1.078	2.409	0.07	0.842	0.918	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	8	1.299	1.362	2.899	0.2	0.839	0.916	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	7	17.	15.857	21.	9.	21.476	4.634	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	7	200.	228.571	800.	50.	68214.286	261.179	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	7	2.301	2.172	2.903	1.699	0.177	0.421	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		148.599									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	8	1.3	1.331	4.	0.05	1.669	1.292	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	8	0.67	0.923	3.	0.005	1.039	1.019	**	**	**	**

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Annual Analysis for 1977 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	11	16.	13.182	31.	1.	100.564	10.028	1.	2.	20.	29.4
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	11	9.3	8.682	13.	1.1	11.48	3.388	2.08	6.4	11.5	12.84
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	11	2.	1.727	2.	1.	0.218	0.467	1.	1.	2.	2.
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	11	7.	6.795	7.6	5.5	0.332	0.576	5.68	6.5	7.	7.58
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	11	7.	6.358	7.6	5.5	0.543	0.737	5.68	6.5	7.	7.58
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	11	0.1	0.439	3.162	0.025	0.831	0.912	0.026	0.1	0.316	2.609
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	11	6.	8.364	20.	3.	26.055	5.104	3.	5.	11.	18.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	11	3.	3.545	10.	0.	10.073	3.174	0.	1.	5.	9.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	11	4.	4.818	13.	0.	16.764	4.094	0.2	2.	8.	12.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	11	0.1	0.159	0.5	0.05	0.022	0.15	0.05	0.05	0.3	0.46
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	11##	0.005	0.022	0.08	0.005	0.001	0.026	0.005	0.005	0.04	0.076
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	5	0.29	0.54	1.699	0.1	0.428	0.654	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	11	0.7	0.627	1.199	0.2	0.098	0.313	0.22	0.3	0.9	1.139
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	11	9.	9.455	17.	1.	20.273	4.503	2.	7.	14.	16.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	50.	760.	6000.	50.	3461000.	1860.376	50.	50.	450.	5490.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	1.699	2.14	3.778	1.699	0.516	0.719	1.699	1.699	2.596	3.696
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		138.144									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	11	0.1	0.405	1.6	0.05	0.25	0.5	0.05	0.05	0.8	1.46
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	11	0.12	0.397	1.399	0.005	0.207	0.455	0.012	0.08	0.8	1.299

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	9	15.	15.8	25.	0.7	60.998	7.81	0.7	11.	22.5	25.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	9	7.9	8.889	14.8	6.	7.054	2.656	6.	7.75	10.	14.8
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	8	1.5	1.5	2.	1.	0.286	0.535	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.3	6.2	6.5	5.4	0.13	0.361	5.4	6.	6.5	6.5
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.3	6.027	6.5	5.4	0.164	0.405	5.4	6.	6.5	6.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	9	0.501	0.94	3.981	0.316	1.376	1.173	0.316	0.316	1.	3.981
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	9	7.	8.889	22.	2.	39.611	6.294	2.	3.5	12.5	22.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	9	4.	3.556	8.	0.	6.028	2.455	0.	1.5	5.	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	9	4.	5.389	14.	0.	23.861	4.885	0.	0.75	9.5	14.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	9##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	4	0.13	0.144	0.29	0.025	0.012	0.109	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	9	0.4	0.461	1.3	0.05	0.127	0.357	0.05	0.25	0.55	1.3
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	9	12.	12.556	18.	4.	23.028	4.799	4.	9.	17.	18.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	200.	316.667	1400.	50.	194375.	440.88	50.	50.	400.	1400.

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Annual Analysis for 1978 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	2.301	2.214	3.146	1.699	0.256	0.506	1.699	1.699	2.54	3.146
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		163.61									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	9	0.1	0.078	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	9	0.05	0.053	0.1	0.005	0.001	0.038	0.005	0.015	0.09	0.1

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Annual Analysis for 1979 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	10	12.5	12.65	21.5	2.	46.503	6.819	2.	8.	18.875	21.35
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	5	39.	40.	46.	36.	13.5	3.674	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	10	9.35	9.76	13.2	7.8	2.934	1.713	7.84	8.5	10.875	13.08
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	9	1.	1.278	3.	0.5	0.569	0.755	0.5	1.	1.5	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	5	29.	24.8	37.	2.	208.7	14.446	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.4	6.46	7.1	6.	0.145	0.381	6.	6.15	6.775	7.09
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.389	6.333	7.1	6.	0.163	0.403	6.	6.15	6.775	7.09
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	10	0.409	0.464	1.	0.079	0.111	0.333	0.081	0.175	0.723	1.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	7.5	7.8	15.	4.	11.956	3.458	4.	4.75	10.	14.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	10	3.5	3.3	6.	1.	2.011	1.418	1.1	2.	4.	5.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	4.5	4.5	9.	2.	4.722	2.173	2.	2.75	6.	8.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.005	0.023	0.18	0.005	0.003	0.055	0.005	0.005	0.005	0.163
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	8	0.175	0.146	0.26	0.005	0.01	0.102	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.3	0.275	0.5	0.05	0.013	0.114	0.065	0.2	0.3	0.48
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	5	0.03	0.024	0.04	0.01	0.	0.013	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	10	12.	11.9	20.	4.	30.544	5.527	4.1	6.5	18.	19.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	100.	788.889	3800.	50.	1709861.111	1307.617	50.	50.	1300.	3800.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	2.	2.333	3.58	1.699	0.557	0.747	1.699	1.699	3.011	3.58
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		215.384									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	5##	0.005	0.021	0.07	0.005	0.001	0.028	**	**	**	**

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Annual Analysis for 1980 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	10	13.25	13.65	27.	2.	71.225	8.439	2.4	6.75	20.	26.9
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	56.	56.3	73.	39.	190.011	13.784	39.1	44.5	69.5	72.8
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	10	9.55	9.51	12.4	6.7	3.568	1.889	6.79	7.75	10.85	12.38
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	10	2.	1.9	4.	1.	0.989	0.994	1.	1.	2.25	3.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	19.5	20.1	35.	9.	65.433	8.089	9.2	11.75	25.	34.3
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.45	6.51	7.5	5.5	0.312	0.559	5.55	6.225	7.	7.45
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.447	6.199	7.5	5.5	0.42	0.648	5.55	6.225	7.	7.45
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	10	0.357	0.632	3.162	0.032	0.866	0.93	0.038	0.1	0.626	2.946
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	6.5	11.55	52.	2.5	220.303	14.843	2.5	2.5	12.5	48.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	10	2.5	4.35	9.	2.	8.614	2.935	2.	2.	7.5	9.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	2.75	7.95	43.	0.	163.414	12.783	0.1	2.125	10.	39.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.05	0.105	0.5	0.05	0.02	0.14	0.05	0.05	0.1	0.46
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.005	0.012	0.03	0.005	0.	0.011	0.005	0.005	0.023	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.27	0.326	0.7	0.025	0.057	0.239	0.03	0.138	0.535	0.7
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.3	0.49	1.7	0.1	0.243	0.493	0.1	0.175	0.675	1.62
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	0.1	0.15	0.7	0.05	0.039	0.199	0.05	0.05	0.125	0.65

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Annual Analysis for 1980 - Station RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	10	0.045	0.083	0.31	0.01	0.009	0.094	0.01	0.025	0.118	0.296
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		04/27/75-06/20/90	10	13.	12.9	19.	7.	15.433	3.929	7.2	9.	16.25	18.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	10	150.	1740.	8000.	50.	7339888.889	2709.223	50.	87.5	3775.	7630.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	10	2.151	2.575	3.903	1.699	0.733	0.856	1.699	1.925	3.576	3.876
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		375.498									

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Annual Analysis for 1981 - Station RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	10	16.25	15.5	26.	3.	75.556	8.692	3.15	6.375	23.75	26.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	11	69.	77.	163.	48.	1078.2	32.836	48.8	58.	79.	151.8
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	10	8.45	8.7	12.5	5.1	5.658	2.379	5.24	7.175	10.225	12.49
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	11	2.	1.636	3.	1.	0.455	0.674	1.	1.	2.	2.8
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	11	19.	20.545	38.	10.	66.873	8.178	10.2	14.	26.	35.8
00400p PH (STANDARD UNITS)		06/28/68-06/20/90	10	6.4	6.43	7.3	6.	0.129	0.359	6.01	6.175	6.525	7.23
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	10	6.4	6.332	7.3	6.	0.14	0.374	6.01	6.175	6.525	7.23
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	10	0.398	0.466	1.	0.05	0.077	0.278	0.07	0.3	0.672	0.979
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	11##	2.5	6.818	15.	2.5	27.614	5.255	2.5	2.5	12.	14.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	11##	2.5	3.545	9.	2.	4.123	2.03	2.1	2.5	4.	8.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	11##	2.5	4.636	10.	2.5	7.105	2.665	2.5	2.5	7.	9.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/20/90	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	11	0.13	0.232	0.9	0.025	0.083	0.289	0.025	0.06	0.17	0.86
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/20/90	11	0.4	0.373	0.7	0.1	0.026	0.162	0.12	0.3	0.5	0.66
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	11	0.1	0.114	0.3	0.05	0.006	0.074	0.05	0.05	0.1	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	11	0.04	0.057	0.19	0.005	0.003	0.05	0.008	0.03	0.06	0.172
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		04/27/75-06/20/90	11	11.	11.636	18.	5.	17.655	4.202	5.2	9.	15.	17.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	11	100.	695.455	3400.	50.	1201227.273	1096.005	50.	50.	900.	3140.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	11	2.	2.314	3.531	1.699	0.518	0.72	1.699	1.699	2.954	3.49
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		205.844									

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Annual Analysis for 1982 - Station RICH0019

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	10	15.	15.45	26.	5.	36.636	6.053	5.45	11.375	20.	25.55
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	9	47.	102.333	517.	42.	24263.5	155.767	42.	43.5	64.5	517.
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	9	8.6	8.8	12.	6.6	3.238	1.799	6.6	7.1	10.3	12.
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	10	2.	1.9	3.	1.	0.544	0.738	1.	1.	2.25	3.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	25.5	24.2	32.	17.	28.844	5.371	17.	17.75	28.5	31.8
00400p PH (STANDARD UNITS)		06/28/68-06/20/90	10	6.15	6.21	6.7	6.	0.063	0.251	6.	6.	6.35	6.68
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	10	6.125	6.154	6.7	6.	0.067	0.258	6.	6.	6.35	6.68
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	10	0.751	0.702	1.	0.2	0.107	0.328	0.211	0.455	1.	1.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	10	7.	7.6	17.	2.5	27.267	5.222	2.5	2.5	12.	16.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	10	3.5	5.3	10.	2.5	10.567	3.251	2.5	2.5	9.	9.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	10	2.5	3.3	9.	2.	4.344	2.084	2.	2.375	3.25	8.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/20/90	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	10	0.17	0.183	0.4	0.09	0.009	0.094	0.091	0.108	0.223	0.386
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/20/90	10	0.475	0.425	0.5	0.3	0.008	0.092	0.3	0.3	0.5	0.5
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	10##	0.05	0.08	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.19
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	10	0.03	0.036	0.07	0.01	0.	0.022	0.01	0.018	0.06	0.069

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	10	8.5	9.2	15.	5.	11.956	3.458	5.1	6.	13.	14.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10	250.	915.	6200.	50.	3661694.444	1913.555	50.	50.	625.	5740.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10	2.389	2.383	3.792	1.699	0.472	0.687	1.699	1.699	2.659	3.734
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		241.313									

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	10	11.75	13.15	27.	0.5	69.169	8.317	1.05	6.75	21.5	26.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	53.	54.9	81.	41.	147.211	12.133	41.3	45.5	60.75	79.8
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	10	11.05	10.74	14.	6.5	5.058	2.249	6.71	8.825	12.25	13.9
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	9	2.	1.778	3.	1.	0.694	0.833	1.	1.	2.5	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	17.5	19.9	36.	14.	46.1	6.79	14.1	15.	23.5	34.9
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.3	6.244	6.8	5.8	0.083	0.288	5.8	6.05	6.4	6.8
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	9	6.3	6.167	6.8	5.8	0.09	0.299	5.8	6.05	6.4	6.8
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	9	0.501	0.681	1.585	0.158	0.18	0.425	0.158	0.398	0.897	1.585
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	7.5	9.15	25.	2.5	39.781	6.307	2.75	5.75	11.5	23.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	10	5.	5.05	8.	2.	3.914	1.978	2.05	3.625	7.	7.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	10	3.	4.35	17.	0.	24.003	4.899	0.	1.5	6.	15.9
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.26	0.29	0.6	0.09	0.027	0.165	0.094	0.153	0.415	0.586
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.3	0.5	1.2	0.1	0.127	0.356	0.11	0.275	0.75	1.17
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10##	0.05	0.095	0.3	0.05	0.007	0.086	0.05	0.05	0.125	0.29
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.02	0.051	0.16	0.005	0.003	0.055	0.007	0.02	0.08	0.158
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	10	8.5	9.7	20.	4.	18.456	4.296	4.3	7.75	12.	19.2
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	50.	250.	1000.	50.	103333.333	321.455	50.	50.	500.	950.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	1.699	2.089	3.	1.699	0.281	0.53	1.699	1.699	2.699	2.97
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		122.823									

** - Less 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 1984 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	7	20.5	18.286	23.	9.5	24.988	4.999	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	7	44.	46.857	61.	38.	92.81	9.634	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	7	8.9	9.2	10.8	7.7	1.42	1.192	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	7	2.	1.857	3.	1.	0.476	0.69	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	7	26.	25.143	42.	10.	98.143	9.907	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	7	6.47	6.167	6.9	5.	0.516	0.718	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	7	6.47	5.629	6.9	5.	0.854	0.924	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	7	0.339	2.349	10.	0.126	14.492	3.807	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	7	5.	23.5	78.	2.5	1153.667	33.966	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	7	2.5	6.5	24.	2.	62.5	7.906	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	7	2.5	18.071	62.	0.	750.286	27.391	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	7##	0.05	0.071	0.2	0.05	0.003	0.057	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	7##	0.005	0.012	0.04	0.005	0.	0.013	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	7	0.16	0.19	0.5	0.02	0.026	0.16	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	7	0.4	0.443	0.7	0.2	0.03	0.172	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	7	0.2	0.179	0.4	0.05	0.013	0.115	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	7	0.11	0.119	0.33	0.01	0.011	0.104	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	7	14.	13.	18.	5.	20.667	4.546	**	**	**	**

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Annual Analysis for 1984 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	7	400.	964.286	3700.	50.	1813928.571	1346.822	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	7	2.602	2.589	3.568	1.699	0.44	0.663	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		388.342									

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	10	15.	14.45	24.5	2.6	47.372	6.883	2.89	10.	19.75	24.25
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	60.5	69.3	172.	44.	1393.567	37.331	44.3	47.75	67.75	162.4
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	10	10.8	10.64	14.4	8.	3.483	1.866	8.04	8.925	11.55	14.13
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	10	1.	0.9	1.	0.5	0.044	0.211	0.5	0.875	1.	1.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	20.5	19.2	28.	11.	33.733	5.808	11.	12.5	24.	27.6
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.7	6.5	8.	4.8	0.847	0.92	4.87	5.875	7.1	7.91
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	10	6.689	5.668	8.	4.8	1.616	1.271	4.87	5.875	7.1	7.91
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	10	0.205	2.148	15.849	0.01	24.086	4.908	0.017	0.079	1.541	14.58
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	10##	2.5	3.65	8.	2.5	3.947	1.987	2.5	2.5	5.25	7.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	10##	2.5	2.45	3.	1.	0.303	0.55	1.15	2.5	2.625	3.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	10##	2.5	2.95	5.	2.	1.192	1.092	2.05	2.5	3.125	5.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	8	0.16	0.325	1.34	0.09	0.174	0.417	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	6	0.35	0.333	0.4	0.2	0.007	0.082	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	6##	0.05	0.142	0.6	0.05	0.05	0.225	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	8	0.025	0.091	0.55	0.005	0.035	0.186	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	10	8.	7.7	12.	2.	10.678	3.268	2.2	5.5	10.5	12.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	75.	95.	300.	50.	5805.556	76.194	50.	50.	100.	280.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	10##	1.849	1.897	2.477	1.699	0.064	0.253	1.699	1.699	2.	2.429
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		78.922									

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	12	12.25	14.375	25.	4.	47.708	6.907	5.2	8.625	20.9	24.07
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	12	58.	58.333	87.	46.	123.879	11.13	46.	50.5	60.5	81.6
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	12	10.6	10.217	12.1	8.	1.672	1.293	8.15	9.05	11.2	11.92
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	12	1.	1.292	3.	0.5	0.475	0.689	0.65	1.	1.75	2.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	12	24.	21.833	32.	5.	56.152	7.493	7.7	16.	27.25	31.1
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.945	6.871	7.37	6.1	0.145	0.381	6.16	6.64	7.175	7.328
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	12	6.943	6.695	7.37	6.1	0.179	0.423	6.16	6.64	7.175	7.328
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	12	0.114	0.202	0.794	0.043	0.051	0.225	0.048	0.067	0.23	0.706
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	12	6.	6.25	15.	2.5	13.75	3.708	2.5	2.5	8.	13.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	12	3.	3.417	7.	2.	1.992	1.412	2.15	2.5	4.	6.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	12	2.75	3.667	8.	2.	3.424	1.85	2.	2.5	4.75	7.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	12##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	12##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.027
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	12	0.195	0.21	0.41	0.05	0.012	0.109	0.062	0.115	0.315	0.389
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	12	0.5	0.458	0.6	0.2	0.023	0.151	0.23	0.3	0.6	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	12	0.1	0.113	0.3	0.05	0.008	0.091	0.05	0.05	0.1	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	12	0.04	0.053	0.21	0.02	0.003	0.052	0.02	0.023	0.058	0.168
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	12	9.	8.75	13.	6.	5.295	2.301	6.	6.25	10.	12.7
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	200.	240.909	700.	50.	45909.091	214.264	50.	50.	400.	660.

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	2.301	2.211	2.845	1.699	0.176	0.419	1.699	1.699	2.602	2.816
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		162.596									

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	11	15.4	15.373	28.	4.5	60.422	7.773	5.	9.5	22.2	27.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	64.	69.455	132.	45.	535.873	23.149	46.6	55.	75.	121.8
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	9	10.4	10.433	12.	8.7	1.488	1.22	8.7	9.25	11.7	12.
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	11	2.	2.318	9.	0.5	5.414	2.327	0.6	1.	2.	7.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	24.	24.545	32.	11.	36.473	6.039	12.8	22.	30.	31.8
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	11	6.74	6.771	8.03	5.81	0.384	0.62	5.868	6.48	6.89	7.944
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	11	6.74	6.456	8.03	5.81	0.493	0.702	5.868	6.48	6.89	7.944
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	11	0.182	0.35	1.549	0.009	0.204	0.451	0.012	0.129	0.331	1.398
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	11	7.	12.818	44.	2.5	165.914	12.881	2.5	5.	13.	41.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	9##	2.5	4.056	12.	0.	16.403	4.05	0.	2.25	6.25	12.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	11	7.	14.273	58.	2.5	294.368	17.157	2.5	5.	18.	53.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	11##	0.005	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.028
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	11	0.14	0.251	0.89	0.08	0.063	0.25	0.082	0.11	0.28	0.82
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	11	0.5	0.736	3.	0.1	0.627	0.792	0.14	0.4	0.7	2.62
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.114	0.5	0.05	0.017	0.131	0.05	0.05	0.1	0.42
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.04	0.057	0.18	0.01	0.002	0.049	0.012	0.03	0.06	0.166
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	7	8.	8.857	14.	6.	10.476	3.237	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	300.	355.556	1000.	50.	112152.778	334.892	50.	75.	600.	1000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	9	2.477	2.351	3.	1.699	0.225	0.474	1.699	1.849	2.753	3.
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		224.352									

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	13	15.	14.238	24.5	4.	68.309	8.265	4.4	5.75	22.	23.98
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	9	65.	65.	74.	59.	21.25	4.61	59.	61.5	68.	74.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	13	10.1	10.538	13.5	7.7	5.123	2.263	7.86	8.2	12.8	13.5
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	9	1.	1.167	2.	0.5	0.25	0.5	0.5	1.	1.5	2.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	9	22.	23.444	36.	11.	60.028	7.748	11.	18.5	30.5	36.
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	13	7.27	7.265	8.9	6.17	0.673	0.82	6.274	6.67	7.345	8.9
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	13	7.27	6.833	8.9	6.17	0.875	0.936	6.274	6.67	7.345	8.9
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	13	0.054	0.147	0.676	0.001	0.037	0.193	0.001	0.045	0.223	0.554
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	9	8.	17.056	42.	2.5	220.903	14.863	2.5	6.5	30.5	42.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	9	4.	4.722	10.	2.	8.694	2.949	2.	2.	7.	10.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	9	6.	12.611	34.	2.	140.736	11.863	2.	3.75	22.5	34.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.08	0.092	0.22	0.01	0.004	0.063	0.011	0.05	0.13	0.214
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.02	0.028	0.06	0.01	0.	0.017	0.01	0.018	0.043	0.059
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.205	0.241	0.87	0.06	0.055	0.235	0.062	0.087	0.258	0.811
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.55	0.53	0.8	0.3	0.02	0.142	0.31	0.4	0.6	0.78
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	0.1	0.15	0.4	0.05	0.011	0.105	0.05	0.088	0.2	0.38
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.075	0.081	0.16	0.03	0.002	0.049	0.03	0.03	0.115	0.16
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	7	7.	7.843	11.6	4.7	5.483	2.342	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	600.	727.273	3900.	50.	1223181.818	1105.976	50.	50.	800.	3300.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	2.778	2.456	3.591	1.699	0.446	0.668	1.699	1.699	2.903	3.464

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	285.619										

** - Less 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 RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	12	17.25	16.042	27.	0.9	58.995	7.681	3.3	9.25	22.625	26.25
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	9	61.	61.	77.	50.	64.25	8.016	50.	54.	65.	77.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	12	9.3	10.35	15.	7.9	5.046	2.246	8.08	8.65	12.45	14.4
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	12	2.	2.25	5.	1.	1.841	1.357	1.	1.	3.5	4.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	12	21.	25.417	39.	18.	52.811	7.267	18.3	19.25	32.75	37.2
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	12	7.305	7.173	7.73	6.35	0.19	0.435	6.44	6.76	7.438	7.718
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	12	7.29	6.96	7.73	6.35	0.239	0.489	6.44	6.76	7.438	7.718
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	12	0.051	0.11	0.447	0.019	0.016	0.126	0.019	0.037	0.176	0.38
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	12	15.	42.583	248.	2.	5745.902	75.802	3.2	8.25	16.75	218.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	12	3.	7.292	38.	0.5	122.612	11.073	0.5	0.625	7.	32.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	12	9.	35.417	210.	2.	4213.538	64.912	2.9	6.25	15.75	185.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	10##	0.03	0.034	0.08	0.02	0.	0.019	0.02	0.02	0.04	0.076
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.01	0.013	0.04	0.005	0.	0.011	0.005	0.005	0.013	0.038
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	10	0.235	0.193	0.36	0.07	0.009	0.095	0.072	0.09	0.243	0.349
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	10	0.45	0.52	0.9	0.2	0.042	0.204	0.22	0.4	0.7	0.88
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	0.1	0.11	0.2	0.1	0.001	0.032	0.1	0.1	0.1	0.19
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.04	0.048	0.15	0.02	0.002	0.039	0.02	0.02	0.055	0.142
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	12	8.8	8.592	13.3	2.2	10.275	3.206	2.95	6.425	11.5	12.91
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	400.	518.182	1700.	50.	349136.364	590.878	50.	100.	600.	1680.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	11	2.602	2.438	3.23	1.699	0.295	0.543	1.699	2.	2.778	3.225
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	273.973										

** - Less 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

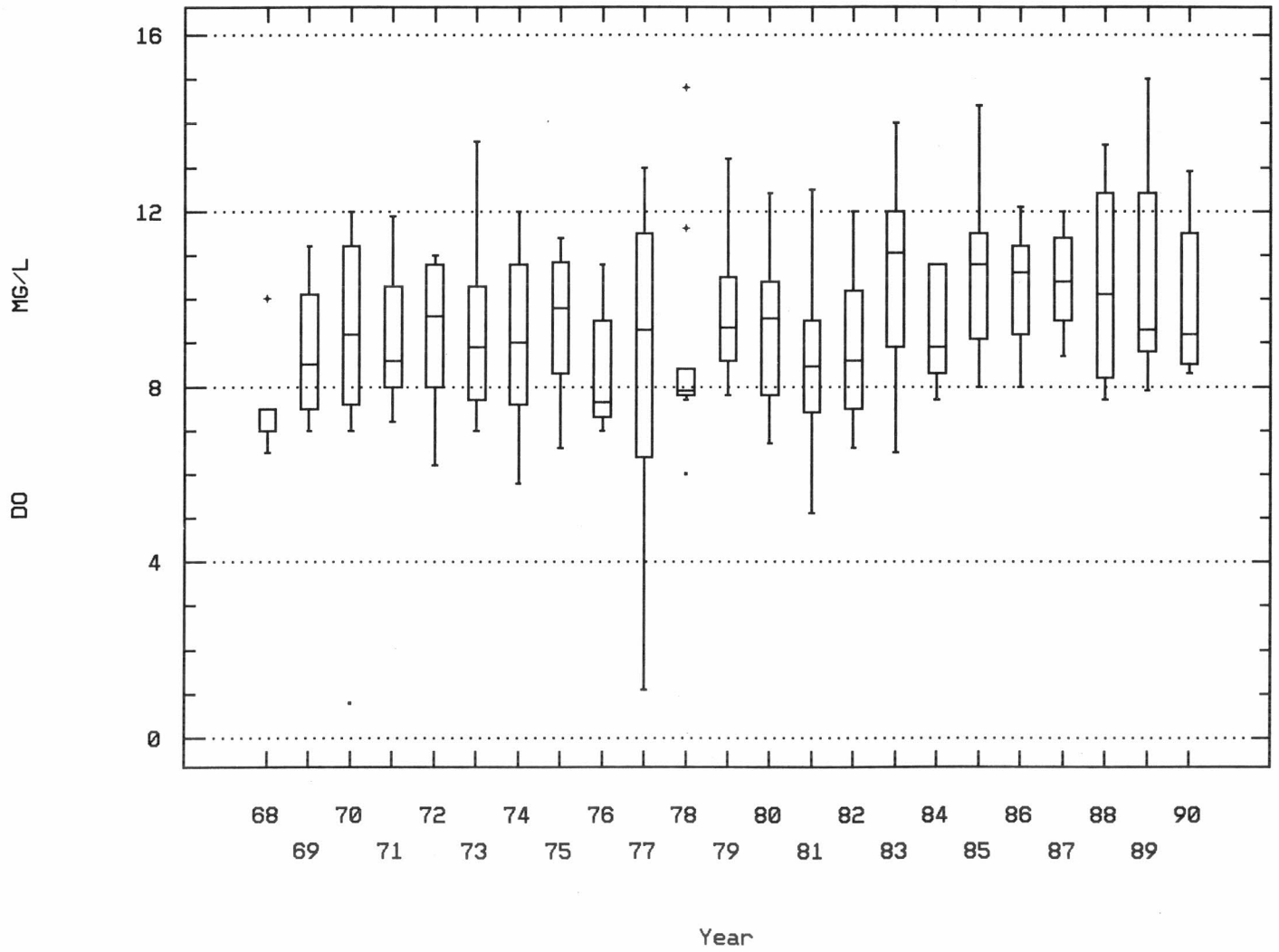
Annual Analysis for 1990 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	5	16.7	14.88	21.3	6.7	47.392	6.884	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	1	67.	67.	67.	67.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	5	9.2	10.08	12.9	8.3	4.102	2.025	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	6	2.	2.333	4.	1.	1.067	1.033	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	6	20.5	24.833	48.	12.	174.567	13.212	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-06/20/90	5	7.03	6.944	7.54	6.22	0.232	0.482	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	5	7.03	6.72	7.54	6.22	0.295	0.544	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	5	0.093	0.191	0.603	0.029	0.055	0.234	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	6	17.5	20.	44.	1.	230.	15.166	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	6	4.5	5.167	10.	1.	13.367	3.656	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	6	11.	14.917	34.	0.5	154.042	12.411	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	5	0.08	0.098	0.16	0.06	0.002	0.041	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	5	0.01	0.014	0.03	0.01	0.	0.009	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	5	0.25	0.286	0.49	0.21	0.013	0.116	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	5	0.6	0.72	1.	0.5	0.047	0.217	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	5	0.1	0.09	0.1	0.05	0.001	0.022	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	5	0.05	0.058	0.1	0.04	0.001	0.025	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	6	8.25	8.317	12.1	5.6	4.654	2.157	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	5	100.	620.	2500.	50.	1125750.	1061.014	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	5	2.	2.28	3.398	1.699	0.527	0.726	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	190.365										

** - Less 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: RICH0019 Parameter Code: 00300

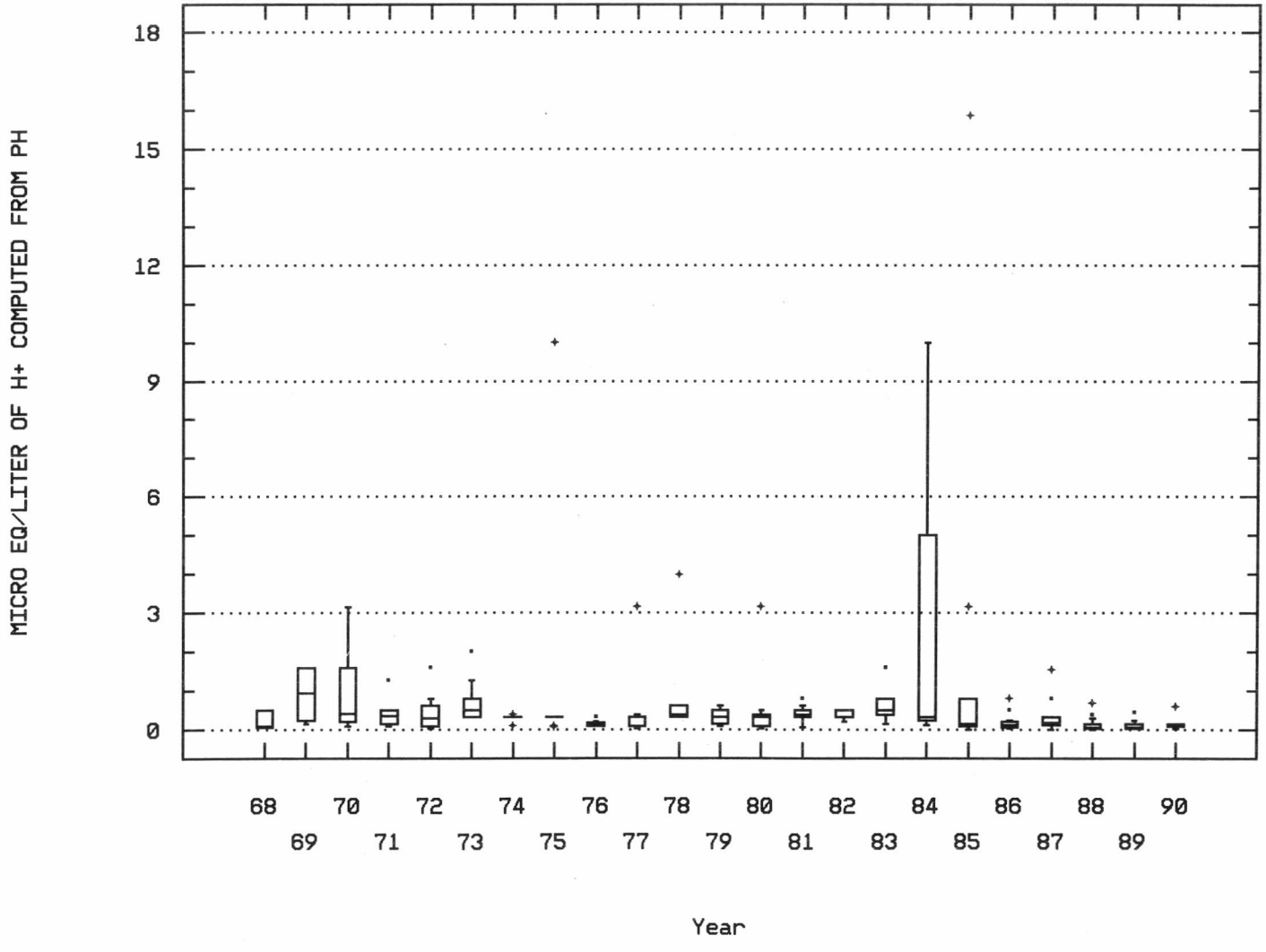
OXYGEN, DISSOLVED



RT. 1 BRIDGE

Station: RICH0019 Parameter Code: 00400

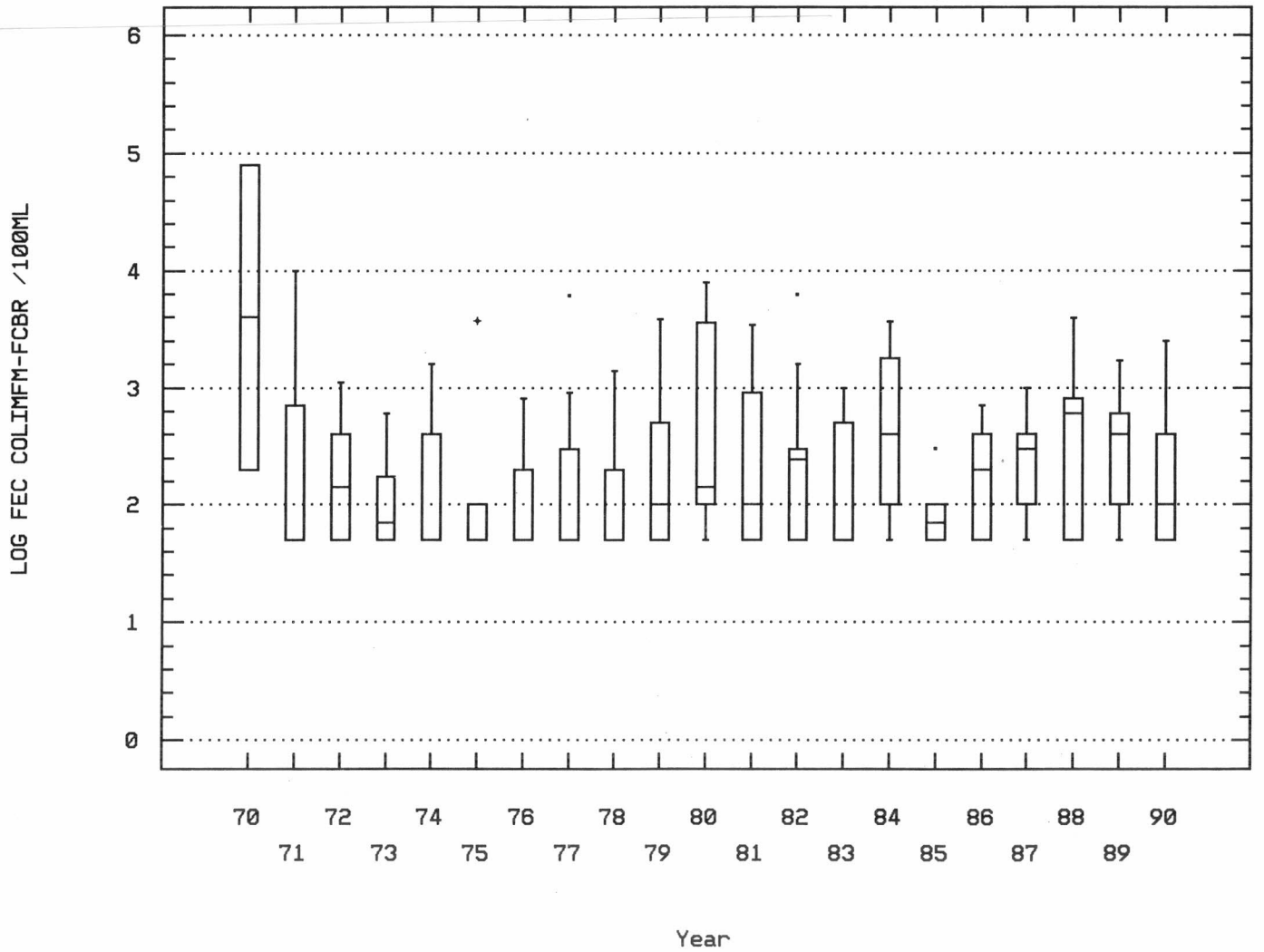
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 1 BRIDGE

Station: RICH0019 Parameter Code: 31616

LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



RT. 1 BRIDGE

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0019

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	64	22.1	22.139	31.	10.	13.958	3.736	17.35	21.	24.5	27.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	27	65.	90.481	517.	36.	8348.644	91.371	44.	59.	81.	164.8
00300	OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	64	8.	7.834	11.7	0.8	3.015	1.736	6.25	7.4	8.6	9.5
00310	BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	41	1.	2.483	25.	0.5	15.858	3.982	1.	1.	2.	4.88
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	28	24.	24.821	36.	11.	36.671	6.056	17.7	20.25	30.	32.4
00400	PH (STANDARD UNITS)		06/28/68-06/20/90	64	6.5	6.535	7.6	5.	0.253	0.503	6.	6.3	6.895	7.265
00400	CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	64	6.5	6.199	7.6	5.	0.368	0.607	6.	6.3	6.895	7.265
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	64	0.316	0.632	10.	0.025	1.843	1.358	0.055	0.127	0.501	1.
00403	PH, LAB, STANDARD UNITS	SU	10/24/68-06/20/90	5	5.8	5.98	6.8	4.8	0.712	0.844	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS		10/24/68-06/20/90	5	5.8	5.403	6.8	4.8	1.127	1.062	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/24/68-06/20/90	5	1.585	3.949	15.849	0.158	44.938	6.704	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		10/24/68-06/20/90	5	9.	7.4	11.	3.	16.8	4.099	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)		10/24/68-06/20/90	3	70.	82.667	114.	64.	745.333	27.301	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)		10/24/68-06/20/90	3	33.	33.	46.	20.	169.	13.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)		04/28/69-06/20/90	3	50.	49.667	68.	31.	342.333	18.502	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	41	7.	10.902	148.	0.5	506.615	22.508	2.5	2.5	11.5	16.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	41	2.5	3.707	20.	0.	11.225	3.35	0.5	2.5	4.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-06/20/90	41	3.	7.829	128.	0.	385.77	19.641	0.1	2.25	8.5	12.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/20/90	46##	0.05	0.096	0.4	0.01	0.008	0.09	0.05	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	47##	0.005	0.049	1.599	0.005	0.054	0.232	0.005	0.005	0.02	0.042
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/20/90	45	0.32	0.526	2.409	0.025	0.305	0.552	0.07	0.16	0.7	1.476
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/20/90	47	0.6	0.784	3.	0.2	0.296	0.544	0.3	0.4	1.099	1.479
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	27	0.1	0.178	0.6	0.05	0.019	0.138	0.05	0.1	0.2	0.42
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	27	0.06	0.107	0.55	0.03	0.011	0.104	0.03	0.04	0.15	0.182
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		04/27/75-06/20/90	39	12.	12.069	20.	4.	14.476	3.805	8.6	9.	15.	18.
00940	CHLORIDE,TOTAL IN WATER	MG/L	06/22/75-06/20/90	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)		07/15/69-03/28/85	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)		07/15/69-03/28/85	4##	5.	8.75	20.	5.	56.25	7.5	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)		07/15/69-03/28/85	4##	17.5	22.5	50.	5.	475.	21.794	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	54	300.	750.926	6200.	50.	1462216.108	1209.221	50.	100.	825.	2150.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/20/90	54	2.477	2.489	3.792	1.699	0.343	0.586	1.699	2.	2.916	3.332
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	308.379								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/21/79	20	0.5	0.815	4.	0.05	0.936	0.967	0.055	0.125	1.075	2.15
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/21/79	20	0.395	0.683	3.	0.02	0.64	0.8	0.052	0.093	1.049	2.129

** - 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

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0019

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-06/20/90	86	7.8	7.853	21.	0.5	19.47	4.412	2.	4.4	10.6	13.09
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	45	58.	57.733	79.	39.	136.7	11.692	40.	46.	67.5	75.
00300	OXYGEN, DISSOLVED	MG/L	06/28/68-06/20/90	86	10.95	10.943	15.	6.5	2.909	1.706	8.6	9.8	12.	13.
00310	BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-06/20/90	63	2.	1.711	6.	0.5	1.094	1.046	1.	1.	2.	3.
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	48	19.	19.625	38.	2.	65.984	8.123	10.9	13.25	27.	30.1
00400	PH (STANDARD UNITS)		06/28/68-06/20/90	86	6.49	6.53	8.03	4.8	0.372	0.61	5.94	6.	7.	7.3
00400	CONVERTED PH (STANDARD UNITS)		06/28/68-06/20/90	86	6.49	6.078	8.03	4.8	0.578	0.761	5.94	6.	7.	7.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-06/20/90	86	0.324	0.836	15.849	0.009	4.252	2.062	0.05	0.1	1.	1.175
00403	PH, LAB, STANDARD UNITS	SU	10/24/68-06/20/90	11	6.1	6.191	7.1	5.6	0.253	0.503	5.6	5.8	6.6	7.06
00403	CONVERTED PH, LAB, STANDARD UNITS		10/24/68-06/20/90	11	6.1	5.988	7.1	5.6	0.298	0.546	5.6	5.8	6.6	7.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/24/68-06/20/90	11	0.794	1.028	2.512	0.079	0.759	0.871	0.089	0.251	1.585	2.512
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		10/24/68-06/20/90	11	5.	7.727	24.	2.	40.418	6.358	2.2	4.	11.	21.8
00500	RESIDUE, TOTAL (MG/L)		10/24/68-06/20/90	12	74.	115.833	532.	48.	17568.333	132.546	50.1	68.	104.5	407.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)		10/24/68-06/20/90	12	23.5	34.	80.	18.	511.818	22.623	18.3	19.25	40.	80.
00510	RESIDUE, TOTAL FIXED (MG/L)		04/28/69-06/20/90	10	52.	86.	452.	3.	17083.111	130.702	5.1	27.75	66.	415.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-06/20/90	63	6.	13.008	248.	2.	1038.835	32.231	2.5	2.5	10.	22.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-06/20/90	63	2.5	3.984	38.	0.	23.5	4.848	1.	2.	4.	6.6

** - 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

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	63	3.	9.77	210.	0.	754.297	27.464	2.	2.5	7.	15.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	74##	0.05	0.098	0.5	0.02	0.012	0.108	0.05	0.05	0.1	0.22
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	74##	0.005	0.011	0.18	0.005	0.	0.022	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	70	0.175	0.198	1.409	0.005	0.033	0.18	0.051	0.11	0.24	0.327
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	74	0.3	0.433	1.5	0.05	0.081	0.284	0.2	0.3	0.5	0.85
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	48##	0.05	0.08	0.4	0.05	0.003	0.059	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	48	0.025	0.038	0.33	0.005	0.003	0.052	0.01	0.02	0.038	0.064
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	57	8.	8.675	20.	1.	17.459	4.178	4.56	6.	9.5	16.2
00940 CHLORIDE,TOTAL IN WATER MG/L	06/22/75-06/20/90	8	10.5	10.75	15.	7.	5.929	2.435	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	07/15/69-03/28/85	6##	5.	6.667	10.	5.	6.667	2.582	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	07/15/69-03/28/85	6##	5.	9.167	30.	5.	104.167	10.206	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	07/15/69-03/28/85	6	15.	18.333	50.	5.	286.667	16.931	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	82##	50.	1214.024	80000.	50.	77815078.666	8821.286	50.	50.	200.	600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	82##	1.699	2.063	4.903	1.699	0.319	0.565	1.699	1.699	2.301	2.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		115.719								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	26	0.1	0.212	1.2	0.05	0.099	0.315	0.05	0.05	0.2	0.93
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	26	0.09	0.174	1.	0.005	0.073	0.27	0.005	0.048	0.14	0.72

** - Less 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: 3/16 to 6/30 - Station RICH0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-06/20/90	71	16.7	16.913	30.	6.	23.269	4.824	10.22	13.5	20.6	22.84
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	32	52.	53.906	87.	38.	128.281	11.326	41.3	45.25	59.75	73.7
00300 OXYGEN, DISSOLVED MG/L	06/28/68-06/20/90	69	9.2	9.174	13.5	6.2	2.558	1.6	7.	8.2	10.05	11.
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-06/20/90	57	2.	2.116	6.	0.5	1.171	1.082	1.	1.	2.25	4.
00340 COD, .25N K2CR207 MG/L	08/15/79-06/20/90	37	23.	24.865	48.	10.	64.009	8.001	16.	19.5	28.	36.6
00400 PH (STANDARD UNITS)	06/28/68-06/20/90	72	6.5	6.584	8.9	5.	0.435	0.66	5.837	6.225	6.968	7.403
00400 CONVERTED PH (STANDARD UNITS)	06/28/68-06/20/90	72	6.5	6.193	8.9	5.	0.59	0.768	5.837	6.225	6.967	7.403
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-06/20/90	72	0.316	0.641	10.	0.001	1.643	1.282	0.04	0.109	0.599	1.462
00403 PH, LAB, STANDARD UNITS SU	10/24/68-06/20/90	14	6.25	6.121	6.7	5.3	0.217	0.466	5.4	5.575	6.5	6.6
00403 CONVERTED PH, LAB, STANDARD UNITS	10/24/68-06/20/90	14	6.247	5.878	6.7	5.3	0.281	0.53	5.4	5.575	6.5	6.6
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/68-06/20/90	14	0.566	1.325	5.012	0.2	2.281	1.51	0.258	0.316	2.674	4.087
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	10/24/68-06/20/90	14	8.	6.357	10.	2.	11.016	3.319	2.	2.75	9.	10.
00500 RESIDUE, TOTAL (MG/L)	10/24/68-06/20/90	15	76.	79.667	123.	45.	310.524	17.622	57.	68.	89.	106.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-06/20/90	15	33.	34.467	50.	15.	98.695	9.935	19.2	27.	45.	47.6
00510 RESIDUE, TOTAL FIXED (MG/L)	04/28/69-06/20/90	15	43.	45.2	73.	23.	174.6	13.214	26.6	39.	52.	69.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-06/20/90	56	10.5	14.571	78.	1.	202.077	14.215	2.5	6.	16.75	30.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-06/20/90	56	5.	6.223	38.	0.5	36.463	6.038	2.	2.5	8.75	10.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-06/20/90	56	6.	9.5	58.	0.	147.018	12.125	1.55	2.5	10.	21.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/20/90	58	0.06	0.158	1.	0.02	0.036	0.191	0.05	0.05	0.2	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	59##	0.005	0.019	0.16	0.005	0.001	0.028	0.005	0.005	0.02	0.06
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/20/90	52	0.215	0.328	1.839	0.06	0.142	0.377	0.093	0.13	0.308	0.651
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/20/90	57	0.6	0.773	2.899	0.05	0.293	0.541	0.3	0.5	0.9	1.459
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	32	0.1	0.122	0.7	0.05	0.015	0.123	0.05	0.05	0.1	0.27
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	34	0.05	0.063	0.31	0.01	0.003	0.056	0.02	0.04	0.07	0.095
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/27/75-06/20/90	52	12.	11.84	25.	4.	20.836	4.565	6.09	8.	14.75	17.7
00940 CHLORIDE,TOTAL IN WATER MG/L	06/22/75-06/20/90	10	8.	10.6	34.	7.	68.489	8.276	7.	7.	9.25	31.6
01034 CHROMIUM, TOTAL (UG/L AS CR)	07/15/69-03/28/85	11##	5.	7.773	20.	0.5	26.068	5.106	1.4	5.	10.	18.
01042 COPPER, TOTAL (UG/L AS CU)	07/15/69-03/28/85	10##	5.	6.	10.	5.	4.444	2.108	5.	5.	6.25	10.
01092 ZINC, TOTAL (UG/L AS ZN)	07/15/69-03/28/85	11	10.	14.091	30.	5.	89.091	9.439	5.	5.	20.	30.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	61	100.	867.213	10000.	50.	3596323.77	1896.398	50.	50.	600.	3380.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/20/90	61	2.	2.303	4.	1.699	0.469	0.685	1.699	1.699	2.772	3.525
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		200.735								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/21/79	25	0.2	0.45	1.8	0.04	0.273	0.522	0.05	0.1	0.7	1.54
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/21/79	25	0.2	0.338	1.399	0.005	0.144	0.38	0.014	0.065	0.45	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

Station Inventory for Station: RICH0020

NPS Station ID: RICH0020 LAT/LON: 37.381948/ -77.376948 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, OFF DUTCH GAP LANDING FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS097.41
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0020

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	51	25.8	25.961	36.5	16.	26.737	5.171	18.32	22.1	30.3	32.18
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	48	228.5	241.938	474.	121.	6256.783	79.1	147.4	181.5	304.75	350.2
00096	SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-10/26/98	50	7.5	7.754	9.9	6.2	0.856	0.925	6.6	7.	8.5	9.19
00400	PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.56	7.568	8.54	7.09	0.086	0.293	7.208	7.33	7.77	7.906
00400	CONVERTED PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.56	7.485	8.54	7.09	0.093	0.305	7.208	7.33	7.77	7.906
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/94-10/26/98	51	0.028	0.033	0.081	0.003	0.	0.019	0.012	0.017	0.047	0.062
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	130.	1232.173	16000.	9.	10994984.342	3315.869	20.	68.	647.5	3200.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	2.114	2.298	4.204	0.954	0.611	0.782	1.301	1.833	2.806	3.5
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	198.662								

** - Less 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: RICH0020

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400	PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	24	0.46	32	14	0.44	5	3	0.60	15	7	0.47			

& - 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 1994 - Station RICH0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	204.	402.625	1400.	20.	235625.411	485.413	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	2.205	2.241	3.146	1.301	0.435	0.66	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		174.347									

** - Less 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 RICH0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	170.	1515.667	9200.	45.	9546828.	3089.794	45.	73.	1865.	9200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	2.23	2.437	3.964	1.653	0.624	0.79	1.653	1.862	2.953	3.964
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		273.612									

** - Less 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 RICH0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	355.	3068.25	16000.	9.	36941730.386	6077.971	19.8	61.25	2050.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	2.516	2.583	4.204	0.954	0.983	0.991	1.164	1.75	3.26	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		382.999									

** - Less 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 RICH0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	110.	421.455	2200.	20.	431134.473	656.608	20.	20.	790.	1918.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	2.041	2.15	3.342	1.301	0.505	0.71	1.301	1.301	2.898	3.253
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		141.18									

** - Less 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 1998 - Station RICH0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	78.	479.667	3500.	9.	1031096.424	1015.429	18.3	50.75	280.	2840.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	1.892	2.083	3.544	0.954	0.48	0.693	1.149	1.698	2.417	3.415
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		120.934									

** - Less 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: RICH0021

NPS Station ID: RICH0021 LAT/LON: 37.382781/ -77.305003 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, MOUTH OF JONES NECK QUARRY CHANNEL FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS088.81
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02A TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	51	26.6	25.614	32.3	17.9	18.94	4.352	18.32	22.5	28.8	31.14
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	47	227.	239.426	454.	116.	5271.163	72.603	161.8	181.	287.	346.
00096	SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-10/26/98	50	8.7	8.628	12.3	6.1	2.448	1.565	6.81	7.275	9.525	10.88
00400	PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.73	7.766	8.78	6.4	0.295	0.543	7.162	7.36	8.28	8.452
00400	CONVERTED PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.73	7.432	8.78	6.4	0.409	0.639	7.162	7.36	8.28	8.452
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/94-10/26/98	51	0.019	0.037	0.398	0.002	0.004	0.063	0.004	0.005	0.044	0.069
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	40.	370.192	9200.	9.	2010209.452	1417.819	9.	20.	88.5	300.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	1.602	1.668	3.964	0.954	0.446	0.668	0.954	1.301	1.946	2.471
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	46.511								

** - Less 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: RICH0021

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400	PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	51	1	0.02	31	1	0.03	5	0	0.00	15	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	7	0.13	32	2	0.06	5	2	0.40	15	3	0.20			

& - 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 1994 - Station RICH0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	30.	43.	92.	9.	1189.429	34.488	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	1.452	1.477	1.964	0.954	0.175	0.418	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		29.981									

** - Less 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 RICH0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	45.	1445.778	9200.	9.	9762346.194	3124.475	9.	20.	1805.	9200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	1.653	2.021	3.964	0.954	1.077	1.038	0.954	1.301	2.793	3.964
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		105.071									

** - Less 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 RICH0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	40.	367.75	3500.	9.	982891.477	991.409	9.	20.	200.	2549.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	1.602	1.793	3.544	0.954	0.549	0.741	0.954	1.301	2.293	3.236
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		62.147									

** - Less 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 RICH0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	20.	39.636	230.	9.	4159.255	64.492	9.	9.	45.	193.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	1.301	1.335	2.362	0.954	0.184	0.429	0.954	0.954	1.653	2.22
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		21.646									

** - Less 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 1998 - Station RICH0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	45.	87.083	390.	20.	11633.902	107.861	20.	20.	140.	315.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	1.653	1.708	2.591	1.301	0.199	0.446	1.301	1.301	2.146	2.458
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		51.033									

** - Less 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: RICH0022

NPS Station ID: RICH0022 LAT/LON: 37.383337/ -77.316670 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION J70 - JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPA3010
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 4.620 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206044000.00 RF3 Mile Point: 0.52 Distance from RF3: 0.41 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0022

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0023

NPS Station ID: RICH0023 LAT/LON: 37.384809/ -77.383587 Agency: 21VASWCB Date Created: / /
Location: DUTCH GAP, BUOY 155 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS097.77 /VA2-02-X0136/VA2-4X0136
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 8.910 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004503.92 RF3 Mile Point: 4.06 Distance from RF3: 0.05 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-11/02/83	2010	28.	25.445	34.	5.6	36.238	6.02	15.	21.	30.5	31.5
00023 SAMPLE WEIGHT IN POUNDS		10/26/79-10/26/79	3	0.1	0.2	0.4	0.1	0.03	0.173	**	**	**	**
00024 SAMPLE LENGTH IN INCHES		10/26/79-10/26/79	3	4.4	6.033	9.6	4.1	9.563	3.092	**	**	**	**
00070 TURBIDITY, (JACKSON CANDLE UNITS)		07/28/75-07/16/80	2	18.1	18.1	31.	5.2	332.82	18.243	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)		11/18/82-10/12/83	9##	0.12	0.266	0.8	0.105	0.076	0.276	0.105	0.118	0.428	0.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-09/27/83	16	231.	243.125	370.	154.	5073.183	71.226	156.8	177.5	297.5	356.7
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/02/83	2013	6.7	6.89	13.4	1.	1.847	1.359	5.4	6.	7.6	9.2
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	29	2.	2.376	6.2	0.5	2.225	1.492	1.	1.45	2.7	5.9
00340 COD, .25N K2CR2O7	MG/L	05/19/80-06/28/83	13	12.	13.769	22.	6.	30.026	5.48	6.4	8.5	18.	21.6
00400 PH (STANDARD UNITS)		07/22/68-09/27/83	79	7.5	7.51	9.2	6.2	0.293	0.541	6.9	7.2	7.6	8.3
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-09/27/83	79	7.5	7.244	9.2	6.2	0.364	0.604	6.9	7.2	7.6	8.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-09/27/83	79	0.032	0.057	0.631	0.001	0.007	0.083	0.005	0.025	0.063	0.126
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-05/26/74	6	7.05	6.917	7.3	6.	0.222	0.471	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-05/26/74	6	7.047	6.626	7.3	6.	0.323	0.568	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-05/26/74	6	0.09	0.236	1.	0.05	0.141	0.375	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-09/27/83	9	44.	45.556	67.	17.	233.528	15.282	17.	36.5	58.5	67.
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		07/28/83-09/27/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00480 SALINITY - PARTS PER THOUSAND		11/18/82-06/28/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/28/83	35	134.	146.657	538.	74.	5753.35	75.851	93.4	115.	152.	190.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/28/83	35	33.	43.514	226.	3.	1323.551	36.381	19.6	26.	53.	76.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/28/83	35	99.	103.143	312.	32.	2569.714	50.692	46.6	74.	119.	150.2
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		07/27/81-09/27/83	4	188.5	187.75	220.	154.	908.25	30.137	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-09/27/83	56	12.5	12.821	36.	0.5	53.268	7.298	4.	7.25	17.	22.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-09/27/83	56	3.	3.929	16.	0.	10.604	3.256	0.	1.25	6.	8.3
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	53	9.	9.047	32.	0.	39.474	6.283	1.4	4.	13.5	16.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/21/70-09/27/83	71	0.2	0.266	0.8	0.05	0.027	0.166	0.062	0.1	0.4	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	71	0.01	0.02	0.14	0.	0.001	0.026	0.005	0.005	0.02	0.048
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	71	0.38	0.399	1.289	0.01	0.06	0.246	0.11	0.21	0.53	0.7
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		07/28/83-09/27/83	3	1.	0.933	1.	0.8	0.013	0.115	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-09/27/83	71	0.5	0.603	3.299	0.1	0.209	0.457	0.2	0.3	0.7	1.079
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)		07/28/83-09/27/83	3	0.5	0.567	0.8	0.4	0.043	0.208	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-09/27/83	16	0.2	0.228	0.4	0.1	0.009	0.093	0.1	0.2	0.3	0.4
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)		07/28/83-09/27/83	3	0.4	0.333	0.4	0.2	0.013	0.115	**	**	**	**

** - Less 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: RICH0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-09/27/83	16	0.17	0.182	0.35	0.07	0.008	0.089	0.07	0.098	0.263	0.315
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-09/27/83	16	5.5	5.688	8.	3.	3.163	1.778	3.	4.	7.	8.
00940	CHLORIDE,TOTAL IN WATER MG/L	05/05/70-04/24/79	38	9.5	9.447	20.	3.	17.227	4.151	4.	6.	11.	15.
01002	ARSENIC, TOTAL (UG/L AS AS)	05/02/72-10/28/82	4##	1.	1.375	2.5	1.	0.563	0.75	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/23/91-09/23/91	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	7##	5.	4.357	5.	0.5	2.893	1.701	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	15##	5.	4.8	10.	0.5	7.564	2.75	0.5	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	15##	5.	8.667	30.	5.	51.667	7.188	5.	5.	10.	24.
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/23/91-09/23/91	1	41.	41.	41.	41.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/02/72-10/28/82	12	5.	6.375	20.	1.	27.415	5.236	1.	2.375	9.25	17.
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/23/91-09/23/91	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	1	80.	80.	80.	80.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	4##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	25.	26.25	50.	5.	489.583	22.127	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/23/91-09/23/91	1	29.	29.	29.	29.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	15##	5.	18.	110.	5.	731.429	27.045	5.	5.	20.	62.
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	09/23/91-09/23/91	1	150.	150.	150.	150.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	13	9300.	20523.462	150000.	15.	1650373397.436	40624.788	101.	680.	16000.	107200.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-09/09/70	13	3.968	3.589	5.176	1.176	1.128	1.062	1.65	2.801	4.182	4.959
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	3883.867								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	93.	138.667	230.	93.	6256.333	79.097	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	1.968	2.1	2.362	1.968	0.052	0.227	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	125.766								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/27/83	63	200.	2131.032	80000.	9.	102683140.515	10133.269	50.	50.	1000.	3320.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/27/83	63	2.301	2.37	4.903	0.954	0.604	0.777	1.699	1.699	3.	3.521
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	234.62								
32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	4	15.5	18.025	34.1	7.	143.229	11.968	**	**	**	**
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	4	4.3	6.85	15.4	3.4	32.73	5.721	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	09/23/91-09/23/91	1	50.	50.	50.	50.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	09/23/91-09/23/91	1	500.	500.	500.	500.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/23/91-09/23/91	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/23/91-09/23/91	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	09/23/91-09/23/91	1	500.	500.	500.	500.	0.	0.	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-09/27/83	4	0.05	0.05	0.1	0.	0.003	0.058	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	55	0.1	0.093	0.3	0.005	0.004	0.06	0.05	0.05	0.1	0.2
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	55	0.05	0.073	0.26	0.01	0.002	0.048	0.03	0.05	0.09	0.136
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	14##	0.25	0.239	0.5	0.15	0.008	0.088	0.15	0.15	0.25	0.375
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	10/26/79-10/26/79	3##	0.07	0.072	0.095	0.05	0.001	0.023	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/23/91-09/23/91	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-10/26/79	3	0.05	0.037	0.05	0.01	0.001	0.023	**	**	**	**
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	3	6.96	5.593	7.74	2.08	9.41	3.068	**	**	**	**
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	3	10.26	9.453	15.32	2.78	39.801	6.309	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-10/26/79	3	3.2	3.06	4.45	1.53	2.146	1.465	**	**	**	**
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-10/26/79	3##	0.07	0.072	0.095	0.05	0.001	0.023	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	09/23/91-09/23/91	1	100.	100.	100.	100.	0.	0.	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	10/26/79-10/26/79	3	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

EPA Water Quality Criteria Analysis for Station: RICH0023

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Pro
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00									
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2013	15	0.01	1617	13	0.01	367	0	0.00	29	2	0.07			
00400 PH	Fresh Chronic	9.	79	3	0.04	41	2	0.05	9	0	0.00	29	1	0.03			
	Other-Lo Lim.	6.5	79	2	0.03	41	0	0.00	9	0	0.00	29	2	0.07			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	1	0	0.00				5	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	1	0	0.00				5	1	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	71	0	0.00	35	0	0.00	9	0	0.00	27	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	71	0	0.00	35	0	0.00	9	0	0.00	27	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	3	0	0.00									
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	38	0	0.00	19	0	0.00	4	0	0.00	15	0	0.00			
	Drinking Water	250.	38	0	0.00	19	0	0.00	4	0	0.00	15	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00				1	0	0.00	3	0	0.00			
	Drinking Water	50.	4	0	0.00				1	0	0.00	3	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.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	15	2	0.13	4	0	0.00	2	0	0.00	9	2	0.22			
	Drinking Water	1300.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	12	0	0.00	4	0	0.00	2	0	0.00	6	0	0.00			
	Drinking Water	15.	12	1	0.08	4	1	0.25	2	0	0.00	6	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00							4	0	0.00			
	Drinking Water	100.	4	0	0.00							4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
	Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
	Drinking Water	5000.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	9	0.69	8	5	0.63				5	4	0.80			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	3	0	0.00	3	0	0.00									
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	63	32	0.51	32	15	0.47	8	4	0.50	23	13	0.57			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	4	2	0.50	3	2	0.67				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	14	0	0.00	5	0	0.00	2	0	0.00	7	0	0.00			
	Drinking Water	2.	14	0	0.00	5	0	0.00	2	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

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-11/02/83	1615	29.5	27.731	34.	6.	15.878	3.985	21.	24.	31.	32.
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/02/83	1617	6.4	6.501	11.	2.4	1.197	1.094	5.3	5.8	7.1	7.9
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	13	2.	2.454	6.2	0.5	2.988	1.728	0.78	1.5	2.6	6.12
00400 PH (STANDARD UNITS)		07/22/68-09/27/83	41	7.5	7.578	9.2	6.7	0.278	0.527	7.12	7.3	7.6	8.5
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-09/27/83	41	7.5	7.378	9.2	6.7	0.319	0.565	7.12	7.3	7.6	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-09/27/83	41	0.032	0.042	0.2	0.001	0.001	0.038	0.003	0.025	0.05	0.076
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/28/83	9	152.	198.222	538.	128.	16957.194	130.22	128.	133.	193.5	538.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/28/83	9	36.	55.444	226.	24.	4139.528	64.339	24.	27.5	42.5	226.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/28/83	9	115.	142.778	312.	96.	4489.444	67.003	96.	103.5	152.	312.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-09/27/83	24	13.	13.354	36.	2.5	55.576	7.455	4.	9.	16.	24.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-09/27/83	24	3.	4.313	16.	0.	11.952	3.457	1.	2.	6.	8.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	21	9.	9.405	32.	1.	42.29	6.503	2.1	4.5	12.	14.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/21/70-09/27/83	35	0.29	0.292	0.6	0.05	0.025	0.16	0.1	0.17	0.48	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	35	0.02	0.029	0.14	0.	0.001	0.034	0.005	0.01	0.03	0.1
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	35	0.41	0.463	1.289	0.01	0.075	0.274	0.11	0.27	0.69	0.716
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-09/27/83	35	0.5	0.708	3.299	0.2	0.318	0.564	0.26	0.3	1.	1.199
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-04/24/79	19	10.	10.	20.	4.	19.222	4.384	4.	6.	14.	15.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/27/83	32	100.	715.781	8000.	9.	2329158.37	1526.158	43.	50.	875.	1850.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/27/83	32	2.	2.246	3.903	0.954	0.544	0.737	1.633	1.699	2.925	3.264
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	176.282								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/21/70-04/24/79	28	0.1	0.111	0.3	0.05	0.005	0.074	0.05	0.05	0.138	0.21
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/21/70-04/24/79	28	0.07	0.085	0.26	0.01	0.003	0.055	0.048	0.05	0.1	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 box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-11/02/83	367	14.	15.627	21.5	5.6	6.472	2.544	13.4	14.	18.	19.5
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/02/83	367	8.7	8.569	12.8	6.8	1.011	1.005	7.3	7.5	9.4	9.7
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	4	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-09/27/83	9	7.5	7.467	8.	6.9	0.15	0.387	6.9	7.1	7.8	8.
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-09/27/83	9	7.5	7.322	8.	6.9	0.174	0.417	6.9	7.1	7.8	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-09/27/83	9	0.032	0.048	0.126	0.01	0.002	0.041	0.01	0.018	0.082	0.126
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/28/83	7	135.	150.429	238.	112.	1925.619	43.882	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/28/83	7	33.	36.143	56.	26.	103.143	10.156	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/28/83	7	108.	114.286	195.	59.	1950.905	44.169	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-09/27/83	8	11.5	11.625	22.	1.	58.554	7.652	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-09/27/83	8	4.	4.375	10.	0.	12.839	3.583	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	8	8.5	7.313	16.	0.	35.21	5.934	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/21/70-09/27/83	9	0.2	0.286	0.5	0.05	0.033	0.182	0.05	0.135	0.5	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	9	0.01	0.018	0.06	0.005	0.	0.018	0.005	0.008	0.025	0.06
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	9	0.42	0.467	0.9	0.28	0.048	0.219	0.28	0.3	0.615	0.9
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-09/27/83	9	0.5	0.533	0.8	0.2	0.045	0.212	0.2	0.35	0.75	0.8
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-04/24/79	4	11.5	11.5	15.	8.	8.333	2.887	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/27/83	8	300.	1356.25	8000.	50.	7394598.214	2719.301	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/27/83	8	2.349	2.468	3.903	1.699	0.674	0.821	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	293.458								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/21/70-04/24/79	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/21/70-04/24/79	5	0.06	0.088	0.18	0.04	0.003	0.056	**	**	**	**

** - Less 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: 3/16 to 6/30 - Station RICH0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/02/83	28	22.1	22.289	30.6	8.	26.176	5.116	16.7	19.625	25.975	28.54
00300	OXYGEN, DISSOLVED MG/L	07/22/68-11/02/83	29	7.6	7.331	13.4	1.	4.507	2.123	5.	6.45	8.45	9.3
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/28/83	12	2.05	2.417	5.9	1.	2.345	1.531	1.	1.05	3.675	5.33
00400	PH (STANDARD UNITS)	07/22/68-09/27/83	29	7.3	7.428	9.	6.2	0.361	0.601	6.8	7.05	7.85	8.3
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-09/27/83	29	7.3	7.09	9.	6.2	0.479	0.692	6.8	7.05	7.85	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-09/27/83	29	0.05	0.081	0.631	0.001	0.016	0.125	0.005	0.014	0.09	0.158
00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	19	122.	120.842	162.	74.	650.585	25.507	75.	107.	138.	157.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	19	33.	40.579	84.	3.	524.48	22.902	17.	24.	55.	82.
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	19	82.	80.263	125.	32.	821.982	28.67	38.	56.	102.	121.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-09/27/83	24	13.	12.688	27.	0.5	53.17	7.292	4.	6.	19.25	22.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-09/27/83	24	3.	3.396	12.	0.	8.978	2.996	0.	1.	5.75	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	24	8.	9.313	20.	0.5	40.518	6.365	1.5	4.	14.75	18.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	27	0.2	0.226	0.8	0.05	0.028	0.166	0.05	0.1	0.3	0.438
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	27	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	27	0.31	0.294	0.59	0.025	0.031	0.176	0.046	0.13	0.48	0.532
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/27/83	27	0.4	0.489	1.799	0.1	0.104	0.322	0.2	0.3	0.5	0.84
00940	CHLORIDE,TOTAL IN WATER MG/L	05/05/70-04/24/79	15	7.	8.2	20.	3.	15.743	3.968	4.2	6.	10.	14.6
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/27/83	23	200.	4369.565	80000.	50.	275374486.166	16594.411	50.	100.	600.	6600.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/27/83	23	2.301	2.509	4.903	1.699	0.675	0.822	1.699	2.	2.778	3.803
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	323.075								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	22##	0.05	0.073	0.15	0.005	0.001	0.036	0.05	0.05	0.1	0.135
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	22	0.05	0.055	0.16	0.01	0.001	0.032	0.03	0.03	0.055	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

Station Inventory for Station: RICH0024

NPS Station ID: RICH0024 LAT/LON: 37.384809/ -77.383587 Agency: 21VASWCB Date Created: 05/09/81
Location: JAMES RIVER AT BUOY 155
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): XPL3170 /X288850 /Y4140100
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 8.910 Distance from RF1: 22.50 On/Off RF1: OFF
RF3 Index: 02080207116900.70 RF3 Mile Point: 1.73 Distance from RF3: 0.00 On/Off RF3:
Description:
VA SWCB CORE NETWORK STATION 21

Parameter Inventory for Station: RICH0024

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71918 ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	10/26/79-09/17/80	6	1.045	1.238	3.	0.1	1.577	1.256	**	**	**	**
71930 MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-09/17/80	6	0.035	0.035	0.05	0.02	0.	0.016	**	**	**	**
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	6	1.79	3.38	7.74	0.9	9.68	3.111	**	**	**	**
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	6	5.9	7.31	15.32	2.78	22.334	4.726	**	**	**	**
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	10/26/79-09/17/80	6	1.7	2.263	4.45	1.	1.689	1.3	**	**	**	**
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/26/79-09/17/80	6	0.1	0.122	0.19	0.1	0.001	0.037	**	**	**	**
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	10/26/79-09/17/80	6	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

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

Station Inventory for Station: RICH0025

NPS Station ID: RICH0025 LAT/LON: 37.385004/ -77.236948 Agency: 21VASWCB Date Created: 05/06/95
Location: TURKEY ISLAND CREEK FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-TIC002.69
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: TURKEY ISLAND CREEK SECTION: 07 TOPO MAP #: 0141 TOPO MAP NAME: ROXBURY, VA

Parameter Inventory for Station: RICH0025

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/92-06/04/97	3	15.3	13.3	16.9	7.7	24.16	4.915	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/30/92-06/04/97	3	91.	95.	140.	54.	1861.	43.139	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	04/30/92-06/04/97	3	7.8	8.4	10.	7.4	1.96	1.4	**	**	**	**
00400	PH (STANDARD UNITS)	04/30/92-06/04/97	3	6.36	6.303	6.56	5.99	0.084	0.289	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/30/92-06/04/97	3	6.36	6.238	6.56	5.99	0.09	0.3	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/92-06/04/97	3	0.437	0.578	1.023	0.275	0.155	0.394	**	**	**	**

** - Less 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: RICH0025

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	2	0.67				1	0	0.00	2	2	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: RICH0026

NPS Station ID: RICH0026 LAT/LON: 37.389726/ -77.362781 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, OFFF RICHMOND YATCH BASIN FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS096.22
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0026

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/14/94-10/26/98	51	26.	26.278	33.9	15.6	26.079	5.107	19.18	22.1	30.7	32.92
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		07/28/94-10/26/98	47	226.	241.553	462.	122.	5995.296	77.429	146.8	179.	304.	348.2
00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/14/94-10/26/98	50	7.9	8.042	11.8	5.5	1.478	1.216	6.51	7.3	8.7	9.7
00400	PH (STANDARD UNITS)		07/14/94-10/26/98	51	7.59	7.632	8.88	7.02	0.172	0.414	7.138	7.34	7.9	8.148
00400	CONVERTED PH (STANDARD UNITS)		07/14/94-10/26/98	51	7.59	7.479	8.88	7.02	0.195	0.442	7.138	7.34	7.9	8.148
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/14/94-10/26/98	51	0.026	0.033	0.095	0.001	0.001	0.025	0.007	0.013	0.046	0.073
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	52	101.5	1300.385	16000.	9.	14161488.986	3763.175	12.3	45.	450.	3110.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	52	2.005	2.171	4.204	0.954	0.693	0.833	1.058	1.653	2.647	3.484
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				GEOMETRIC MEAN =	148.161								

** - Less 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: RICH0026

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400	PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	19	0.37	32	11	0.34	5	2	0.40	15	6	0.40			

& - 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 1994 - Station RICH0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	161.5	277.	790.	20.	91132.286	301.881	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	8	2.165	2.167	2.898	1.301	0.317	0.563	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		146.819									

** - Less 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 RICH0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	78.	2405.889	16000.	9.	27892724.861	5281.356	9.	42.5	2545.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	9	1.892	2.349	4.204	0.954	1.117	1.057	0.954	1.628	3.266	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		223.338									

** - Less 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 RICH0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	355.	3015.083	16000.	20.	37020857.356	6084.477	20.	47.75	1472.5	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	2.516	2.547	4.204	1.301	0.994	0.997	1.301	1.677	3.147	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		352.345									

** - Less 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 RICH0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	45.	85.	230.	9.	6010.2	77.525	9.	9.	170.	218.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	11	1.653	1.691	2.362	0.954	0.289	0.538	0.954	0.954	2.23	2.335
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		49.079									

** - Less 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 1998 - Station RICH0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	94.	552.917	3500.	9.	1232121.538	1110.01	18.3	45.	222.5	3110.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	1.967	2.103	3.544	0.954	0.528	0.726	1.149	1.653	2.343	3.484
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		126.858									

** - Less 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: RICH0027

NPS Station ID: RICH0027 LAT/LON: 37.390559/ -77.363615 Agency: 112WRD Date Created: / /
Location: JAMES RIVER NEAR DUTCH GAP, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/ESTURY STORET Station ID(s): 02038700
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 1.80 On/Off RF1:
RF3 Index: 02080205075100.00 RF3 Mile Point: 0.71 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0027

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/12/74-02/27/79	122	17.	17.045	35.	1.5	89.331	9.451	3.8	9.	26.	29.35
00060	FLOW, STREAM, MEAN DAILY	CFS	03/12/74-09/22/76	68	5570.	7828.088	32800.	1020.	40919797.783	6396.858	2199.	3700.	9970.	18630.
00061	FLOW, STREAM, INSTANTANEOUS	CFS	08/13/75-02/27/79	57	4900.	9032.807	137000.	680.	349711995.551	18700.588	1300.	2130.	8065.	18000.
00070	TURBIDITY, (JACKSON CANDLE UNITS)		03/12/74-02/27/79	119	8.	15.714	300.	1.	878.341	29.637	2.	5.	15.	40.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/12/74-02/27/79	121	160.	175.471	430.	50.	4550.701	67.459	108.	127.5	210.	280.
00300	OXYGEN, DISSOLVED	MG/L	03/12/74-02/27/79	121	8.9	9.465	15.6	4.9	6.305	2.511	6.62	7.4	11.5	13.28
00310	BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	120	1.85	1.924	7.3	0.	1.592	1.262	0.61	1.	2.4	3.48
00335	COD, .025N K2CR2O7	MG/L	03/12/74-02/12/75	12	12.	11.367	21.	0.	48.377	6.955	1.02	4.5	18.	20.7
00340	COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	108	11.	12.657	50.	0.	74.732	8.645	4.	8.	15.	21.1
00400	PH (STANDARD UNITS)		03/12/74-02/27/79	121	7.1	7.045	8.6	5.5	0.328	0.572	6.42	6.7	7.45	7.6
00400	CONVERTED PH (STANDARD UNITS)		03/12/74-02/27/79	121	7.1	6.645	8.6	5.5	0.489	0.699	6.42	6.7	7.45	7.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/12/74-02/27/79	121	0.079	0.226	3.162	0.003	0.204	0.451	0.025	0.036	0.2	0.382
00405	CARBON DIOXIDE (MG/L AS CO2)		03/12/74-12/21/78	20	7.4	32.81	243.	0.3	3910.571	62.535	0.73	3.9	20.5	135.7
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		03/12/74-12/21/78	20	42.5	44.45	59.	33.	51.418	7.171	36.3	39.	50.	56.8
00440	BICARBONATE ION (MG/L AS HCO3)		03/12/74-12/21/78	20	51.5	54.2	72.	40.	77.326	8.794	44.3	48.	61.	69.7
00445	CARBONATE ION (MG/L AS CO3)		03/12/74-12/21/78	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00572	BIOMASS, PERIPHYTON (GRAMS PER SQUARE METER)		09/14/74-03/05/75	3	11.	12.633	20.	6.9	44.903	6.701	**	**	**	**
00573	BIOMASS, PERIPHYTON,DRY WEIGHT TOTAL (G/M2)		03/05/75-03/05/75	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00600	NITROGEN, TOTAL (MG/L AS N)		03/12/74-02/27/79	120	0.975	1.004	2.	0.11	0.107	0.327	0.622	0.813	1.2	1.49
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)		06/12/74-02/27/79	114	0.37	0.399	1.2	0.03	0.047	0.217	0.16	0.25	0.493	0.675
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/12/74-02/27/79	120	0.205	0.235	0.72	0.005	0.019	0.138	0.1	0.13	0.31	0.43
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/12/74-02/27/79	120	0.57	0.603	1.5	0.02	0.077	0.277	0.292	0.43	0.748	0.947
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		03/12/74-02/27/79	120	0.39	0.4	1.3	0.04	0.031	0.175	0.24	0.31	0.478	0.58
00665	PHOSPHORUS, TOTAL (MG/L AS P)		03/12/74-02/27/79	120	0.14	0.148	0.31	0.06	0.003	0.054	0.081	0.11	0.168	0.229
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		03/12/74-02/27/79	113	4.5	5.042	13.	1.	6.84	2.615	2.28	2.95	7.	8.52
00916	CALCIUM, TOTAL (MG/L AS CA)		03/12/74-03/12/74	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00927	MAGNESIUM, TOTAL (MG/L AS MG)		03/12/74-03/12/74	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00929	SODIUM, TOTAL (MG/L AS NA)		06/26/74-06/26/74	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)		03/12/74-03/12/74	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00937	POTASSIUM, TOTAL MG/L AS K)		03/12/74-06/26/74	2	1.7	1.7	1.9	1.5	0.08	0.283	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER	MG/L	03/12/74-12/21/78	20	10.	12.3	33.	5.	46.537	6.822	7.	8.	16.75	21.8
00945	SULFATE, TOTAL (MG/L AS SO4)		03/12/74-12/21/78	20	16.	18.5	43.	10.	60.158	7.756	12.	14.	23.75	27.9
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED,M-ENDO MED,35C		06/12/74-11/04/76	59	425.	772.153	4300.	18.	847146.028	920.405	56.	216.	850.	2140.
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED,M-ENDO MED,		06/12/74-11/04/76	59	2.628	2.615	3.633	1.255	0.278	0.528	1.748	2.334	2.929	3.33
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED,M-ENDO MED,3				GEOMETRIC MEAN =	411.818								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	88	81.	701.841	35500.	6.5	14422534.486	3797.701	20.	34.5	390.5	717.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	88	1.908	2.054	4.55	0.813	0.459	0.677	1.301	1.538	2.591	2.855
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	113.179								

** - Less 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: RICH0027

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31625 FECAL COLIFORM, MF,M-FC, 0.7 UM	10/18/77-02/27/79	32	495.	1417.094	6000.	18.	3149740.668	1774.751	32.3	53.25	2475.	4230.
31625 LOG FECAL COLIFORM, MF,M-FC, 0.7 UM	10/18/77-02/27/79	32	2.694	2.61	3.778	1.255	0.686	0.829	1.509	1.71	3.394	3.624
31625 GM FECAL COLIFORM, MF,M-FC, 0.7 UM			GEOMETRIC MEAN =	407.086								
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	118	40.	558.182	15600.	0.5	3248042.387	1802.233	4.95	18.	250.	1384.5
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	118	1.602	1.811	4.193	-0.301	0.796	0.892	0.694	1.255	2.398	3.141
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR			GEOMETRIC MEAN =	64.702								
31679 FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	06/12/74-07/14/76	2	42.	42.	48.	36.	72.	8.485	**	**	**	**
31679 LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	06/12/74-07/14/76	2	1.619	1.619	1.681	1.556	0.008	0.088	**	**	**	**
31679 GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4			GEOMETRIC MEAN =	41.569								
32226 CHLOROPHYLL B, PERIPHYTON, SPECTRO, MG/M2	09/14/74-09/14/74	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
32228 CHLOROPHYLL A, PERIPHYTON, SPECTRO, MG/M2	09/14/74-09/14/74	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32230 CHLOROPHYLL A (MG/L)	03/12/74-08/09/78	95	0.002	0.007	0.043	0.	0.	0.01	0.	0.	0.012	0.022
32231 CHLOROPHYLL B (MG/L)	03/12/74-08/09/78	95	0.	0.003	0.05	0.	0.	0.008	0.	0.	0.002	0.009
60050 ALGAE, TOTAL (CELLS/ML)	01/15/75-01/15/75	1	810.	810.	810.	810.	0.	0.	**	**	**	**
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/12/74-02/27/79	113	100.	108.619	227.	0.9	1580.716	39.758	66.4	81.	128.	173.6
70301 SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/22/74-05/22/74	1	87.	87.	87.	87.	0.	0.	**	**	**	**
70302 SOLIDS, DISSOLVED-TONS PER DAY	03/12/74-02/27/79	114	1325.	1952.955	22200.	14.9	6716280.517	2591.579	628.5	917.	2085.	3160.
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/12/74-02/27/79	114	0.14	0.147	0.31	0.	0.003	0.054	0.09	0.11	0.17	0.24
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	06/08/78-06/08/78	1	100.	100.	100.	100.	0.	0.	**	**	**	**
70953 CHLOROPHYLL-A,PHYTOPLANKTON UG/L,CHROMO-FLUORO	04/19/78-02/27/79	19	5.7	9.411	45.1	0.	144.834	12.035	0.	0.	18.2	21.8
70954 CHLOROPHYLL-B,PHYTOPLANKTON UG/L,CHROMO-FLUORO	04/19/78-02/27/79	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71887 NITROGEN, TOTAL, AS NO3 - MG/L	03/12/74-02/27/79	120	4.3	4.448	9.	0.5	2.093	1.447	2.71	3.6	5.1	6.56
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	113	22.	38.469	550.	6.	4469.698	66.856	9.4	14.	33.5	70.6
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	112	296.	1958.589	132000.	25.	155977003.848	12489.075	62.5	137.	747.	1827.

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EPA Water Quality Criteria Analysis for Station: RICH0027

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	119	7	0.06	34	3	0.09	49	4	0.08	36	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	121	0	0.00	35	0	0.00	50	0	0.00	36	0	0.00			
00400 PH	Marine Chronic	8.5	121	2	0.02	35	1	0.03	50	0	0.00	36	1	0.03			
	Other-Lo Lim.	6.5	121	21	0.17	35	7	0.20	50	5	0.10	36	9	0.25			
31501 COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	59	11	0.19	19	0	0.00	23	4	0.17	17	7	0.41			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	88	32	0.36	29	8	0.28	30	11	0.37	29	13	0.45			
31625 FECAL COLIFORM, MF	Other-Hi Lim.	200.	32	21	0.66	6	2	0.33	20	15	0.75	6	4	0.67			

& - 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 1974 - Station RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/12/74-02/27/79	20	19.	17.8	30.	5.	50.8	7.127	7.2	12.	23.75	26.8
00070 TURBIDITY, (JACKSON CANDLE UNITS)		03/12/74-02/27/79	20	12.5	18.6	50.	1.	196.779	14.028	4.2	9.25	28.75	44.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/12/74-02/27/79	20	160.	171.55	231.	105.	1612.576	40.157	120.	138.75	208.75	229.
00300 OXYGEN, DISSOLVED	MG/L	03/12/74-02/27/79	20	7.9	8.08	12.2	5.8	3.121	1.767	5.91	6.825	8.875	10.78
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	20	2.5	2.645	7.3	0.3	2.649	1.628	0.91	1.325	3.1	5.3
00340 COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	9	11.	11.556	26.	4.	48.778	6.984	4.	5.5	16.	26.
00400 PH (STANDARD UNITS)		03/12/74-02/27/79	20	6.9	6.85	7.6	5.8	0.174	0.417	6.41	6.525	7.175	7.3
00400 CONVERTED PH (STANDARD UNITS)		03/12/74-02/27/79	20	6.9	6.631	7.6	5.8	0.225	0.474	6.41	6.525	7.175	7.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/12/74-02/27/79	20	0.126	0.234	1.585	0.025	0.113	0.337	0.05	0.067	0.3	0.39
00600 NITROGEN, TOTAL (MG/L AS N)		03/12/74-02/27/79	20	0.96	0.84	1.2	0.11	0.12	0.346	0.15	0.573	1.1	1.2
00605 NITROGEN, ORGANIC, TOTAL (MG/L AS N)		06/12/74-02/27/79	14	0.41	0.42	0.65	0.16	0.022	0.148	0.2	0.305	0.585	0.63
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/12/74-02/27/79	20	0.255	0.295	0.72	0.01	0.033	0.183	0.112	0.173	0.41	0.652
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/12/74-02/27/79	20	0.59	0.517	0.96	0.02	0.1	0.316	0.07	0.145	0.793	0.908
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		03/12/74-02/27/79	20	0.34	0.325	0.54	0.04	0.015	0.122	0.118	0.253	0.42	0.459
00665 PHOSPHORUS, TOTAL (MG/L AS P)		03/12/74-02/27/79	20	0.14	0.135	0.22	0.065	0.001	0.039	0.073	0.113	0.16	0.18
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/12/74-02/27/79	16	3.05	3.45	7.6	2.1	1.833	1.354	2.17	2.5	4.075	5.43
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	20	96.5	174.7	580.	10.	38124.958	195.256	15.5	31.75	349.	552.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	20	1.974	1.946	2.763	1.	0.305	0.553	1.189	1.5	2.521	2.741
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		88.284									
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	19	17.	30.737	158.	2.	1944.538	44.097	2.	4.	28.	140.
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	19	1.23	1.161	2.199	0.301	0.305	0.552	0.301	0.602	1.447	2.146
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		GEOMETRIC MEAN =		14.5									
32230 CHLOROPHYLL A (MG/L)		03/12/74-08/09/78	16	0.016	0.014	0.034	0.	0.	0.01	0.	0.004	0.021	0.027
32231 CHLOROPHYLL B (MG/L)		03/12/74-08/09/78	16	0.008	0.014	0.05	0.	0.	0.015	0.	0.001	0.028	0.039
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L		03/12/74-02/27/79	18	105.	104.383	148.	0.9	1066.057	32.651	65.79	93.	126.25	136.3
70302 SOLIDS, DISSOLVED-TONS PER DAY		03/12/74-02/27/79	19	1120.	1397.942	4800.	14.9	1040671.419	1020.133	645.	796.	1810.	2430.
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT		03/12/74-02/27/79	19	0.14	0.141	0.2	0.	0.002	0.044	0.1	0.12	0.17	0.18
71887 NITROGEN, TOTAL, AS NO3 - MG/L		03/12/74-02/27/79	20	4.25	3.73	5.4	0.5	2.343	1.531	0.69	2.55	4.95	5.28
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)		03/12/74-02/27/79	16	26.	33.438	95.	11.	492.263	22.187	13.8	17.75	41.25	77.5
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)		03/12/74-02/27/79	16	324.	803.875	4850.	70.	1415882.25	1189.909	93.8	130.75	1046.75	2596.

** - Less 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 RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/12/74-02/27/79	27	16.	16.481	30.	5.	71.259	8.442	5.8	9.	25.	30.
00070 TURBIDITY, (JACKSON CANDLE UNITS)		03/12/74-02/27/79	25	6.	15.2	60.	2.	268.667	16.391	3.6	5.	22.5	44.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/12/74-02/27/79	26	140.	137.962	225.	50.	1734.838	41.651	76.4	108.75	170.	187.4
00300 OXYGEN, DISSOLVED	MG/L	03/12/74-02/27/79	26	8.95	8.981	13.9	5.7	4.599	2.145	6.18	7.075	10.5	12.17
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	25	2.	2.052	6.3	0.	2.279	1.51	0.1	0.85	2.65	4.28
00340 COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	26	11.	11.577	46.	2.	76.894	8.769	4.	5.5	12.5	21.9
00400 PH (STANDARD UNITS)		03/12/74-02/27/79	26	6.9	6.969	8.2	5.8	0.282	0.531	6.44	6.6	7.3	7.86
00400 CONVERTED PH (STANDARD UNITS)		03/12/74-02/27/79	26	6 9	6.69	8.2	5.8	0.363	0.603	6.44	6.6	7.3	7.86
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/12/74-02/27/79	26	0.126	0.204	1.585	0.006	0.093	0.306	0.014	0.05	0.251	0.372
00600 NITROGEN, TOTAL (MG/L AS N)		03/12/74-02/27/79	26	1.	1.087	1.7	0.69	0.094	0.307	0.771	0.833	1.225	1.7
00605 NITROGEN, ORGANIC, TOTAL (MG/L AS N)		06/12/74-02/27/79	26	0.38	0.474	1.1	0.11	0.069	0.263	0.238	0.28	0.58	0.993
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/12/74-02/27/79	26	0.225	0.257	0.66	0.1	0.019	0.136	0.114	0.163	0.343	0.457
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/12/74-02/27/79	26	0.65	0.732	1.4	0.39	0.103	0.321	0.427	0.485	0.918	1.3
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		03/12/74-02/27/79	26	0.35	0.353	0.5	0.1	0.007	0.086	0.261	0.3	0.41	0.466
00665 PHOSPHORUS, TOTAL (MG/L AS P)		03/12/74-02/27/79	26	0.125	0.13	0.27	0.06	0.002	0.046	0.077	0.087	0.16	0.173
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/12/74-02/27/79	26	5.	5.562	12.	1.8	7.55	2.748	2.31	3.5	7.7	9.32
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	26	250.	1805.346	35500.	20.	47687279.435	6905.598	30.2	72.25	645.	1712.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	26	2.389	2.4	4.55	1.301	0.526	0.725	1.478	1.858	2.807	3.154
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		251.254									
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	26	80.5	874.	15600.	2.	9205265.36	3034.018	5.4	11.5	511.25	1403.5
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	26	1.898	1.936	4.193	0.301	0.892	0.945	0.725	1.059	2.706	3.147

** - Less 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 RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31673	GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	GEOMETRIC MEAN =		86.215									
32230	CHLOROPHYLL A (MG/L)	03/12/74-08/09/78	26	0.002	0.004	0.029	0.	0.	0.007	0.	0.	0.007	0.016
32231	CHLOROPHYLL B (MG/L)	03/12/74-08/09/78	26	0.	0.001	0.01	0.	0.	0.002	0.	0.	0.001	0.004
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/12/74-02/27/79	21	84.	91.619	139.	55.	414.948	20.37	63.4	78.5	108.	121.
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/12/74-02/27/79	21	1330.	2173.905	5700.	834.	2128142.99	1458.816	968.4	1165.	2860.	5008.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/12/74-02/27/79	21	0.11	0.125	0.19	0.07	0.001	0.029	0.084	0.11	0.15	0.166
71887	NITROGEN, TOTAL, AS NO3 - MG/L	03/12/74-02/27/79	26	4.5	4.808	7.6	3.1	1.829	1.352	3.44	3.675	5.5	7.43
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	26	23.5	64.538	550.	9.	12950.818	113.802	11.1	16.75	58.25	192.9
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	25	505.	1086.24	4610.	153.	1432438.773	1196.845	168.2	207.	1565.	3116.

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Annual Analysis for 1976 - Station RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/74-02/27/79	23	21.	18.304	32.	2.	90.585	9.518	3.8	11.	28.	28.6
00070	TURBIDITY, (JACKSON CANDLE UNITS)	03/12/74-02/27/79	23	10.	13.957	55.	1.	265.225	16.286	1.	2.	15.	51.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/74-02/27/79	23	150.	164.348	290.	75.	3000.237	54.774	108.8	130.	185.	260.
00300	OXYGEN, DISSOLVED MG/L	03/12/74-02/27/79	23	8.8	9.452	13.2	6.9	4.113	2.028	7.2	7.8	11.2	12.76
00310	BOD, 5 DAY, 20 DEG C MG/L	03/12/74-02/27/79	23	1.6	1.657	4.	0.6	0.695	0.834	0.7	0.9	2.1	2.7
00340	COD, .25N K2CR2O7 MG/L	06/12/74-02/27/79	22	11.	12.273	34.	4.	54.779	7.401	5.3	7.	15.25	25.8
00400	PH (STANDARD UNITS)	03/12/74-02/27/79	23	7.2	7.035	8.6	5.5	0.714	0.845	5.7	6.3	7.6	8.2
00400	CONVERTED PH (STANDARD UNITS)	03/12/74-02/27/79	23	7.2	6.336	8.6	5.5	1.225	1.107	5.7	6.3	7.6	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/74-02/27/79	23	0.063	0.461	3.162	0.003	0.7	0.837	0.012	0.025	0.501	1.995
00600	NITROGEN, TOTAL (MG/L AS N)	03/12/74-02/27/79	23	0.9	0.903	1.4	0.59	0.053	0.231	0.604	0.72	1.	1.3
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	06/12/74-02/27/79	23	0.35	0.369	0.7	0.04	0.029	0.17	0.172	0.23	0.5	0.608
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/12/74-02/27/79	23	0.15	0.156	0.29	0.05	0.003	0.059	0.08	0.12	0.2	0.246
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/12/74-02/27/79	23	0.49	0.525	0.84	0.19	0.031	0.175	0.272	0.4	0.64	0.808
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/12/74-02/27/79	23	0.39	0.376	0.58	0.1	0.014	0.117	0.19	0.31	0.45	0.51
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/12/74-02/27/79	23	0.13	0.144	0.29	0.06	0.002	0.047	0.1	0.11	0.16	0.204
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/12/74-02/27/79	22	4.65	4.886	9.2	1.6	4.733	2.175	2.03	3.075	5.8	8.76
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/12/74-10/05/77	23	112.	443.696	3600.	6.5	688543.062	829.785	16.9	37.	510.	1604.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/12/74-10/05/77	23	2.049	2.138	3.556	0.813	0.501	0.708	1.122	1.568	2.708	3.146
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		137.465									
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	23	37.	320.109	3800.	2.	625502.931	790.887	3.3	20.	320.	740.
31673	LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	23	1.568	1.773	3.58	0.301	0.72	0.849	0.5	1.301	2.505	2.867
31673	GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	GEOMETRIC MEAN =		59.283									
32230	CHLOROPHYLL A (MG/L)	03/12/74-08/09/78	23	0.	0.008	0.043	0.	0.	0.013	0.	0.	0.013	0.036
32231	CHLOROPHYLL B (MG/L)	03/12/74-08/09/78	23	0.	0.002	0.026	0.	0.	0.005	0.	0.	0.	0.004
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/12/74-02/27/79	23	94.	97.	171.	37.	1025.364	32.021	59.2	77.	106.	154.
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/12/74-02/27/79	23	1330.	1949.826	7970.	430.	2999804.15	1731.994	493.8	923.	2380.	4538.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/12/74-02/27/79	23	0.13	0.132	0.23	0.05	0.002	0.043	0.084	0.1	0.14	0.21
71887	NITROGEN, TOTAL, AS NO3 - MG/L	03/12/74-02/27/79	23	4.	3.991	6.1	2.6	1.017	1.009	2.7	3.2	4.4	5.76
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	22	15.	22.5	107.	7.	531.976	23.065	9.	12.	19.75	60.5
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	22	305.5	1089.727	11800.	25.	7398268.684	2719.976	33.2	111.	522.5	4647.8

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Annual Analysis for 1977 - Station RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/74-02/27/79	25	17.5	18.46	35.	1.5	129.748	11.391	2.9	7.25	29.25	33.2
00070	TURBIDITY, (JACKSON CANDLE UNITS)	03/12/74-02/27/79	24	7.	6.667	15.	1.	13.884	3.726	1.	4.25	8.	12.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/74-02/27/79	25	200.	216.32	430.	108.	7481.06	86.493	119.6	139.	287.5	330.8
00300	OXYGEN, DISSOLVED MG/L	03/12/74-02/27/79	25	9.6	10.032	15.6	4.9	7.669	2.769	7.1	7.6	12.15	14.08

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Annual Analysis for 1977 - Station RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	25	1.9	2.02	5.4	0.4	1.685	1.298	0.62	1.	2.3	4.24
00340 COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	24	13.	13.708	50.	4.	79.955	8.942	6.	9.	15.	20.
00400 PH (STANDARD UNITS)		03/12/74-02/27/79	25	7.5	7.356	8.4	6.2	0.246	0.496	6.62	7.2	7.6	8.04
00400 CONVERTED PH (STANDARD UNITS)		03/12/74-02/27/79	25	7.5	7.065	8.4	6.2	0.334	0.578	6.62	7.2	7.6	8.04
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/12/74-02/27/79	25	0.032	0.086	0.631	0.004	0.018	0.134	0.011	0.025	0.063	0.246
00600 NITROGEN, TOTAL (MG/L AS N)		03/12/74-02/27/79	24	1.05	1.15	2.	0.71	0.136	0.368	0.75	0.903	1.3	1.9
00605 NITROGEN, ORGANIC, TOTAL (MG/L AS N)		06/12/74-02/27/79	24	0.37	0.424	1.2	0.08	0.06	0.245	0.15	0.25	0.588	0.71
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/12/74-02/27/79	24	0.275	0.267	0.48	0.05	0.016	0.125	0.085	0.155	0.375	0.435
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/12/74-02/27/79	24	0.685	0.692	1.5	0.22	0.07	0.264	0.33	0.535	0.813	0.965
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		03/12/74-02/27/79	24	0.405	0.46	1.3	0.06	0.067	0.258	0.15	0.35	0.518	0.83
00665 PHOSPHORUS, TOTAL (MG/L AS P)		03/12/74-02/27/79	24	0.16	0.168	0.29	0.09	0.003	0.056	0.105	0.13	0.213	0.265
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/12/74-02/27/79	22	5.9	6.395	13.	1.6	10.343	3.216	2.6	3.425	8.025	12.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	19	38.	59.158	320.	7.	5963.251	77.222	18.	24.	52.	220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/12/74-10/05/77	19	1.58	1.591	2.505	0.845	0.13	0.361	1.255	1.38	1.716	2.342
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		39.011									
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	24	26.5	611.104	9200.	6.5	3901442.478	1975.207	13.5	20.	217.5	2030.
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	24	1.423	1.789	3.964	0.813	0.601	0.775	1.105	1.301	2.335	3.062
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		GEOMETRIC MEAN =		61.536									
32230 CHLOROPHYLL A (MG/L)		03/12/74-08/09/78	22	0.004	0.007	0.04	0.	0.	0.01	0.	0.	0.011	0.026
32231 CHLOROPHYLL B (MG/L)		03/12/74-08/09/78	22	0.	0.001	0.006	0.	0.	0.002	0.	0.	0.002	0.004
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L		03/12/74-02/27/79	24	120.5	131.333	227.	66.	2302.406	47.983	76.	91.25	177.25	207.5
70302 SOLIDS, DISSOLVED-TONS PER DAY		03/12/74-02/27/79	24	1090.	1217.917	2710.	395.	374988.862	612.363	467.	685.	1687.5	2210.
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT		03/12/74-02/27/79	24	0.16	0.178	0.31	0.09	0.004	0.066	0.105	0.123	0.24	0.28
71887 NITROGEN, TOTAL, AS NO3 - MG/L		03/12/74-02/27/79	24	4.65	5.1	9.	3.1	2.584	1.608	3.35	4.	5.875	8.15
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)		03/12/74-02/27/79	24	17.5	21.375	62.	6.	196.853	14.03	7.5	10.25	28.5	42.5
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)		03/12/74-02/27/79	24	140.	330.	2130.	25.	259165.217	509.083	26.	56.5	390.75	1070.

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Annual Analysis for 1978 - Station RICH0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/12/74-02/27/79	23	16.5	16.652	30.	1.5	91.283	9.554	3.2	8.	27.	28.8
00070 TURBIDITY, (JACKSON CANDLE UNITS)		03/12/74-02/27/79	23	10.	13.696	65.	2.	179.949	13.414	4.4	6.	15.	29.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/12/74-02/27/79	23	175.	194.	360.	90.	5532.455	74.38	107.	135.	243.	322.2
00300 OXYGEN, DISSOLVED	MG/L	03/12/74-02/27/79	23	9.9	9.843	14.4	5.7	7.823	2.797	6.22	7.	12.5	13.84
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/12/74-02/27/79	23	1.4	1.474	2.5	0.2	0.356	0.596	0.68	1.	2.	2.22
00340 COD, .25N K2CR2O7	MG/L	06/12/74-02/27/79	23	10.	11.13	23.	0.	33.664	5.802	2.8	8.	15.	21.2
00400 PH (STANDARD UNITS)		03/12/74-02/27/79	23	7.1	6.97	7.9	5.8	0.161	0.402	6.5	6.7	7.1	7.4
00400 CONVERTED PH (STANDARD UNITS)		03/12/74-02/27/79	23	7.1	6.738	7.9	5.8	0.217	0.466	6.5	6.7	7.1	7.4
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/12/74-02/27/79	23	0.079	0.183	1.585	0.013	0.1	0.316	0.04	0.079	0.2	0.316
00600 NITROGEN, TOTAL (MG/L AS N)		03/12/74-02/27/79	23	1.	1.008	1.6	0.54	0.086	0.293	0.596	0.76	1.2	1.56
00605 NITROGEN, ORGANIC, TOTAL (MG/L AS N)		06/12/74-02/27/79	23	0.33	0.325	0.58	0.1	0.016	0.126	0.154	0.23	0.41	0.49
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/12/74-02/27/79	23	0.2	0.212	0.55	0.01	0.017	0.129	0.076	0.12	0.27	0.414
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/12/74-02/27/79	23	0.51	0.537	1.	0.25	0.033	0.18	0.31	0.42	0.69	0.742
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		03/12/74-02/27/79	23	0.47	0.469	0.95	0.04	0.043	0.207	0.204	0.32	0.61	0.768
00665 PHOSPHORUS, TOTAL (MG/L AS P)		03/12/74-02/27/79	23	0.15	0.163	0.31	0.07	0.005	0.071	0.084	0.1	0.21	0.296
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/12/74-02/27/79	23	4.5	4.643	9.4	1.	5.367	2.317	1.76	2.6	6.2	8.2
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	22	205.	619.568	3100.	0.5	988904.674	994.437	10.4	36.	530.	2720.
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		03/12/74-02/27/79	22	2.312	2.125	3.491	-0.301	0.878	0.937	0.898	1.556	2.688	3.432
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		GEOMETRIC MEAN =		133.394									
32230 CHLOROPHYLL A (MG/L)		03/12/74-08/09/78	8	0.001	0.002	0.009	0.	0.	0.003	**	**	**	**
32231 CHLOROPHYLL B (MG/L)		03/12/74-08/09/78	8	0.001	0.001	0.003	0.	0.	0.001	**	**	**	**
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L		03/12/74-02/27/79	23	111.	120.87	225.	56.	2024.573	44.995	65.	90.	147.	188.4
70302 SOLIDS, DISSOLVED-TONS PER DAY		03/12/74-02/27/79	23	1500.	2044.696	15200.	598.	8616344.13	2935.361	646.8	840.	1770.	2720.
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT		03/12/74-02/27/79	23	0.15	0.165	0.31	0.08	0.004	0.062	0.09	0.12	0.2	0.256
71887 NITROGEN, TOTAL, AS NO3 - MG/L		03/12/74-02/27/79	23	4.4	4.461	7.3	2.4	1.751	1.323	2.64	3.4	5.2	7.02

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Annual Analysis for 1978 - Station RICH0027

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	21	25.	33.286	141.	9.	964.714	31.06	9.6	19.5	32.	88.8
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	21	279.	608.	5030.	77.	1107167.7	1052.22	80.4	143.5	732.	878.8

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Annual Analysis for 1979 - Station RICH0027

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/74-02/27/79	4	3.5	3.25	4.5	1.5	1.583	1.258	**	**	**	**
00070 TURBIDITY, (JACKSON CANDLE UNITS)	03/12/74-02/27/79	4	8.5	80.5	300.	5.	21417.667	146.348	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/74-02/27/79	4	142.5	141.	204.	75.	3570.	59.749	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	03/12/74-02/27/79	4	13.9	13.9	14.5	13.3	0.407	0.638	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/12/74-02/27/79	4	1.1	1.05	1.4	0.6	0.17	0.412	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	06/12/74-02/27/79	4	26.5	26.75	46.	8.	344.917	18.572	**	**	**	**
00400 PH (STANDARD UNITS)	03/12/74-02/27/79	4	7.05	7.075	7.5	6.7	0.109	0.33	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/12/74-02/27/79	4	7.047	6.989	7.5	6.7	0.119	0.345	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/74-02/27/79	4	0.09	0.103	0.2	0.032	0.005	0.071	**	**	**	**
00600 NITROGEN, TOTAL (MG/L AS N)	03/12/74-02/27/79	4	0.895	0.968	1.5	0.58	0.154	0.393	**	**	**	**
00605 NITROGEN, ORGANIC, TOTAL (MG/L AS N)	06/12/74-02/27/79	4	0.095	0.295	0.96	0.03	0.198	0.445	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/12/74-02/27/79	4	0.165	0.199	0.46	0.005	0.036	0.191	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/12/74-02/27/79	4	0.4	0.493	1.1	0.07	0.194	0.44	**	**	**	**
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	03/12/74-02/27/79	4	0.495	0.483	0.51	0.43	0.001	0.036	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	03/12/74-02/27/79	4	0.13	0.148	0.24	0.09	0.004	0.065	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	03/12/74-02/27/79	4	2.6	3.725	7.2	2.5	5.376	2.319	**	**	**	**
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	4	1390.	1724.5	4100.	18.	3606374.333	1899.046	**	**	**	**
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	03/12/74-02/27/79	4	2.98	2.707	3.613	1.255	1.132	1.064	**	**	**	**
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	GEOMETRIC MEAN = 509.346											
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/12/74-02/27/79	4	71.	77.	106.	60.	411.333	20.281	**	**	**	**
70302 SOLIDS, DISSOLVED-TONS PER DAY	03/12/74-02/27/79	4	2975.	7330.	22200.	1170.	99258600.	9962.861	**	**	**	**
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/12/74-02/27/79	4	0.095	0.103	0.14	0.08	0.001	0.026	**	**	**	**
71887 NITROGEN, TOTAL, AS NO3 - MG/L	03/12/74-02/27/79	4	3.95	4.325	6.8	2.6	3.262	1.806	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/12/74-02/27/79	4	30.5	106.75	358.	8.	28182.25	167.876	**	**	**	**
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/12/74-02/27/79	4	1296.5	33670.5	132000.	89.	4297617869.667	65556.219	**	**	**	**

** - Less 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: RICH0028

NPS Station ID: RICH0028 LAT/LON: 37.393059/ -77.483892 Agency: 21VASWCB Date Created: / /
Location: SALEM RD. ABOVE CENTRALIA STP FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-PCT006.81 /VA2-07-X0189/VA2-4X0189
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 29.30 On/Off RF1:
RF3 Index: 02080206008003.32 RF3 Mile Point: 3.80 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: PROCTORS CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0028

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-01/10/74	7	12.2	14.2	23.9	2.2	63.803	7.988	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/18/73-01/10/74	8	8.7	8.725	11.	6.2	3.016	1.737	**	**	**	**
00400 PH (STANDARD UNITS)	04/18/73-01/10/74	8	6.	6.	6.5	5.	0.286	0.535	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/18/73-01/10/74	8	6.	5.67	6.5	5.	0.41	0.641	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/73-01/10/74	8	1.	2.139	10.	0.316	10.957	3.31	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-01/10/74	8##	0.05	0.194	1.099	0.05	0.134	0.367	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-01/10/74	8##	0.005	0.011	0.05	0.005	0.	0.016	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/73-01/10/74	8	0.415	0.406	0.6	0.1	0.032	0.178	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-01/10/74	8	0.5	0.825	3.	0.3	0.805	0.897	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	08/04/73-08/04/73	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	08/04/73-08/04/73	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-12/12/73	3##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/29/73-12/12/73	3##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	08/04/73-12/12/73	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-08/04/73	2##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/29/73-12/12/73	3	30.	56.667	130.	10.	4133.333	64.291	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-01/10/74	8##	50.	68.75	100.	50.	669.643	25.877	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-01/10/74	8##	1.699	1.812	2.	1.699	0.024	0.156	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		64.842								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-01/10/74	8##	0.075	0.213	0.9	0.05	0.086	0.292	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-01/10/74	8	0.1	0.225	0.9	0.05	0.081	0.285	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	05/29/73-12/12/73	3##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0028

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8	0	0.00	2	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

EPA Water Quality Criteria Analysis for Station: RICH0028

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00400 PH	Fresh Chronic	9.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	8	8	1.00	2	2	1.00	4	4	1.00	2	2	1.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	8	0	0.00	2	0	0.00	4	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									
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.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	1300.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	15.	2	0	0.00	1	0	0.00	1	0	0.00						
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	3	1	0.33	1	0	0.00	1	1	1.00	1	0	0.00			
	Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	2.	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: RICH0029

NPS Station ID: RICH0029 LAT/LON: 37.393226/ -77.458031 Agency: 21VASWCB Date Created: / /
Location: CENTRALIA RD. BRIDGE BELOW STP
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-PCT004.92 /VA2-07-X0188/VA2-4X0188
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 22.60 On/Off RF1:
RF3 Index: 02080206008001.70 RF3 Mile Point: 1.95 Distance from RF3: 0.02 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: PROCTORS CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	61	16.	14.61	30.	0.7	59.323	7.702	2.36	8.9	21.1	23.9
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	62	8.45	8.458	15.4	3.9	7.024	2.65	4.86	6.4	10.2	11.77
00310 BOD, 5 DAY, 20 DEG C MG/L	05/17/74-05/17/74	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	04/18/73-06/21/79	61	6.5	6.386	7.5	4.5	0.359	0.599	5.54	6.	6.7	7.08
00400 CONVERTED PH (STANDARD UNITS)	04/18/73-06/21/79	61	6.5	5.848	7.5	4.5	0.653	0.808	5.54	6.	6.7	7.08
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/73-06/21/79	61	0.316	1.418	31.623	0.032	18.794	4.335	0.084	0.2	1.	2.929
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	59	0.2	0.532	9.5	0.05	1.854	1.362	0.05	0.05	0.4	1.299
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	60##	0.005	0.051	1.449	0.005	0.036	0.189	0.005	0.005	0.03	0.09
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/73-02/02/79	47	0.24	0.636	3.549	0.005	0.73	0.855	0.037	0.09	0.8	2.163
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	60	0.8	2.108	35.09	0.05	24.439	4.944	0.3	0.425	1.549	4.289
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	12	0.11	0.5	3.5	0.025	1.058	1.029	0.025	0.036	0.208	2.9
00940 CHLORIDE,TOTAL IN WATER MG/L	06/15/76-06/15/76	1	52.	52.	52.	52.	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3##	1.	1.167	2.	0.5	0.583	0.764	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4##	5.	5.125	5.5	5.	0.063	0.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	7##	5.	5.714	10.	5.	3.571	1.89	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	7##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/17/77-11/17/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	08/04/73-06/23/77	5##	5.	5.2	10.	1.	14.7	3.834	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	6##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	7	5.	11.286	30.	4.	99.905	9.995	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	57##	50.	174.561	1300.	50.	81260.965	285.063	50.	50.	100.	540.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	57##	1.699	1.962	3.114	1.699	0.173	0.416	1.699	1.699	2.	2.728
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	91.65								
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	60	0.2	0.779	10.	0.05	2.266	1.505	0.05	0.05	0.875	1.98
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	60	0.105	0.532	5.5	0.005	0.815	0.903	0.01	0.05	0.6	1.589
71900 MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	7##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0029

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	62	2	0.03	20	2	0.10	22	0	0.00	20	0	0.00			
00400 PH	Fresh Chronic	9.	61	0	0.00	20	0	0.00	22	0	0.00	19	0	0.00			
	Other-Lo Lim.	6.5	61	45	0.74	20	16	0.80	22	17	0.77	19	12	0.63			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	60	1	0.02	20	1	0.05	21	0	0.00	19	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	47	0	0.00	18	0	0.00	16	0	0.00	13	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	12	0	0.00	2	0	0.00	4	0	0.00	6	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			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	50.	3	0	0.00	1	0	0.00				2	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.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	1300.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	15.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
	Drinking Water	100.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	5000.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	57	13	0.23	18	7	0.39	20	2	0.10	19	4	0.21			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	2.	7	0	0.00	1	0	0.00	2	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

Annual Analysis for 1973 - Station RICH0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/29/73-06/21/79	7	20.	15.957	23.9	2.2	61.823	7.863	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/18/73-06/21/79	8	8.1	8.7	14.	6.4	6.137	2.477	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/18/73-06/21/79	8	0.25	0.275	0.9	0.05	0.076	0.275	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/18/73-06/21/79	8##	0.005	0.014	0.05	0.005	0.	0.017	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/18/73-06/21/79	8	0.9	1.175	2.	0.7	0.285	0.534	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	8##	50.	81.25	200.	50.	2812.5	53.033	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	8##	1.699	1.849	2.301	1.699	0.052	0.228	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		70.711									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/18/73-06/21/79	8	0.45	0.575	1.4	0.05	0.29	0.539	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/18/73-06/21/79	8	0.35	0.425	1.	0.1	0.119	0.345	**	**	**	**

** - Less 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 RICH0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/29/73-06/21/79	11	11.1	13.682	23.9	5.6	48.748	6.982	5.82	7.8	22.2	23.78
00300 OXYGEN, DISSOLVED	MG/L	04/18/73-06/21/79	11	9.	8.327	11.8	4.4	7.856	2.803	4.48	6.	11.	11.76
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/18/73-06/21/79	10	0.2	0.55	2.699	0.1	0.727	0.852	0.1	0.1	0.65	2.569
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/18/73-06/21/79	11##	0.005	0.012	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.036
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/18/73-06/21/79	11	1.099	1.518	4.	0.4	1.374	1.172	0.42	0.6	2.399	3.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	9##	50.	83.333	300.	50.	6875.	82.916	50.	50.	75.	300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	9##	1.699	1.819	2.477	1.699	0.071	0.266	1.699	1.699	1.849	2.477
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		65.899									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/18/73-06/21/79	11	0.3	0.582	1.6	0.05	0.355	0.596	0.05	0.1	1.1	1.58
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/18/73-06/21/79	11	0.3	0.559	1.599	0.05	0.368	0.607	0.05	0.05	1.099	1.579

** - Less 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 RICH0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/29/73-06/21/79	12	15.	14.408	22.2	5.	28.999	5.385	5.84	9.45	18.625	21.72
00300 OXYGEN, DISSOLVED	MG/L	04/18/73-06/21/79	12	8.8	8.55	11.	5.2	3.666	1.915	5.68	6.85	10.2	11.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/18/73-06/21/79	10	0.3	0.365	1.	0.05	0.072	0.269	0.055	0.175	0.5	0.95
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/18/73-06/21/79	10	0.01	0.014	0.05	0.005	0.	0.014	0.005	0.005	0.02	0.047
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/18/73-06/21/79	10	0.95	1.19	4.299	0.4	1.289	1.135	0.41	0.5	1.174	4.009
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	11##	50.	190.909	1300.	50.	140909.091	375.379	50.	50.	100.	1100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		04/18/73-06/21/79	11##	1.699	1.926	3.114	1.699	0.213	0.462	1.699	1.699	2.	2.987
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		84.277									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/18/73-06/21/79	10	0.3	0.415	1.7	0.05	0.223	0.473	0.055	0.175	0.425	1.58
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/18/73-06/21/79	10	0.135	0.277	1.199	0.05	0.122	0.35	0.05	0.088	0.323	1.127

** - Less 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 RICH0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/29/73-06/21/79	8	19.45	18.55	30.	3.9	67.82	8.235	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	04/18/73-06/21/79	8	7.1	7.187	9.9	4.	5.51	2.347	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/18/73-06/21/79	8	0.35	1.975	9.5	0.1	10.893	3.3	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/18/73-06/21/79	8	0.12	0.277	1.449	0.01	0.23	0.48	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/18/73-06/21/79	8	2.949	4.66	13.79	0.2	26.853	5.182	**	**	**	**

** - Less 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 RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	7	100.	307.143	1000.	50.	127857.143	357.571	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	7	2.	2.2	3.	1.699	0.307	0.554	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		158.382									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	8	2.2	2.831	10.	0.05	10.636	3.261	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	8	0.92	1.464	5.5	0.005	3.29	1.814	**	**	**	**

** - Less 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 RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	11	17.	12.864	27.	1.	94.205	9.706	1.	1.	19.	26.7
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	11	8.7	8.591	13.6	3.9	10.137	3.184	4.12	5.1	11.	13.44
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	11	0.1	0.327	1.899	0.05	0.291	0.539	0.05	0.05	0.4	1.599
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	11##	0.005	0.025	0.09	0.005	0.001	0.031	0.005	0.005	0.05	0.086
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	11	0.9	4.272	35.09	0.2	106.656	10.327	0.22	0.3	1.299	29.172
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	11##	50.	145.455	700.	50.	37227.273	192.944	50.	50.	200.	600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	11##	1.699	1.967	2.845	1.699	0.143	0.378	1.699	1.699	2.301	2.736
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		92.76									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	11	0.1	0.741	2.8	0.05	0.973	0.986	0.05	0.05	1.8	2.64
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	11	0.12	0.671	2.799	0.005	0.861	0.928	0.01	0.04	1.5	2.579

** - Less 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 RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	9	16.	15.8	25.	0.7	57.373	7.574	0.7	11.25	22.5	25.
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	9	7.7	8.4	15.4	4.8	10.725	3.275	4.8	6.	10.2	15.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.008	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	9	0.4	0.372	0.6	0.05	0.033	0.182	0.05	0.25	0.55	0.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	9##	50.	150.	700.	50.	45000.	212.132	50.	50.	150.	700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	9##	1.699	1.96	2.845	1.699	0.155	0.394	1.699	1.699	2.151	2.845
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		91.224									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	9##	0.05	0.072	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	9	0.03	0.049	0.13	0.005	0.002	0.048	0.005	0.01	0.1	0.13

** - Less 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 RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	3	3.	8.	19.	2.	91.	9.539	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	3	11.7	11.	12.5	8.8	3.79	1.947	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	3##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	3##	0.005	0.037	0.1	0.005	0.003	0.055	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	3	0.4	0.3	0.4	0.1	0.03	0.173	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	2##	675.	675.	1300.	50.	781250.	883.883	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	2##	2.406	2.406	3.114	1.699	1.001	1.001	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		254.951									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	3##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	3##	0.005	0.02	0.05	0.005	0.001	0.026	**	**	**	**

** - Less 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 10/14 - Station RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	20	22.1	21.405	27.	11.1	14.872	3.856	15.28	18.875	23.9	25.59
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	20	6.65	6.46	9.2	3.9	2.124	1.457	4.08	5.25	7.15	8.9
00400 PH (STANDARD UNITS)	04/18/73-06/21/79	20	6.4	6.33	7.5	5.	0.29	0.538	5.73	6.	6.5	7.09
00400 CONVERTED PH (STANDARD UNITS)	04/18/73-06/21/79	20	6.389	5.974	7.5	5.	0.423	0.65	5.73	6.	6.5	7.09
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/73-06/21/79	20	0.409	1.061	10.	0.032	4.652	2.157	0.081	0.316	1.	1.896
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	19	0.1	0.668	9.5	0.05	4.591	2.143	0.05	0.1	0.3	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	20	0.015	0.113	1.449	0.005	0.103	0.321	0.005	0.005	0.08	0.235
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	20	1.05	1.914	13.79	0.3	9.009	3.002	0.41	0.525	1.774	4.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	18	100.	272.222	1300.	50.	136241.83	369.11	50.	50.	350.	1030.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	18	2.	2.129	3.114	1.699	0.252	0.502	1.699	1.699	2.533	3.011
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	134.706								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	20	0.55	1.333	10.	0.05	5.011	2.239	0.1	0.3	1.4	2.89
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	20	0.445	0.972	5.5	0.01	1.721	1.312	0.054	0.14	1.4	2.719

** - 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

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	22	6.9	6.841	17.	0.7	22.09	4.7	1.	2.15	10.725	12.97
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	22	10.55	10.577	15.4	6.	5.22	2.285	7.36	8.975	11.975	13.88
00400 PH (STANDARD UNITS)	04/18/73-06/21/79	22	6.45	6.318	7.5	4.5	0.51	0.714	5.5	6.	6.625	7.44
00400 CONVERTED PH (STANDARD UNITS)	04/18/73-06/21/79	22	6.447	5.65	7.5	4.5	0.977	0.989	5.5	6.	6.625	7.44
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/73-06/21/79	22	0.357	2.237	31.623	0.032	44.091	6.64	0.037	0.262	1.	3.162
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	21	0.2	0.331	2.699	0.05	0.337	0.58	0.05	0.05	0.3	0.82
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	21##	0.005	0.013	0.1	0.005	0.001	0.022	0.005	0.005	0.008	0.044
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	21	0.7	2.447	35.09	0.1	56.658	7.527	0.2	0.3	0.95	3.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	20##	50.	77.5	300.	50.	4072.368	63.815	50.	50.	87.5	190.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	20##	1.699	1.813	2.477	1.699	0.052	0.227	1.699	1.699	1.925	2.271
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	65.033								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	21	0.1	0.286	1.6	0.05	0.229	0.479	0.05	0.05	0.2	1.36
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	21	0.05	0.212	1.599	0.005	0.158	0.397	0.005	0.025	0.185	0.92

** - Less 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: 3/16 to 6/30 - Station RICH0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/29/73-06/21/79	19	17.	16.453	30.	6.7	27.616	5.255	8.9	12.8	19.	22.2
00300 OXYGEN, DISSOLVED MG/L	04/18/73-06/21/79	20	8.45	8.125	11.5	4.4	5.138	2.267	4.47	6.1	10.2	10.96
00400 PH (STANDARD UNITS)	04/18/73-06/21/79	19	6.5	6.524	7.5	5.	0.267	0.517	6.	6.4	6.9	7.
00400 CONVERTED PH (STANDARD UNITS)	04/18/73-06/21/79	19	6.5	6.074	7.5	5.	0.481	0.693	6.	6.4	6.9	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/73-06/21/79	19	0.316	0.844	10.	0.032	4.987	2.233	0.1	0.126	0.398	1.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/18/73-06/21/79	19	0.2	0.618	3.899	0.05	0.936	0.967	0.05	0.05	1.	1.899
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/73-06/21/79	19	0.01	0.027	0.15	0.005	0.001	0.036	0.005	0.005	0.04	0.07
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/18/73-06/21/79	19	0.8	1.939	11.19	0.05	7.438	2.727	0.3	0.4	2.399	5.5
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	19##	50.	184.211	1300.	50.	99736.842	315.811	50.	50.	100.	700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/18/73-06/21/79	19##	1.699	1.961	3.114	1.699	0.193	0.439	1.699	1.699	2.	2.845
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	91.309								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/18/73-06/21/79	19	0.2	0.742	4.4	0.05	1.256	1.121	0.05	0.05	1.6	2.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/18/73-06/21/79	19	0.1	0.422	1.699	0.005	0.331	0.575	0.005	0.05	0.6	1.5

** - 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

Station Inventory for Station: RICH0030

NPS Station ID: RICH0030 LAT/LON: 37.396115/ -77.254726 Agency: 21VASWCB Date Created: 05/06/95
Location: CREWES CHANNEL, RT. 5 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CCH000.54
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: CREWES CHANNEL SECTION: 07 TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0030

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/09/94-12/09/94	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/09/94-12/09/94	1	105.	105.	105.	105.	0.	0.	**	**	**	**
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		12/09/94-12/09/94	1	6.24	6.24	6.24	6.24	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		12/09/94-12/09/94	1	6.24	6.24	6.24	6.24	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/09/94-12/09/94	1	0.575	0.575	0.575	0.575	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: RICH0030

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0031

NPS Station ID: RICH0031 LAT/LON: 37.400559/ -77.385004 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION J76 - JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL4069
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 9.720 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206012500.00 RF3 Mile Point: 5.93 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0031

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0032

NPS Station ID: RICH0032 LAT/LON: 37.402948/ -77.391948 Agency: 21VASWCB Date Created: / /
Location: BUOY 157 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS099.30 /VA2-02-X0137/VA2-4X0137
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 10.150 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004508.68 RF3 Mile Point: 8.80 Distance from RF3: 0.04 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA
THIS STATION IS ALSO USED FOR SURVEY 845101

Parameter Inventory for Station: RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	1131	20.1	18.67	33.1	1.5	71.137	8.434	6.6	10.5	26.6	29.
00070 TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-10/05/93	14	5.2	18.693	130.	1.	1127.755	33.582	2.1	3.875	22.	82.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	83	7.7	13.324	209.	2.	620.336	24.907	4.2	6.3	10.9	21.48
00078 TRANSPARENCY, SECCHI DISC (METERS)		06/28/83-12/15/98	204	1.	1.003	10.15	0.1	0.575	0.758	0.4	0.7	1.2	1.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	1070	190.	210.872	462.	70.	7258.879	85.199	111.	145.	270.	343.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		12/20/88-12/15/98	102	183.5	198.284	514.	21.	5592.661	74.784	116.3	144.25	244.25	294.1
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	932	0.	0.003	0.2	0.	0.001	0.023	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	1047	8.4	8.945	14.4	2.1	5.396	2.323	6.3	7.1	11.	12.3
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	117	7.3	7.494	13.	1.6	5.044	2.246	4.16	6.2	8.7	11.12
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	114	1.	1.489	6.8	0.5	1.143	1.069	0.5	1.	2.	2.75
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	89	10.	10.77	27.	2.5	26.978	5.194	5.	7.	14.	18.
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	332	7.5	7.523	9.22	2.2	0.258	0.508	7.012	7.27	7.788	8.055
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	332	7.5	4.72	9.22	2.2	8.138	2.853	7.012	7.27	7.788	8.055
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	332	0.032	19.047	6309.573	0.001	119910.174	346.28	0.009	0.016	0.054	0.097
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	74	7.3	7.28	8.	6.1	0.122	0.35	6.75	7.1	7.525	7.7
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	74	7.3	7.117	8.	6.1	0.149	0.386	6.75	7.1	7.525	7.7
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	74	0.05	0.076	0.794	0.01	0.01	0.1	0.02	0.03	0.079	0.179
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	75	49.	49.613	79.	27.	166.565	12.906	33.	40.	59.	69.
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		09/20/83-10/03/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00480 SALINITY - PARTS PER THOUSAND		06/28/83-06/28/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/01/95	44	136.5	137.25	221.	63.	1150.703	33.922	96.	112.75	159.	179.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/01/95	44	34.5	39.455	92.	10.	284.161	16.857	19.	29.25	46.75	66.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/01/95	44	101.	97.795	176.	19.	994.911	31.542	55.5	81.	120.75	136.
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		07/27/81-10/03/83	3	209.	200.333	221.	171.	681.333	26.102	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	209	10.	15.789	213.	0.5	757.898	27.53	5.	7.	15.	23.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	209	2.	3.447	23.	0.	13.615	3.69	1.	1.5	4.	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	206	7.	12.51	193.	0.	620.941	24.919	3.	5.	11.	18.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	207	0.21	0.29	1.3	0.004	0.068	0.26	0.04	0.095	0.4	0.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/69-06/01/95	80	0.215	0.285	0.9	0.03	0.033	0.182	0.1	0.175	0.4	0.518
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	212	0.01	0.026	0.26	0.002	0.002	0.039	0.004	0.005	0.03	0.076
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/69-06/01/95	79	0.01	0.032	0.9	0.005	0.01	0.101	0.005	0.01	0.02	0.04

** - 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: RICH0032

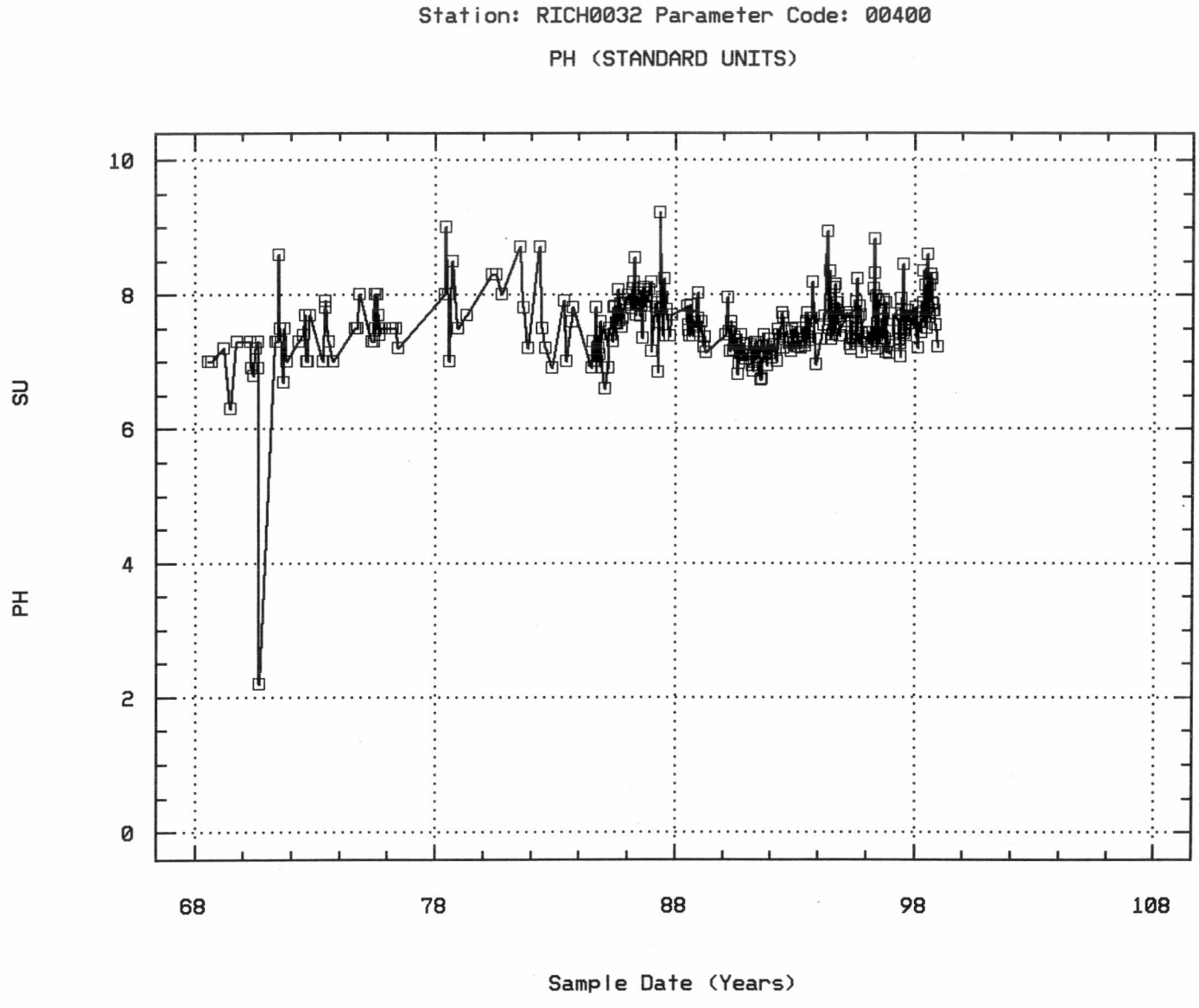
Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	208	0.29	0.289	0.97	0.002	0.019	0.137	0.119	0.21	0.37	0.46
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	79	0.35	0.393	1.649	0.01	0.083	0.289	0.09	0.16	0.52	0.8
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/20/83-10/03/83	2	0.65	0.65	0.7	0.6	0.005	0.071	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	232	0.6	0.704	3.599	0.1	0.163	0.404	0.3	0.4	0.845	1.2
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-12/15/98	36	0.35	0.368	1.	0.04	0.038	0.195	0.2	0.2	0.4	0.66
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	03/20/69-10/02/69	3	0.32	0.277	0.34	0.17	0.009	0.093	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	180	0.13	0.243	12.	0.04	0.793	0.891	0.06	0.09	0.23	0.33
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	172	0.08	0.122	0.78	0.02	0.012	0.11	0.03	0.04	0.178	0.27
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	09/20/83-10/03/83	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	225	0.057	0.098	0.42	0.001	0.009	0.096	0.02	0.03	0.14	0.26
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	234	4.2	4.658	14.7	0.5	3.509	1.873	2.85	3.4	5.7	7.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	69	64.	65.594	126.	0.	425.921	20.638	42.	53.5	77.	90.
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	95	11.	13.532	39.	2.5	63.956	7.997	5.	8.	19.	25.2
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	62	18.	22.	58.	0.03	151.519	12.309	11.	13.	30.25	40.5
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	129	7.3	6.975	10.4	2.5	3.159	1.777	4.3	5.9	8.05	9.
01002 ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	5##	1.	1.5	2.5	0.5	0.875	0.935	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	7##	5.	4.357	5.	0.5	2.893	1.701	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/22/93-06/22/93	1	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	15##	5.	5.133	10.	0.5	9.374	3.062	0.5	5.	5.	10.
01042 COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	15##	5.	12.333	50.	5.	195.952	13.998	5.	5.	10.	44.
01051 LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	13##	5.	5.962	19.	0.5	25.603	5.06	0.7	2.	9.5	15.4
01055 MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	1	80.	80.	80.	80.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	4##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	22.5	25.	50.	5.	550.	23.452	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	15##	5.	16.	60.	5.	311.429	17.647	5.	5.	20.	54.
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	80	7300.	7126.963	12800.	8.	6130979.581	2476.081	4120.	5500.	8900.	9900.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	13	11000.	65686.923	430000.	30.	16449587639.744	128255.946	78.	1125.	68000.	354000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-09/09/70	13	4.041	3.82	5.633	1.477	1.484	1.218	1.757	3.026	4.801	5.532
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	6608.875								
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-07/08/86	28	930.	13677.286	110000.	28.	587447656.878	24237.32	87.7	230.	24000.	46000.
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-07/08/86	28	2.968	3.228	5.041	1.447	1.149	1.072	1.932	2.362	4.38	4.663
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	1691.029								
31614 FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	132.5	130.5	240.	17.	9231.	96.078	**	**	**	**
31614 LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	2.104	1.955	2.38	1.23	0.261	0.511	**	**	**	**
31614 GM FECAL COLIFORM,MPN,TUBE CONFIGURATION			GEOMETRIC MEAN =	90.097								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	107	140.	1358.374	16000.	9.	12349907.953	3514.244	19.6	40.	700.	3500.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	107	2.146	2.258	4.204	0.954	0.757	0.87	1.292	1.602	2.845	3.544
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	181.298								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	99	200.	2029.01	80000.	4.	72060806.561	8488.864	40.	50.	930.	4300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	99	2.301	2.359	4.903	0.602	0.713	0.845	1.602	1.699	2.968	3.633
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	228.503								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/30/83-10/03/83	3	10.3	13.8	23.	8.1	64.69	8.043	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/30/83-10/03/83	3	7.6	6.467	9.4	2.4	13.213	3.635	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	06/13/71-06/13/71	1	0.007	0.007	0.007	0.007	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	45	0.027	0.048	0.654	0.006	0.01	0.1	0.011	0.017	0.039	0.063
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	43	0.656	0.903	5.098	0.045	0.765	0.874	0.324	0.499	1.011	1.577
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	43	0.082	0.118	0.525	0.024	0.009	0.097	0.039	0.064	0.155	0.253
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	45	0.546	0.553	0.902	0.059	0.034	0.184	0.307	0.456	0.683	0.793
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	45	0.04	0.056	0.554	0.007	0.006	0.08	0.023	0.028	0.055	0.081
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-10/03/83	3	0.1	0.1	0.2	0.	0.01	0.1	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	50	0.1	0.123	0.7	0.05	0.012	0.109	0.05	0.05	0.163	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-06/01/95	61	0.06	0.081	0.29	0.01	0.003	0.053	0.03	0.045	0.1	0.168
71900 MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	15##	0.25	0.223	0.25	0.15	0.002	0.046	0.15	0.15	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: RICH0032

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	14	1	0.07	8	0	0.00	2	1	0.50	4	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	83	2	0.02	25	0	0.00	29	2	0.07	29	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1047	7	0.01	347	7	0.02	340	0	0.00	360	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	117	11	0.09	52	11	0.21	20	0	0.00	45	0	0.00			
00400 PH	Fresh Chronic	9.	332	2	0.01	137	0	0.00	84	0	0.00	111	2	0.02			
	Other-Lo Lim.	6.5	332	2	0.01	137	1	0.01	84	0	0.00	111	1	0.01			
00403 PH, LAB	Fresh Chronic	9.	74	0	0.00	21	0	0.00	24	0	0.00	29	0	0.00			
	Other-Lo Lim.	6.5	74	1	0.01	21	0	0.00	24	0	0.00	29	1	0.03			
00613 NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	212	0	0.00	72	0	0.00	70	0	0.00	70	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	79	0	0.00	41	0	0.00	10	0	0.00	28	0	0.00			
00618 NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	208	0	0.00	70	0	0.00	68	0	0.00	70	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	79	0	0.00	41	0	0.00	10	0	0.00	28	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	36	0	0.00	11	0	0.00	13	0	0.00	12	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	95	0	0.00	36	0	0.00	27	0	0.00	32	0	0.00			
	Drinking Water	250.	95	0	0.00	36	0	0.00	27	0	0.00	32	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	62	0	0.00	20	0	0.00	23	0	0.00	19	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	50.	5	0	0.00				1	0	0.00	4	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.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	15	3	0.20	4	0	0.00	2	0	0.00	9	3	0.33			
	Drinking Water	1300.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	13	0	0.00	4	0	0.00	2	0	0.00	7	0	0.00			
	Drinking Water	15.	13	1	0.08	4	0	0.00	2	0	0.00	7	1	0.14			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00							4	0	0.00			
	Drinking Water	100.	4	0	0.00							4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
	Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
	Drinking Water	5000.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	10	0.77	8	6	0.75				5	4	0.80			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	28	13	0.46	10	5	0.50	8	5	0.63	10	3	0.30			
31614 FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	4	1	0.25							4	1	0.25			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	107	50	0.47	47	21	0.45	28	15	0.54	32	14	0.44			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	99	51	0.52	44	22	0.50	23	14	0.61	32	15	0.47			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00							1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	3	2	0.67	2	2	1.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	15	0	0.00	5	0	0.00	2	0	0.00	8	0	0.00			
	Drinking Water	2.	15	0	0.00	5	0	0.00	2	0	0.00	8	0	0.00			

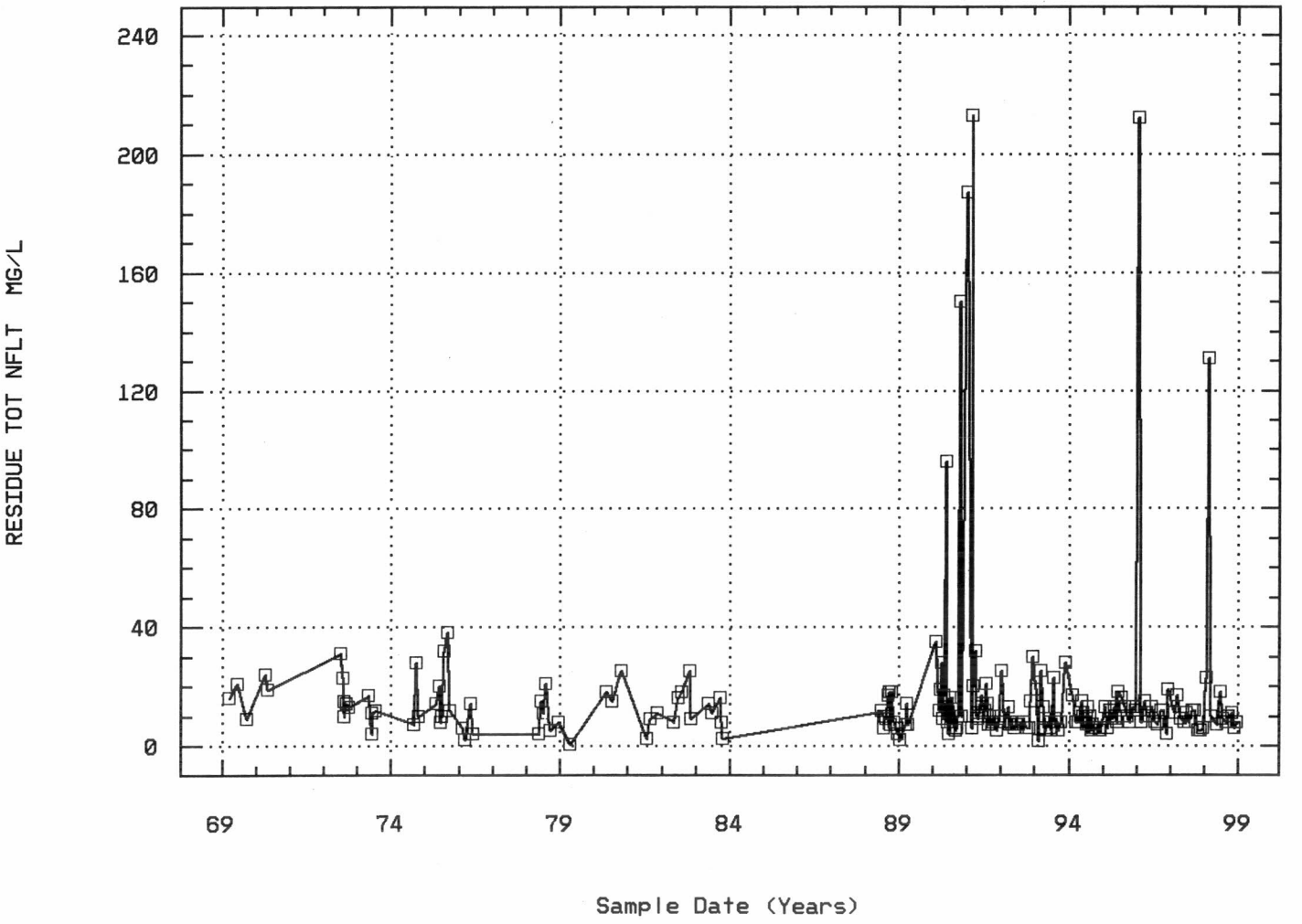
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter


Station: RICH0032 Parameter Code: 00400
PH (STANDARD UNITS)
10
8
6
4
2
0
SU
PH
68
78
88
98
108
Sample Date (Years)

BUOY 157

Station: RICH0032 Parameter Code: 00530

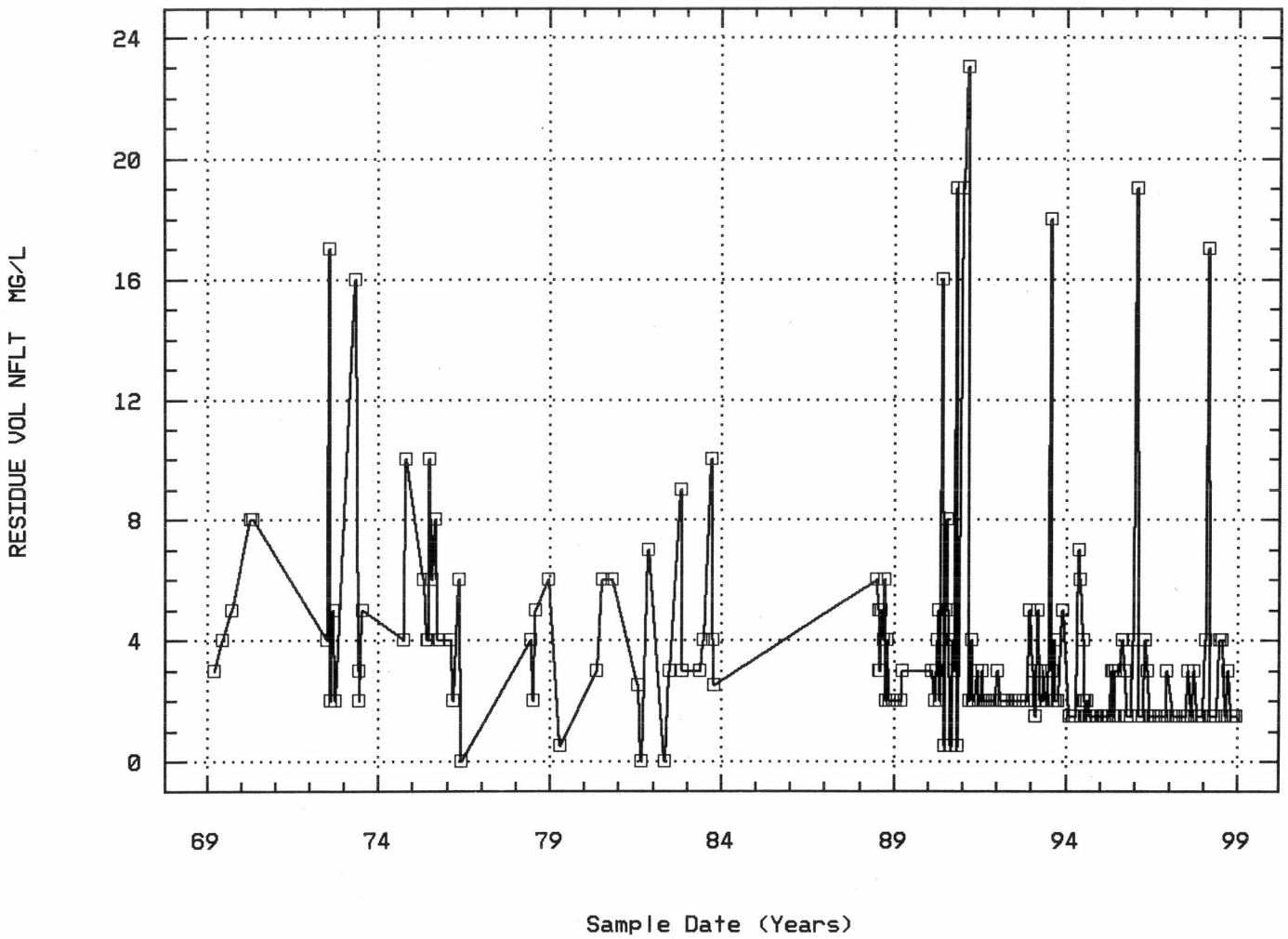
RESIDUE, TOTAL NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00535

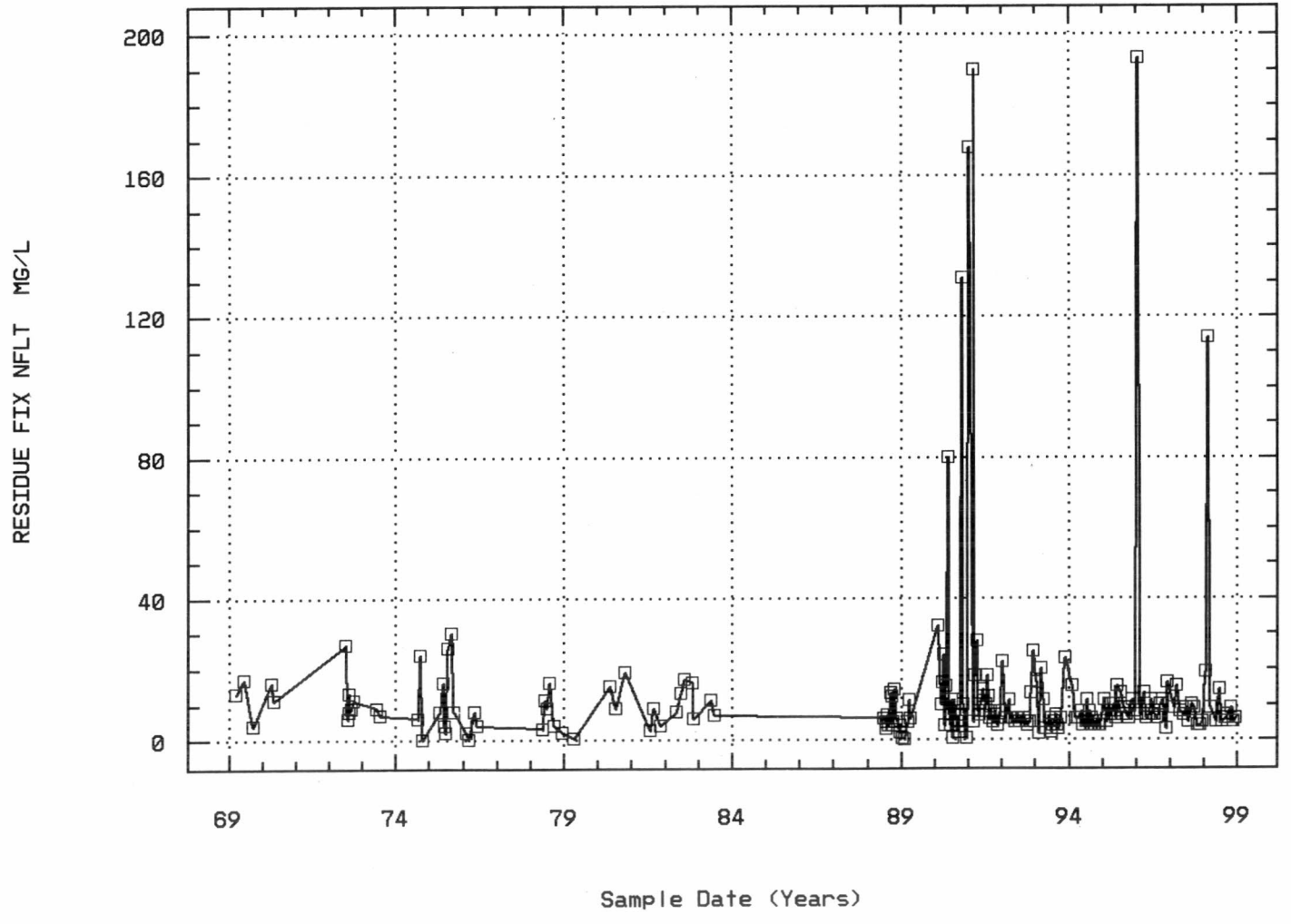
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00540

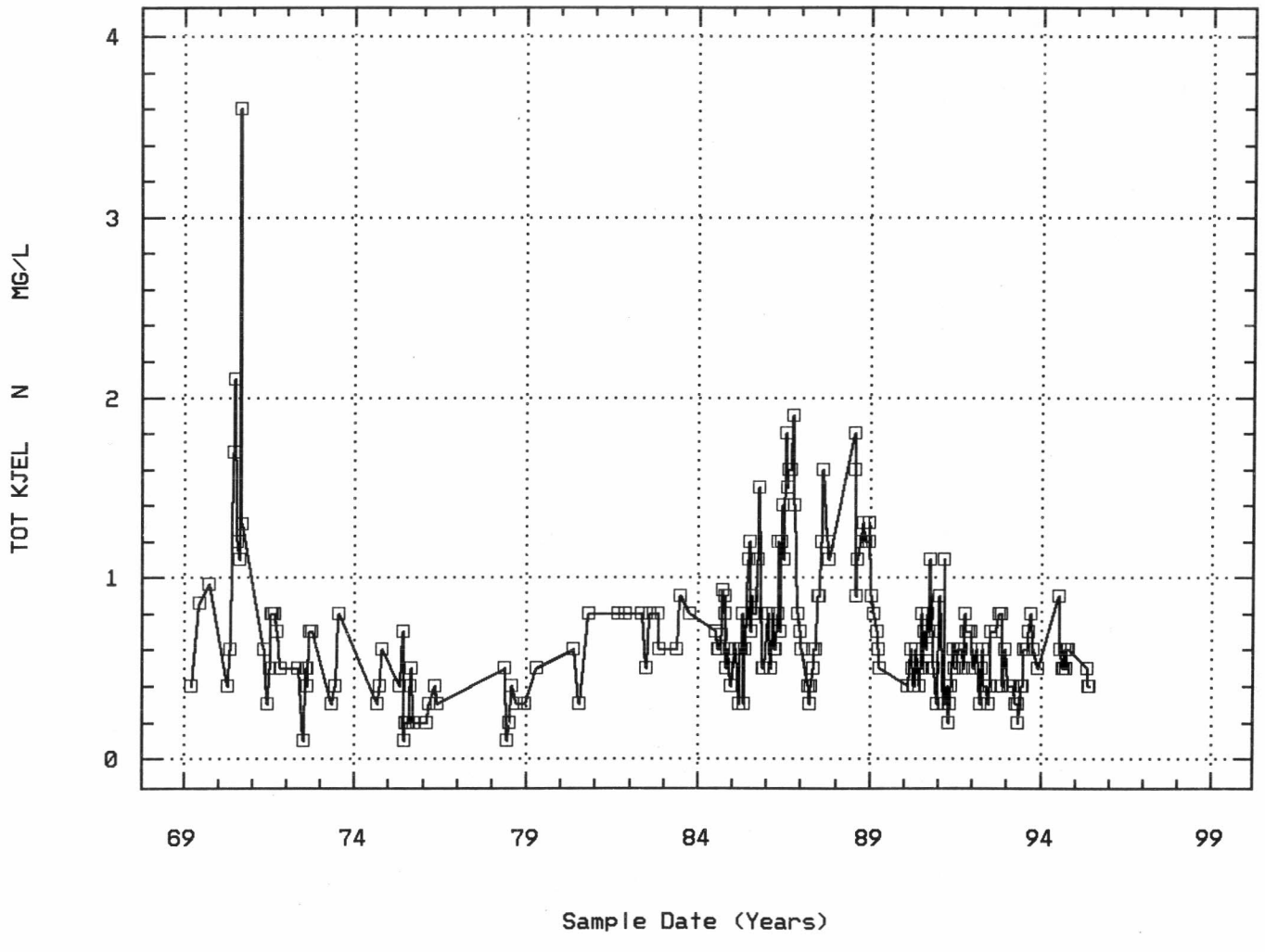
RESIDUE, FIXED NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00625

NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



BUOY 157

Annual Analysis for 1968 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	2	28.6	28.6	30.	27.2	3.92	1.98	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	2	3.85	3.85	3.9	3.8	0.005	0.071	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	2	7.	7.	7.	7.	0.	0.	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	2	7.	7.	7.	7.	0.	0.	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	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 box-and-whisker plot

Annual Analysis for 1969 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	3	21.1	18.9	25.6	10.	64.47	8.029	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	3	4.7	5.7	8.8	3.6	7.51	2.74	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	3	2.	2.167	2.9	1.6	0.443	0.666	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	3	7.2	6.933	7.3	6.3	0.303	0.551	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	3	7.2	6.689	7.3	6.3	0.393	0.627	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	3	0.063	0.205	0.501	0.05	0.066	0.257	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	3	6.8	6.733	7.3	6.1	0.363	0.603	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	3	6.8	6.476	7.3	6.1	0.463	0.68	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	3	0.158	0.334	0.794	0.05	0.162	0.402	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	3	31.	36.667	52.	27.	180.333	13.429	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	16.	15.333	21.	9.	36.333	6.028	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	4.	4.	5.	3.	1.	1.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	13.	11.333	17.	4.	44.333	6.658	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	3	0.86	0.74	0.96	0.4	0.089	0.299	**	**	**	**

** - Less 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 RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	8	28.6	26.525	31.1	17.8	23.422	4.84	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	8	4.	4.4	7.6	1.6	3.76	1.939	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	7	2.9	3.614	6.8	1.4	4.965	2.228	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	7	6.9	6.371	7.3	2.2	3.426	1.851	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	7	6.9	3.045	7.3	2.2	16.335	4.042	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	7	0.126	901.45	6309.573	0.05	5687072.953	2384.758	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	2	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	2	42.	42.	44.	40.	8.	2.828	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	2	21.5	21.5	24.	19.	12.5	3.536	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	2	8.	8.	8.	8.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	2	13.5	13.5	16.	11.	12.5	3.536	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	8	1.249	1.499	3.599	0.4	1.017	1.008	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	1	7.	7.	7.	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 box-and-whisker plot

Annual Analysis for 1971 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	8	25.	24.5	29.4	17.2	20.974	4.58	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	8	6.3	6.4	9.	4.	2.56	1.6	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	8	7.3	7.4	8.6	6.7	0.306	0.553	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	8	7.3	7.191	8.6	6.7	0.356	0.596	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	8	0.05	0.064	0.2	0.003	0.004	0.061	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	8	0.65	0.625	0.8	0.3	0.034	0.183	**	**	**	**

** - Less 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 RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	6	23.05	23.35	26.7	20.6	7.339	2.709	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	7	7.	7.114	8.4	6.	0.985	0.992	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	6	7.35	7.35	7.7	7.	0.099	0.315	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	6	7.347	7.26	7.7	7.	0.109	0.33	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	6	0.045	0.055	0.1	0.02	0.001	0.037	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	14.5	17.667	31.	10.	61.467	7.84	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	3.	5.333	17.	2.	34.267	5.854	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	10.	12.333	27.	6.	57.467	7.581	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	7	0.5	0.486	0.7	0.1	0.041	0.204	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	6	7.	7.833	11.	5.	6.967	2.639	**	**	**	**

** - Less 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 RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	5	28.3	26.1	29.4	17.8	23.115	4.808	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	5	7.	6.94	11.8	3.6	11.318	3.364	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	5	7.3	7.4	7.9	7.	0.185	0.43	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	5	7.3	7.254	7.9	7.	0.212	0.46	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	5	0.05	0.056	0.1	0.013	0.002	0.043	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	11.5	11.	17.	4.	28.667	5.354	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	4.	6.5	16.	2.	41.667	6.455	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	4.	4.5	9.	1.	17.	4.123	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	4	0.4	0.475	0.8	0.3	0.049	0.222	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	4	5.	6.	11.	3.	12.	3.464	**	**	**	**

** - Less 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 RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	3	21.	21.333	28.	15.	42.333	6.506	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	3	7.2	8.467	11.2	7.	5.613	2.369	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	3	7.5	7.667	8.	7.5	0.083	0.289	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	3	7.5	7.612	8.	7.5	0.088	0.296	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	3	0.032	0.024	0.032	0.01	0.	0.012	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	10.	15.	28.	7.	129.	11.358	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	4.	5.	10.	1.	21.	4.583	**	**	**	**

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Annual Analysis for 1974 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	6.	10.	24.	0.	156.	12.49	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	3	0.4	0.433	0.6	0.3	0.023	0.153	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	3	11.	12.333	16.	10.	10.333	3.215	**	**	**	**

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Annual Analysis for 1975 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	8	27.25	25.213	30.	17.2	20.164	4.49	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	9	7.8	8.011	9.2	7.	0.499	0.706	7.	7.65	8.55	9.2
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	9	1.	1.111	2.	0.5	0.299	0.546	0.5	0.75	1.5	2.
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.578	8.	7.3	0.072	0.268	7.3	7.35	7.85	8.
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.515	8.	7.3	0.076	0.276	7.3	7.35	7.85	8.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	9	0.032	0.031	0.05	0.01	0.	0.015	0.01	0.015	0.045	0.05
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	14.	19.143	38.	8.	134.476	11.596	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	6.	6.	10.	4.	5.333	2.309	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	8.	13.429	30.	2.	119.619	10.937	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	9	0.2	0.322	0.7	0.1	0.037	0.192	0.1	0.2	0.45	0.7
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	9	6.	6.222	12.	4.	6.694	2.587	4.	4.	7.5	12.
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	9	9.	11.333	30.	4.	73.	8.544	4.	5.	16.	30.

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Annual Analysis for 1976 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	4	15.	14.45	22.2	5.6	62.997	7.937	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	4	9.2	9.8	12.7	8.1	4.433	2.106	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	4	1.	1.25	2.	1.	0.25	0.5	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	4	7.5	7.425	7.5	7.2	0.022	0.15	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	4	7.5	7.404	7.5	7.2	0.023	0.152	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	4	0.032	0.039	0.063	0.032	0.	0.016	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	5.	6.5	14.	2.	27.667	5.26	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	3.	3.	6.	0.	6.667	2.582	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	3.	3.5	8.	0.	11.667	3.416	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	4	0.3	0.3	0.4	0.2	0.007	0.082	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	4	5.5	5.25	6.	4.	0.917	0.957	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	4	9.	8.75	10.	7.	1.583	1.258	**	**	**	**

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Annual Analysis for 1978 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	6	14.	15.333	26.	5.	88.667	9.416	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	6	6.6	7.35	11.7	4.7	6.743	2.597	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	6	8.	8.	9.	7.	0.5	0.707	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	6	8.	7.586	9.	7.	0.706	0.84	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	6	0.01	0.026	0.1	0.001	0.001	0.038	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	9.5	10.667	21.	4.	41.867	6.47	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	3.	3.167	6.	1.	4.567	2.137	**	**	**	**

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Annual Analysis for 1978 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	6.5	7.5	16.	2.	29.9	5.468	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	6	0.3	0.3	0.5	0.1	0.02	0.141	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	6	7.	6.833	8.	4.	2.167	1.472	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	6	11.	10.5	15.	4.	16.7	4.087	**	**	**	**

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Annual Analysis for 1979 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**

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Annual Analysis for 1980 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	3	21.	22.5	28.5	18.	29.25	5.408	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	3	235.	240.	319.	166.	5871.	76.622	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	3	7.7	7.667	8.3	7.	0.423	0.651	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	3	15.	14.	23.	4.	91.	9.539	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	3	8.3	8.2	8.3	8.	0.03	0.173	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	3	8.3	8.176	8.3	8.	0.031	0.176	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	3	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	18.	19.333	25.	15.	26.333	5.132	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	6.	5.	6.	3.	3.	1.732	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	3	15.	14.333	19.	9.	25.333	5.033	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	3	0.6	0.567	0.8	0.3	0.063	0.252	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/14/95	3	0.2	0.167	0.25	0.05	0.011	0.104	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-12/15/98	3	0.1	0.133	0.25	0.05	0.011	0.104	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	3	10.	10.	11.	9.	1.	1.	**	**	**	**

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Annual Analysis for 1981 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	3	26.	22.	29.	11.	93.	9.644	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	3	265.	272.667	305.	248.	856.333	29.263	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	3	7.	7.233	7.8	6.9	0.243	0.493	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**

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Annual Analysis for 1981 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	3	15.	13.667	15.	11.	5.333	2.309	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	3	7.8	7.9	8.7	7.2	0.57	0.755	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	3	7.8	7.569	8.7	7.2	0.734	0.857	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	3	0.016	0.027	0.063	0.002	0.001	0.032	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	9.	7.5	11.	2.5	19.75	4.444	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	2.5	3.167	7.	0.	12.583	3.547	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	4.	5.167	9.	2.5	11.583	3.403	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	3	0.28	0.28	0.3	0.26	0.	0.02	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	3	7.	6.333	8.	4.	4.333	2.082	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

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Annual Analysis for 1982 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	4	23.25	20.875	28.	9.	69.729	8.35	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	5	188.	195.4	250.	162.	1214.8	34.854	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	4	7.1	7.575	10.6	5.5	4.642	2.155	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	5	2.	1.8	3.	1.	0.7	0.837	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	5	12.	14.2	22.	9.	31.2	5.586	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	4	7.35	7.575	8.7	6.9	0.622	0.789	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	4	7.325	7.255	8.7	6.9	0.759	0.871	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	4	0.047	0.056	0.126	0.002	0.003	0.053	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	16.	15.2	25.	8.	48.7	6.979	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	3.	3.2	9.	0.	12.2	3.493	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	13.	12.	17.	6.	23.5	4.848	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	5	0.8	0.7	0.8	0.5	0.02	0.141	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	5	0.2	0.18	0.2	0.1	0.002	0.045	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	5	0.13	0.128	0.19	0.06	0.003	0.054	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	5	5.	4.8	6.	4.	0.7	0.837	**	**	**	**

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Annual Analysis for 1983 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	4	23.25	23.625	28.5	19.5	20.729	4.553	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	7##	0.155	0.194	0.5	0.105	0.019	0.138	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	4	242.5	239.75	320.	154.	7640.25	87.409	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	4	7.65	7.725	8.5	7.1	0.416	0.645	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	2	7.5	7.5	9.	6.	4.5	2.121	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	4	7.7	7.575	7.9	7.	0.163	0.403	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	4	7.689	7.416	7.9	7.	0.196	0.443	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	4	0.02	0.038	0.1	0.013	0.002	0.041	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	2	70.	70.	72.	68.	8.	2.828	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	11.	10.3	16.	2.5	28.2	5.31	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	4.	4.7	10.	2.5	9.2	3.033	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	2	9.	9.	11.	7.	8.	2.828	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	4	0.85	0.825	1.	0.6	0.029	0.171	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	4	0.3	0.275	0.4	0.1	0.023	0.15	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	4	0.215	0.198	0.3	0.06	0.015	0.122	**	**	**	**

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	4	4.5	4.75	6.	4.	0.917	0.957	**	**	**	**

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Annual Analysis for 1984 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	25	19.5	16.58	26.	5.	46.556	6.823	5.	11.	20.5	24.2
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	9	1.	0.873	1.2	0.16	0.094	0.306	0.16	0.75	1.05	1.2
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	24	195.	169.917	225.	90.	2261.036	47.55	92.5	145.	210.	222.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	19	0.	0.042	0.2	0.	0.007	0.084	0.	0.	0.	0.2
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	25	8.3	9.236	12.	7.1	3.074	1.753	7.48	7.8	11.	12.
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	10	7.15	7.2	7.8	6.9	0.089	0.298	6.9	6.975	7.375	7.78
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	10	7.147	7.126	7.8	6.9	0.095	0.308	6.9	6.975	7.375	7.78
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	10	0.071	0.075	0.126	0.016	0.001	0.038	0.017	0.044	0.106	0.126
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.37	0.35	0.54	0.06	0.02	0.141	0.088	0.28	0.46	0.53
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.02	0.03	0.06	0.005	0.	0.022	0.005	0.005	0.05	0.058
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	7	0.45	0.467	0.63	0.36	0.01	0.1	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	11	0.68	0.692	0.93	0.4	0.03	0.174	0.42	0.6	0.9	0.924
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	10	0.285	0.304	0.5	0.18	0.012	0.11	0.183	0.218	0.37	0.499
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	11	0.23	0.248	0.44	0.07	0.013	0.114	0.086	0.17	0.3	0.44
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.23	0.235	0.42	0.05	0.012	0.111	0.068	0.17	0.3	0.418
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	11	4.	4.909	9.	3.	5.691	2.386	3.	3.	7.	9.
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	8	9550.	9465.	11720.	6800.	3012657.143	1735.701	**	**	**	**

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Annual Analysis for 1985 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	97	21.5	18.68	28.5	1.5	51.819	7.199	9.	12.	24.	26.
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	16	0.85	1.413	10.15	0.3	5.532	2.352	0.3	0.6	1.2	3.955
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	97	160.	167.732	280.	75.	3025.532	55.005	95.	130.	200.	260.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	96	0.	0.01	0.1	0.	0.001	0.031	0.	0.	0.	0.1
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	97	7.6	8.306	14.4	2.1	5.784	2.405	6.2	6.4	10.	11.4
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	12	7.75	8.05	11.2	6.2	2.688	1.64	6.23	6.725	9.475	10.96
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.565	7.542	8.07	6.6	0.131	0.361	6.87	7.4	7.83	7.935
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.565	7.358	8.07	6.6	0.166	0.408	6.87	7.4	7.83	7.935
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	18	0.027	0.044	0.251	0.009	0.003	0.058	0.012	0.015	0.04	0.138
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	18	0.3	0.4	1.1	0.1	0.072	0.268	0.1	0.2	0.6	0.74
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	18	0.025	0.036	0.16	0.005	0.001	0.036	0.005	0.01	0.043	0.079
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	18	0.315	0.353	0.97	0.15	0.034	0.184	0.186	0.235	0.41	0.538
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	18	0.75	0.772	1.5	0.3	0.101	0.318	0.3	0.575	1.025	1.23
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	18	0.21	0.206	0.4	0.1	0.005	0.069	0.109	0.155	0.233	0.274
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	18	0.16	0.16	0.32	0.03	0.004	0.064	0.093	0.108	0.183	0.248
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	18	0.14	0.146	0.29	0.005	0.004	0.062	0.055	0.118	0.17	0.227
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	18	5.	5.222	8.	3.	2.301	1.517	3.	4.	6.	8.
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	18	8200.	7418.722	12800.	8.	12139566.801	3484.188	8.9	5175.	9905.	11090.

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Annual Analysis for 1986 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	101	21.6	18.64	30.5	2.5	76.725	8.759	5.	10.	27.	29.
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	19	1.	1.063	1.6	0.7	0.055	0.234	0.8	0.9	1.2	1.4
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	101	200.	216.911	390.	90.	9260.802	96.233	105.	120.	310.	358.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	101	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	87	7.7	8.276	12.5	4.6	6.445	2.539	5.	6.	10.7	12.1
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	20	7.55	8.09	12.4	5.	4.549	2.133	5.55	6.6	9.675	12.03
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.96	7.941	8.54	7.35	0.056	0.236	7.684	7.825	8.075	8.18
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.96	7.879	8.54	7.35	0.06	0.244	7.684	7.825	8.075	8.18
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	21	0.011	0.013	0.045	0.003	0.	0.008	0.007	0.008	0.015	0.021
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	21	0.6	0.617	1.3	0.01	0.112	0.334	0.1	0.4	0.85	1.16
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	21	0.03	0.059	0.26	0.005	0.004	0.066	0.005	0.008	0.09	0.16
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	21	0.22	0.228	0.48	0.025	0.021	0.146	0.025	0.095	0.35	0.436
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	21	1.	1.095	1.9	0.5	0.177	0.421	0.6	0.75	1.45	1.76
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	21	0.24	0.286	1.15	0.09	0.047	0.217	0.112	0.165	0.33	0.4
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	21	0.18	0.201	0.41	0.07	0.01	0.102	0.072	0.115	0.275	0.356
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	20	0.185	0.21	0.42	0.07	0.011	0.104	0.072	0.13	0.323	0.34
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	21	6.	5.667	8.	4.	1.233	1.111	4.	5.	6.5	7.
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	21	7100.	6490.476	9800.	2900.	4460904.762	2112.085	3700.	4700.	8250.	9380.

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Annual Analysis for 1987 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	80	16.5	18.324	32.	4.	78.421	8.856	7.2	9.425	27.575	29.8
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	15	1.	0.973	1.7	0.4	0.098	0.313	0.46	0.8	1.1	1.46
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	80	180.	186.25	410.	70.	11054.114	105.139	75.	95.	220.	395.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	80	8.7	8.661	12.7	3.8	7.598	2.756	5.3	5.95	12.1	12.4
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	15	8.7	8.487	13.	3.9	7.2	2.683	4.98	6.1	11.1	12.52
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.78	7.745	9.22	6.84	0.33	0.575	6.964	7.38	7.915	8.828
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.78	7.485	9.22	6.84	0.403	0.635	6.964	7.38	7.915	8.828
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	13	0.017	0.033	0.145	0.001	0.001	0.038	0.003	0.012	0.042	0.115
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	16	0.4	0.478	1.1	0.11	0.096	0.31	0.138	0.21	0.7	0.96
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	16	0.01	0.033	0.2	0.005	0.003	0.054	0.005	0.005	0.038	0.151
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	16	0.26	0.242	0.48	0.025	0.019	0.137	0.043	0.123	0.32	0.459
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	16	0.9	0.831	1.6	0.3	0.13	0.361	0.37	0.525	1.075	1.32
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	16	0.18	0.188	0.38	0.08	0.008	0.088	0.094	0.12	0.228	0.359
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	16	0.1	0.14	0.35	0.04	0.009	0.096	0.047	0.063	0.218	0.301
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	15	0.1	0.122	0.26	0.005	0.008	0.092	0.02	0.04	0.22	0.26
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	13	5.	4.538	6.	3.	0.769	0.877	3.	4.	5.	5.6
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	16	7150.	7225.	9900.	4800.	2580666.667	1606.445	4870.	6100.	8750.	9410.

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Annual Analysis for 1988 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	49	23.6	20.214	30.	2.9	78.356	8.852	3.1	13.9	28.35	30.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	2	5.55	5.55	5.6	5.5	0.005	0.071	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	9	0.7	0.689	1.	0.4	0.031	0.176	0.4	0.6	0.8	1.
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	49	370.	338.612	408.	250.	2720.659	52.16	265.	300.	380.	397.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	2	264.5	264.5	267.	262.	12.5	3.536	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	49	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	49	7.3	7.578	13.7	3.5	8.098	2.846	4.5	5.1	8.55	13.7

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Annual Analysis for 1988 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	12	7.575	7.619	8.02	7.38	0.038	0.194	7.38	7.483	7.788	7.966
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	12	7.575	7.584	8.02	7.38	0.039	0.197	7.38	7.482	7.788	7.966
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	12	0.027	0.026	0.042	0.01	0.	0.01	0.011	0.017	0.033	0.042
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	9.5	10.417	18.	4.	23.72	4.87	4.6	6.25	15.75	18.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	3.5	3.667	6.	2.	2.424	1.557	2.	2.	5.	6.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	5.5	6.75	14.	2.	16.205	4.025	2.3	4.	10.75	13.7
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	10	0.655	0.617	0.87	0.26	0.057	0.238	0.27	0.375	0.853	0.869
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.08	0.08	0.17	0.005	0.003	0.052	0.01	0.025	0.11	0.164
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.31	0.301	0.46	0.08	0.013	0.114	0.113	0.22	0.413	0.454
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	12	1.2	1.217	1.8	0.9	0.069	0.262	0.93	1.	1.3	1.74
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	12	0.315	0.301	0.49	0.21	0.007	0.084	0.21	0.218	0.33	0.46
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	13	0.24	0.285	0.78	0.14	0.03	0.174	0.144	0.165	0.3	0.66
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.24	0.229	0.41	0.14	0.006	0.08	0.14	0.145	0.278	0.374
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	12	4.45	4.583	5.7	3.5	0.409	0.639	3.62	4.15	5.05	5.64
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	12	6300.	6191.667	9900.	400.	5404469.697	2324.752	1690.	5575.	7050.	9630.

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	25	8.1	8.996	13.	6.	7.375	2.716	6.1	6.8	12.	12.94
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	5	1.	1.	1.4	0.6	0.125	0.354	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	25	155.	177.28	239.	131.	1740.377	41.718	131.	144.5	214.5	238.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	3	149.	172.333	237.	131.	3217.333	56.722	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	25	11.6	11.316	12.	10.4	0.455	0.674	10.4	10.5	11.9	12.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.37	7.352	7.59	7.13	0.033	0.183	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.37	7.322	7.59	7.13	0.034	0.186	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	5	0.043	0.048	0.074	0.026	0.	0.019	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	7.	6.2	14.	1.	26.7	5.167	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	2.	1.8	3.	1.	0.7	0.837	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	5.	4.5	11.	0.	20.25	4.5	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	5	0.28	0.322	0.56	0.11	0.034	0.185	**	**	**	**
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	5	0.01	0.019	0.04	0.005	0.	0.015	**	**	**	**
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	5	0.31	0.328	0.43	0.27	0.004	0.061	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	5	0.7	0.7	0.9	0.5	0.025	0.158	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	5	0.14	0.152	0.23	0.11	0.002	0.046	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	5	0.09	0.108	0.19	0.07	0.002	0.048	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	5	0.08	0.102	0.2	0.06	0.003	0.056	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	5	2.9	3.	3.3	2.7	0.08	0.283	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	5	7200.	6940.	8000.	5200.	1228000.	1108.152	**	**	**	**

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	97	21.8	20.243	30.2	6.5	50.178	7.084	9.3	14.85	27.5	29.12
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	18	1.	0.961	2.	0.1	0.215	0.464	0.28	0.675	1.3	1.46
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	97	183.	202.485	376.	106.	5487.857	74.08	114.	161.	252.	333.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	19	162.	176.368	291.	21.	5031.023	70.93	102.	129.	229.	291.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	97	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	97	8.2	8.549	13.1	5.7	3.556	1.886	6.1	6.95	10.2	11.2
00340 COD, .25N K2CR207 MG/L	05/19/80-12/15/98	9	7.	8.222	13.	5.	8.444	2.906	5.	6.	11.	13.
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	19	7.27	7.274	7.95	6.81	0.065	0.254	6.97	7.1	7.4	7.6
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	19	7.27	7.211	7.95	6.81	0.069	0.263	6.97	7.1	7.4	7.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	19	0.054	0.061	0.155	0.011	0.001	0.033	0.025	0.04	0.079	0.107
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	10.	23.737	150.	1.	1378.538	37.129	1.	6.	19.	96.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	3.	4.368	19.	0.5	25.746	5.074	0.5	1.	5.	16.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	10.	19.526	131.	0.5	1055.569	32.49	0.5	4.	16.	80.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	19	0.28	0.25	0.6	0.05	0.019	0.138	0.07	0.14	0.32	0.42
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	19	0.02	0.038	0.12	0.005	0.001	0.038	0.005	0.01	0.06	0.12
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	19	0.27	0.261	0.47	0.02	0.014	0.119	0.09	0.17	0.32	0.47
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	19	0.5	0.579	1.1	0.3	0.036	0.19	0.4	0.4	0.7	0.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	19	0.1	0.103	0.28	0.05	0.003	0.052	0.06	0.07	0.11	0.17
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	19	0.05	0.05	0.08	0.02	0.	0.019	0.03	0.03	0.06	0.08
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	19	0.04	0.044	0.07	0.02	0.	0.016	0.02	0.03	0.06	0.07
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	19	3.3	3.321	6.7	1.5	1.476	1.215	2.	2.4	3.9	5.2
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	19	7.7	7.068	9.5	2.5	3.495	1.869	3.5	6.3	8.	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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	94	21.35	18.794	28.8	6.4	58.268	7.633	9.65	10.175	26.	27.7
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	19	1.	0.895	1.6	0.1	0.199	0.447	0.2	0.5	1.3	1.5
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	94	168.	197.319	360.	109.	6539.101	80.865	111.	133.	264.	335.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	9	136.	154.889	243.	102.	2211.361	47.025	102.	119.	197.5	243.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	94	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	94	8.15	8.843	12.5	6.2	3.79	1.947	6.4	7.1	10.9	11.3
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	20	7.125	7.099	7.4	6.73	0.035	0.187	6.752	6.953	7.243	7.335
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	20	7.125	7.058	7.4	6.73	0.037	0.191	6.752	6.953	7.242	7.335
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	20	0.075	0.087	0.186	0.04	0.002	0.042	0.046	0.057	0.112	0.178
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	10.5	31.15	213.	5.	3391.924	58.24	6.1	8.25	19.25	171.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	2.	3.85	23.	1.	35.397	5.95	1.	1.25	2.75	17.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	9.	27.3	190.	4.	2736.326	52.31	5.	7.	17.	154.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	20	0.125	0.167	0.39	0.04	0.013	0.114	0.06	0.07	0.26	0.376
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	20##	0.005	0.012	0.05	0.005	0.	0.012	0.005	0.005	0.018	0.03
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	20	0.305	0.308	0.46	0.08	0.012	0.108	0.12	0.24	0.375	0.46
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	20	0.6	0.565	1.1	0.2	0.049	0.221	0.3	0.4	0.7	0.89
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	20	0.1	0.123	0.37	0.05	0.007	0.084	0.051	0.073	0.128	0.314
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	20	0.045	0.051	0.09	0.03	0.	0.02	0.03	0.03	0.068	0.08
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	20	0.04	0.045	0.08	0.02	0.	0.017	0.021	0.03	0.06	0.069
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	20	3.65	3.705	7.6	1.2	2.178	1.476	1.74	2.9	4.425	5.84
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	20	6.8	6.87	9.4	2.5	2.73	1.652	4.67	5.9	8.	8.97

** - 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 box-and-whisker plot

Annual Analysis for 1992 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	78	17.85	16.409	30.6	5.2	64.643	8.04	5.3	8.7	23.825	27.9
00078 TRANSPARENCY, SECCHI DISC (METERS)		06/28/83-12/15/98	15	1.3	1.2	1.9	0.3	0.214	0.463	0.36	1.1	1.5	1.72
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	77	196.	212.922	354.	109.	4453.415	66.734	127.8	165.	244.	322.
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	78	8.7	9.635	13.5	5.9	4.971	2.23	7.1	8.	11.9	12.9
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	6	13.	13.333	20.	6.	27.867	5.279	**	**	**	**
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	16	7.275	7.318	7.73	7.	0.041	0.204	7.035	7.178	7.473	7.681
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	16	7.275	7.277	7.73	7.	0.043	0.208	7.035	7.177	7.472	7.681
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	16	0.053	0.053	0.1	0.019	0.001	0.023	0.021	0.034	0.066	0.092
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	16	7.	10.375	30.	6.	51.85	7.201	6.	6.25	11.75	26.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	16	2.	1.813	5.	1.	1.096	1.047	1.	1.	2.	3.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	16	6.	8.563	25.	4.	39.596	6.293	4.7	5.	9.75	22.9
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	15	0.19	0.227	0.49	0.08	0.016	0.127	0.098	0.12	0.28	0.466
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	15	0.01	0.011	0.02	0.005	0.	0.006	0.005	0.005	0.02	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	15	0.33	0.29	0.52	0.07	0.017	0.129	0.112	0.18	0.38	0.478
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	15	0.5	0.533	0.8	0.3	0.028	0.168	0.3	0.4	0.7	0.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/14/95	15	0.08	0.088	0.14	0.06	0.001	0.028	0.06	0.07	0.12	0.134
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)		07/12/84-01/29/96	15	0.04	0.041	0.09	0.02	0.	0.016	0.026	0.03	0.04	0.066
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-12/15/98	15	0.04	0.037	0.08	0.02	0.	0.014	0.02	0.03	0.04	0.056
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	22	4.1	3.932	6.6	1.7	1.868	1.367	1.89	2.575	4.575	5.91
00900 HARDNESS, TOTAL (MG/L AS CACO3)		06/18/92-12/15/98	5	68.	66.6	88.	33.	461.8	21.49	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)		02/13/90-12/15/98	15	6.6	6.407	8.7	2.9	2.588	1.609	3.8	5.1	7.8	8.52

** - 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

Annual Analysis for 1993 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	84	23.75	20.352	31.4	5.	85.784	9.262	6.6	10.7	29.175	30.5
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	11	6.9	12.755	48.	2.	223.591	14.953	2.38	4.	11.4	45.6
00078 TRANSPARENCY, SECCHI DISC (METERS)		06/28/83-12/15/98	17	1.1	1.112	1.9	0.3	0.151	0.389	0.38	0.9	1.35	1.58
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	84	178.	226.869	441.	117.	11212.284	105.888	132.	143.	290.	403.5
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	79	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	84	7.9	8.908	13.5	6.3	5.059	2.249	6.4	7.025	11.075	12.1
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	9	12.	12.	22.	5.	24.5	4.95	5.	8.5	14.5	22.
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	17	7.43	7.442	8.18	6.96	0.074	0.272	7.152	7.26	7.62	7.82
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	17	7.43	7.374	8.18	6.96	0.079	0.281	7.152	7.26	7.62	7.82
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	17	0.037	0.042	0.11	0.007	0.001	0.024	0.016	0.024	0.055	0.072
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	17	8.	10.912	28.	1.5	62.132	7.882	4.3	5.5	16.	25.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	17	2.	3.618	18.	1.5	14.86	3.855	1.9	2.	3.5	7.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	17	5.	7.382	23.	1.5	40.735	6.382	1.9	3.	9.	20.6
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	17	0.13	0.154	0.38	0.04	0.007	0.081	0.072	0.105	0.19	0.3
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	17	0.01	0.012	0.06	0.005	0.	0.014	0.005	0.005	0.01	0.036
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	17	0.22	0.249	0.48	0.12	0.009	0.095	0.136	0.18	0.315	0.4
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	17	0.4	0.506	1.	0.2	0.041	0.201	0.28	0.4	0.6	0.84
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/14/95	17	0.08	0.787	12.	0.04	8.35	2.89	0.048	0.06	0.11	2.52
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)		07/12/84-01/29/96	17	0.04	0.048	0.12	0.02	0.001	0.028	0.02	0.03	0.06	0.104
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-12/15/98	17	0.03	0.036	0.09	0.01	0.	0.022	0.018	0.02	0.045	0.082
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	26	3.7	4.796	14.7	3.	6.381	2.526	3.1	3.4	5.175	7.98
00900 HARDNESS, TOTAL (MG/L AS CACO3)		06/18/92-12/15/98	8	64.	64.75	98.	0.	1090.214	33.018	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)		02/13/90-12/15/98	17	6.9	7.041	9.	4.	1.575	1.255	5.28	6.45	7.75	8.84

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	68	19.15	18.938	31.9	4.3	69.768	8.353	9.1	9.425	26.125	29.9
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	19	6.6	6.237	11.8	2.2	5.779	2.404	3.	3.8	8.	8.8
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	10	1.3	1.18	1.6	0.7	0.084	0.29	0.71	0.95	1.4	1.58
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	66	244.	235.515	332.	127.	3768.469	61.388	147.7	173.5	285.	301.3
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	19	222.	216.474	301.	114.	2826.596	53.166	133.	154.	258.	270.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	53	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	68	8.85	9.149	13.	6.1	3.494	1.869	6.76	7.75	10.8	11.21
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	20	1.45	1.595	3.8	0.5	1.173	1.083	0.5	0.5	2.375	3.55
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	4	12.5	13.	17.	10.	8.667	2.944	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.71	7.754	8.94	7.33	0.148	0.384	7.348	7.485	7.875	8.302
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.71	7.641	8.94	7.33	0.161	0.401	7.348	7.485	7.875	8.302
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	21	0.019	0.023	0.047	0.001	0.	0.014	0.005	0.013	0.033	0.045
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	17	7.2	7.271	7.9	6.7	0.101	0.318	6.86	7.05	7.6	7.74
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	17	7.2	7.17	7.9	6.7	0.112	0.334	6.86	7.05	7.6	7.74
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	17	0.063	0.068	0.2	0.013	0.002	0.047	0.018	0.025	0.09	0.141
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	16	54.5	52.563	69.	33.	87.729	9.366	39.3	44.	59.75	63.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	7.	8.263	17.	5.	11.982	3.462	5.	6.	10.	15.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	19##	1.5	2.211	7.	1.	2.675	1.636	1.5	1.5	2.	6.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	5.	6.	15.	4.	8.111	2.848	4.	4.	6.	11.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.275	0.24	0.428	0.004	0.024	0.154	0.014	0.111	0.393	0.428
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.008	0.009	0.018	0.003	0.	0.006	0.003	0.004	0.015	0.018
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.24	0.209	0.36	0.002	0.012	0.111	0.016	0.13	0.27	0.358
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	8	0.6	0.6	0.9	0.5	0.017	0.131	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	8	0.065	0.07	0.12	0.05	0.001	0.023	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	5	0.05	0.062	0.11	0.04	0.001	0.029	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.032	0.033	0.092	0.002	0.001	0.025	0.003	0.011	0.033	0.086
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	12	3.15	3.208	5.3	0.5	1.266	1.125	1.16	2.75	3.775	4.97
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	9	72.	66.778	87.	42.	200.944	14.175	42.	53.5	75.	87.
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	11	22.	22.182	31.	10.	28.764	5.363	11.6	21.	24.	30.4
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	11	30.	28.818	42.	14.	69.364	8.328	15.2	20.	35.	41.
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	11	7.5	7.118	9.6	4.7	2.026	1.423	4.82	5.6	8.	9.32
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	16	185.	1602.688	16000.	11.	16536337.429	4066.49	17.3	68.	1057.5	8580.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	16	2.254	2.317	4.204	1.041	0.77	0.878	1.223	1.833	2.965	3.874
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		207.36									

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	67	17.8	17.755	32.1	2.8	86.205	9.285	5.3	7.9	24.5	29.52
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	15	9.4	10.627	19.9	5.8	19.149	4.376	6.1	7.2	12.2	19.06
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	12	1.1	1.075	1.6	0.7	0.088	0.296	0.7	0.8	1.275	1.57
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	66	185.	213.394	361.	120.	4322.581	65.746	152.	158.	250.	354.3
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	15	171.	198.533	402.	125.	5200.267	72.113	132.2	154.	226.	338.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	67	8.7	9.485	13.6	5.8	5.318	2.306	6.9	7.3	11.9	12.8
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	15	1.	1.313	3.	0.5	0.754	0.868	0.5	0.5	2.	2.7
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	12	11.	11.625	17.	2.5	17.96	4.238	3.85	9.25	15.	16.7
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.48	7.533	8.23	7.14	0.071	0.266	7.202	7.33	7.705	7.876
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	21	7.48	7.466	8.23	7.14	0.075	0.274	7.202	7.33	7.705	7.876
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	21	0.033	0.034	0.072	0.006	0.	0.018	0.013	0.02	0.047	0.063
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	15	7.3	7.3	7.8	6.7	0.09	0.3	6.88	7.1	7.5	7.74
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	15	7.3	7.204	7.8	6.7	0.1	0.316	6.88	7.1	7.5	7.74
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	15	0.05	0.062	0.2	0.016	0.002	0.046	0.018	0.032	0.079	0.14
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	15	44.	47.267	76.	31.	145.924	12.08	32.2	42.	51.	71.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	15	12.	11.333	18.	6.	10.238	3.2	7.2	9.	13.	16.8

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Annual Analysis for 1995 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	15##	1.5	2.333	4.	1.5	0.952	0.976	1.5	1.5	3.	4.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	15	8.	8.867	15.	5.	7.838	2.8	5.6	7.	11.	13.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.185	0.179	0.295	0.038	0.006	0.075	0.055	0.126	0.23	0.288
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.008	0.015	0.079	0.003	0.	0.021	0.003	0.005	0.013	0.064
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.27	0.252	0.41	0.05	0.012	0.108	0.071	0.16	0.305	0.41
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	3	0.4	0.433	0.5	0.4	0.003	0.058	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	4	0.095	0.098	0.14	0.06	0.001	0.033	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	11	0.08	0.078	0.14	0.04	0.001	0.028	0.042	0.05	0.09	0.132
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.055	0.056	0.117	0.03	0.001	0.023	0.031	0.04	0.062	0.104
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	12	4.4	4.792	8.2	2.9	2.61	1.616	2.99	3.5	5.825	7.78
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	12	63.	67.5	115.	45.	372.636	19.304	45.9	55.75	73.75	97.5
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	15	12.	15.4	39.	8.	79.4	8.911	8.	9.	21.	32.4
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	15	16.	19.	45.	12.	71.	8.426	12.6	14.	22.	33.6
00955 SILICA, DISSOLVED (MG/L AS SIO2)	02/13/90-12/15/98	12	8.05	7.8	10.4	4.3	3.975	1.994	4.63	5.9	9.725	10.22
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	21	130.	1086.857	9200.	9.	4898024.129	2213.148	11.2	44.	900.	4060.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	21	2.114	2.267	3.964	0.954	0.769	0.877	1.024	1.567	2.874	3.607
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		184.819									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	10	0.037	0.102	0.654	0.025	0.038	0.195	0.025	0.028	0.06	0.596
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	9	0.72	0.818	1.576	0.045	0.252	0.502	0.045	0.509	1.293	1.576
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	10	0.073	0.107	0.261	0.034	0.006	0.079	0.037	0.061	0.154	0.259
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	10	0.573	0.569	0.902	0.059	0.057	0.239	0.098	0.445	0.782	0.895
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	10	0.071	0.122	0.554	0.041	0.024	0.154	0.042	0.059	0.1	0.512

** - Less 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 RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	77	18.5	16.745	28.5	3.8	80.624	8.979	4.3	6.	27.	28.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	10.8	28.95	209.	5.4	3260.903	57.104	5.67	6.5	22.75	153.5
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	12	0.95	0.925	2.	0.1	0.242	0.492	0.22	0.5	1.175	1.79
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	77	162.	173.26	310.	110.	2969.642	54.494	124.	135.	191.	251.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	12	153.	165.75	295.	107.	2974.568	54.54	110.	122.5	183.5	278.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	77	9.4	9.771	13.4	6.4	5.149	2.269	7.1	7.6	12.3	13.3
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	12##	0.5	0.917	2.	0.5	0.447	0.669	0.5	0.5	1.75	2.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	12	10.	11.167	21.	5.	26.333	5.132	5.3	8.	12.75	21.
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	25	7.44	7.599	8.82	7.12	0.162	0.403	7.17	7.32	7.89	8.176
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	25	7.44	7.473	8.82	7.12	0.179	0.423	7.17	7.32	7.89	8.176
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	25	0.036	0.034	0.076	0.002	0.	0.021	0.007	0.013	0.048	0.068
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	12	7.4	7.442	8.	7.1	0.09	0.3	7.1	7.225	7.7	7.97
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	12	7.4	7.363	8.	7.1	0.097	0.311	7.1	7.225	7.7	7.97
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	12	0.04	0.043	0.079	0.01	0.001	0.023	0.011	0.022	0.06	0.079
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	12	41.5	44.25	73.	32.	139.477	11.81	32.3	33.75	51.25	67.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	11.	27.5	212.	4.	3391.364	58.235	4.9	8.	14.5	154.1
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	12##	1.5	3.417	19.	1.5	24.811	4.981	1.5	1.5	3.	14.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	8.5	24.167	193.	3.	2839.606	53.288	3.9	6.25	12.5	139.9
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.035	0.074	0.456	0.022	0.015	0.122	0.022	0.024	0.063	0.343
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.004	0.005	0.011	0.002	0.	0.003	0.002	0.003	0.006	0.011
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.39	0.329	0.44	0.04	0.014	0.117	0.091	0.25	0.408	0.431
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.03	0.029	0.043	0.005	0.	0.009	0.01	0.025	0.034	0.041
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	8	4.05	4.188	6.5	2.5	1.307	1.143	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	12	58.	57.25	89.	28.	224.205	14.973	31.9	50.25	63.25	83.3
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	12	10.	10.625	22.	2.5	37.688	6.139	3.25	6.	12.	22.
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	12	13.	14.75	33.	9.	47.477	6.89	9.	10.25	15.75	30.
00955 SILICA, DISSOLVED (MG/L AS SIO2)	02/13/90-12/15/98	12	7.85	7.517	10.3	2.5	3.963	1.991	3.46	6.8	8.85	9.91

** - 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

Annual Analysis for 1996 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	24	290.	2952.417	16000.	9.	35674164.254	5972.785	20.	68.	1250.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	24	2.461	2.509	4.204	0.954	0.946	0.972	1.301	1.833	3.096	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		322.725									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	12	0.027	0.046	0.245	0.012	0.004	0.063	0.014	0.023	0.034	0.186
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	11	0.63	0.966	5.098	0.074	1.955	1.398	0.133	0.375	0.744	4.309
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	10	0.091	0.137	0.525	0.024	0.021	0.145	0.026	0.055	0.164	0.493
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	12	0.562	0.555	0.718	0.234	0.016	0.128	0.304	0.499	0.646	0.708
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	12	0.038	0.037	0.051	0.014	0.	0.01	0.018	0.032	0.046	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 1997 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	46	21.3	18.391	30.8	5.7	78.659	8.869	5.7	10.1	28.5	29.46
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	11	7.8	8.636	16.6	6.2	8.551	2.924	6.26	7.3	8.9	15.46
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	10	1.15	1.17	1.7	0.6	0.089	0.298	0.64	1.	1.35	1.68
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	44	219.5	227.114	410.	135.	4470.382	66.861	136.5	192.25	266.5	334.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	11	213.	226.273	314.	142.	3425.018	58.524	142.6	204.	292.	312.8
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	31	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	44	8.25	8.986	13.7	6.3	5.842	2.417	6.3	6.925	11.05	13.6
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	11##	1.	0.909	2.	0.5	0.191	0.437	0.5	0.5	1.	1.8
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	11	5.	6.364	13.	2.5	15.355	3.918	2.5	2.5	9.	12.8
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	22	7.61	7.58	8.45	7.07	0.081	0.285	7.249	7.37	7.72	7.879
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	22	7.61	7.505	8.45	7.07	0.087	0.295	7.249	7.37	7.72	7.879
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	22	0.025	0.031	0.085	0.004	0.	0.018	0.013	0.019	0.043	0.056
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	11	7.4	7.482	7.8	7.2	0.042	0.204	7.22	7.3	7.7	7.78
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	11	7.4	7.44	7.8	7.2	0.044	0.209	7.22	7.3	7.7	7.78
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	11	0.04	0.036	0.063	0.016	0.	0.016	0.017	0.02	0.05	0.061
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	11	55.	52.364	75.	27.	161.455	12.706	28.6	49.	57.	72.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	9.	9.455	17.	5.	13.073	3.616	5.	6.	12.	16.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11##	1.5	1.773	3.	1.5	0.368	0.607	1.5	1.5	1.5	3.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	8.	7.727	15.	4.	10.618	3.259	4.	5.	9.	14.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	10	0.057	0.052	0.095	0.016	0.001	0.024	0.017	0.032	0.071	0.093
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.004	0.004	0.008	0.002	0.	0.002	0.002	0.003	0.006	0.008
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	11	0.35	0.299	0.46	0.11	0.013	0.113	0.126	0.19	0.38	0.452
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.026	0.027	0.056	0.001	0.	0.015	0.003	0.02	0.036	0.053
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	11	68.	67.636	80.	43.	137.055	11.707	45.2	62.	79.	79.8
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	11	17.	17.636	33.	8.	62.855	7.928	8.4	12.	24.	32.2
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	11	22.	22.909	35.	11.	72.091	8.491	11.	16.	31.	34.6
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	11	6.8	6.255	9.5	3.2	5.447	2.334	3.22	3.3	8.7	9.38
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	22	185.	533.682	5400.	9.	1355477.656	1164.25	11.7	66.25	370.	1580.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	22	2.254	2.208	3.732	0.954	0.468	0.684	1.045	1.821	2.561	3.195
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		161.511									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	11	0.011	0.012	0.022	0.006	0.	0.004	0.006	0.01	0.014	0.021
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	11	0.548	0.646	1.349	0.276	0.096	0.31	0.28	0.499	0.903	1.265
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	11	0.066	0.087	0.222	0.026	0.003	0.058	0.027	0.046	0.121	0.209
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	11	0.563	0.523	0.824	0.062	0.047	0.217	0.099	0.433	0.682	0.809
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	11	0.041	0.038	0.072	0.007	0.	0.019	0.008	0.026	0.052	0.069

** - Less 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

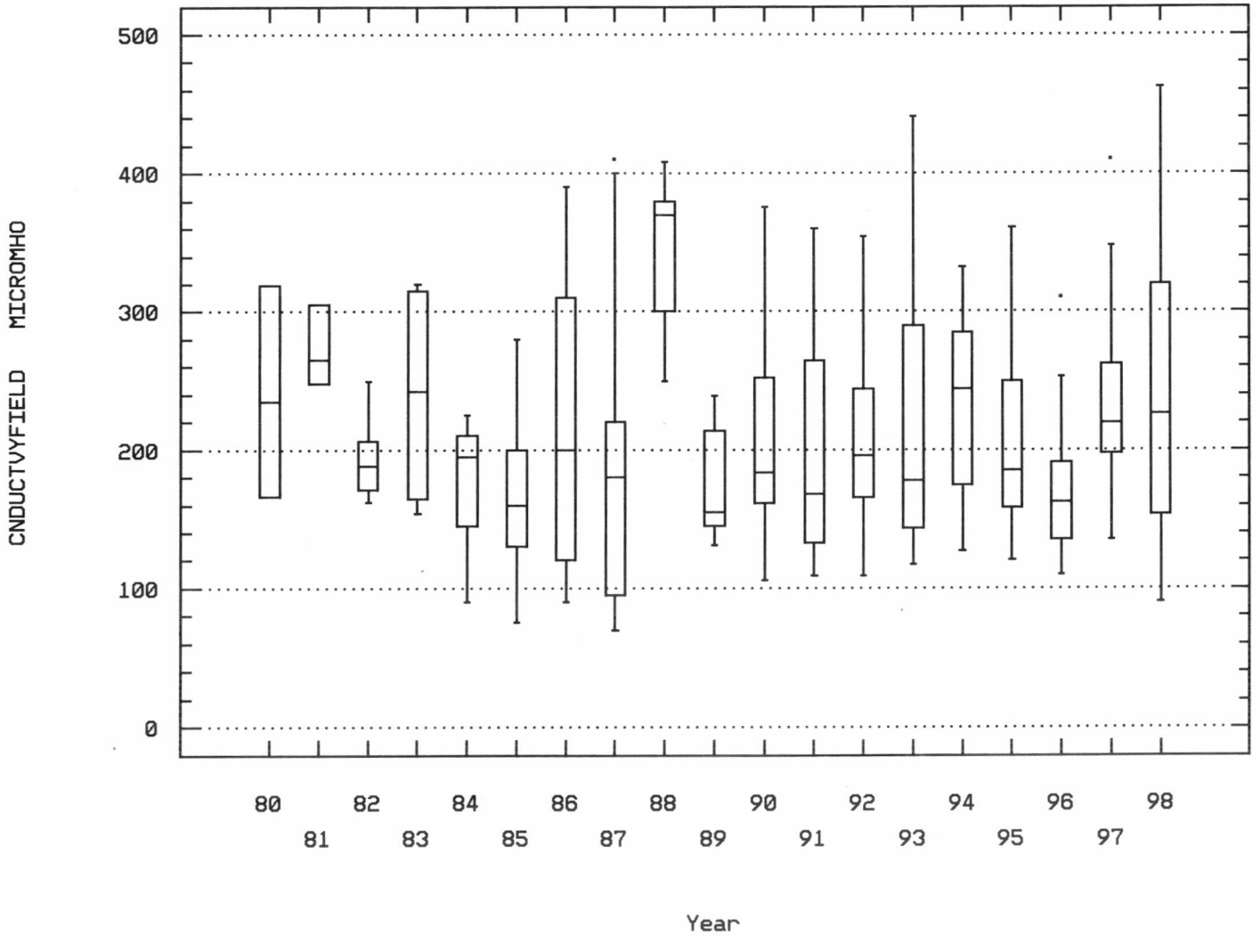
Annual Analysis for 1998 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	75	20.9	19.391	33.1	5.6	84.681	9.202	6.9	9.8	28.3	29.58
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	8.85	18.942	96.	4.5	684.043	26.154	4.62	7.1	18.275	79.17
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	11	0.8	0.736	1.2	0.2	0.097	0.311	0.22	0.5	1.	1.18
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	74	225.5	234.811	462.	90.	9422.292	97.068	115.	147.75	321.25	372.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	12	227.	238.75	514.	94.	15944.568	126.272	97.3	127.75	327.75	468.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	7	0.2	0.171	0.2	0.	0.006	0.076	**	**	**	**
00299p OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	75	8.6	9.279	12.9	6.5	3.791	1.947	6.76	7.5	11.2	12.
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	12##	1.	1.083	2.	1.	0.083	0.289	1.	1.	1.	1.7
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	12	9.5	10.25	27.	2.5	43.977	6.632	2.5	6.	13.75	23.1
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	24	7.76	7.812	8.6	7.2	0.119	0.345	7.32	7.593	8.065	8.325
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	24	7.76	7.693	8.6	7.2	0.133	0.365	7.32	7.593	8.065	8.325
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	24	0.017	0.02	0.063	0.003	0.	0.016	0.005	0.009	0.026	0.049
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	12	7.	7.025	7.6	6.6	0.117	0.341	6.6	6.7	7.375	7.54
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	12	7.	6.914	7.6	6.6	0.13	0.36	6.6	6.7	7.375	7.54
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	12	0.1	0.122	0.251	0.025	0.007	0.083	0.03	0.042	0.2	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	12	58.	54.417	79.	30.	256.083	16.003	30.9	39.25	67.	76.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	10.	21.909	131.	6.	1334.891	36.536	6.2	8.	18.	109.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11##	1.5	3.727	17.	1.5	20.668	4.546	1.5	1.5	4.	14.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	7.	18.091	114.	5.	1031.091	32.111	5.	5.	14.	95.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	10	0.025	0.038	0.09	0.007	0.001	0.032	0.007	0.012	0.066	0.09
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.005	0.006	0.017	0.002	0.	0.004	0.002	0.002	0.008	0.015
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	12	0.295	0.365	0.77	0.17	0.031	0.175	0.182	0.25	0.488	0.707
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.023	0.028	0.076	0.017	0.	0.016	0.017	0.018	0.03	0.064
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	12	67.	69.417	126.	35.	801.538	28.311	36.8	44.75	89.75	118.8
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	12	13.5	14.	28.	2.5	84.136	9.173	2.5	6.25	22.	27.7
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	12	20.	27.75	58.	8.	376.932	19.415	8.9	11.	47.25	57.7
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	12	7.2	6.783	9.2	4.	3.882	1.97	4.03	4.45	8.45	9.14
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	24	61.5	595.	3500.	9.	942567.478	970.859	9.	20.	1172.5	2300.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	24	1.773	2.008	3.544	0.954	0.807	0.899	0.954	1.301	3.06	3.361
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		101.804									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	12	0.031	0.038	0.103	0.019	0.001	0.023	0.019	0.021	0.044	0.088
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	12	0.867	1.145	3.538	0.416	0.732	0.855	0.457	0.556	1.509	2.963
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	12	0.112	0.14	0.332	0.049	0.008	0.091	0.054	0.066	0.208	0.311
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	12	0.527	0.565	0.874	0.347	0.029	0.169	0.36	0.436	0.73	0.844
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	12	0.03	0.036	0.09	0.022	0.	0.018	0.023	0.025	0.039	0.076

** - Less 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: RICH0032 Parameter Code: 00094

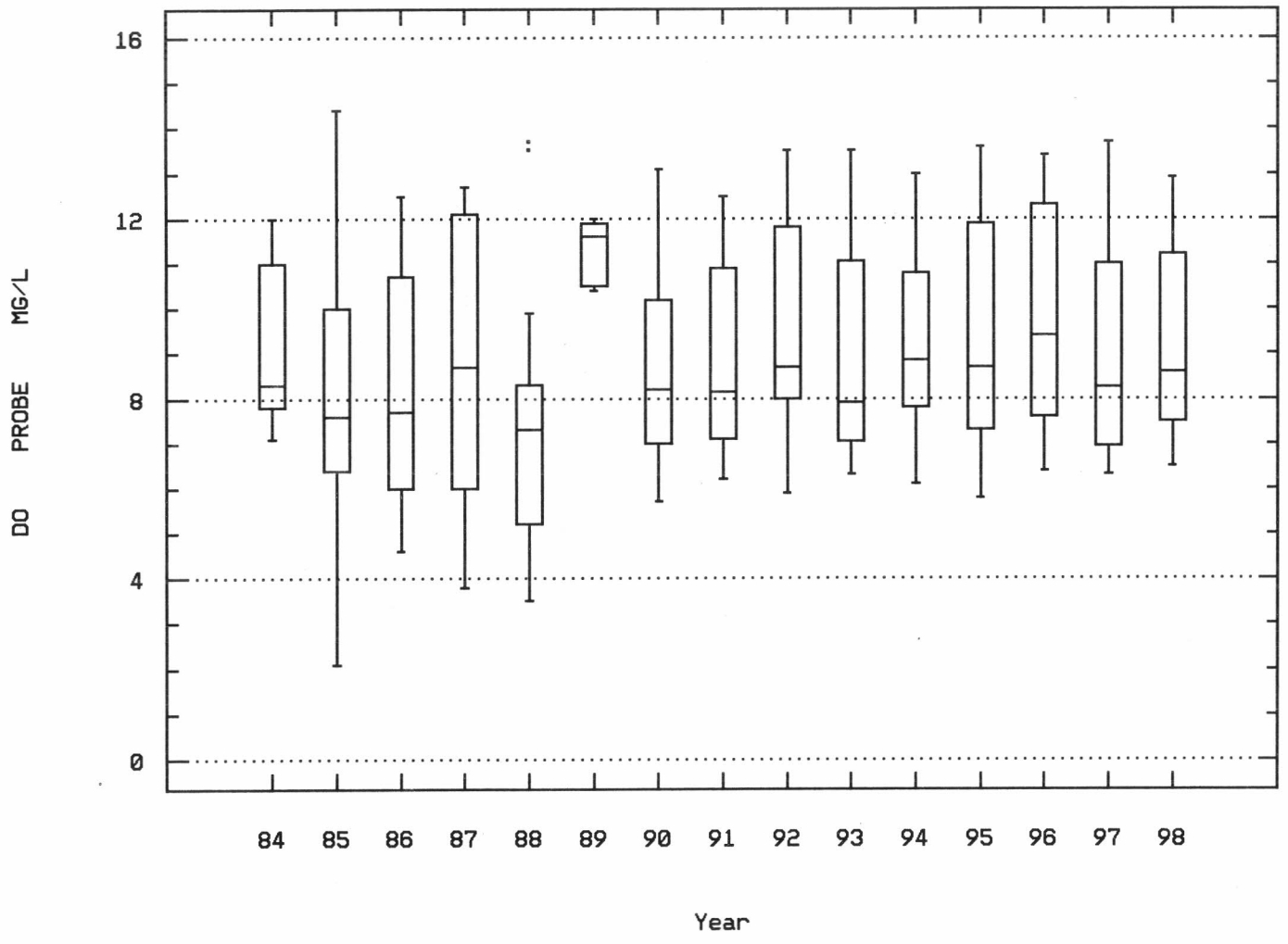
SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @



BUOY 157

Station: RICH0032 Parameter Code: 00299

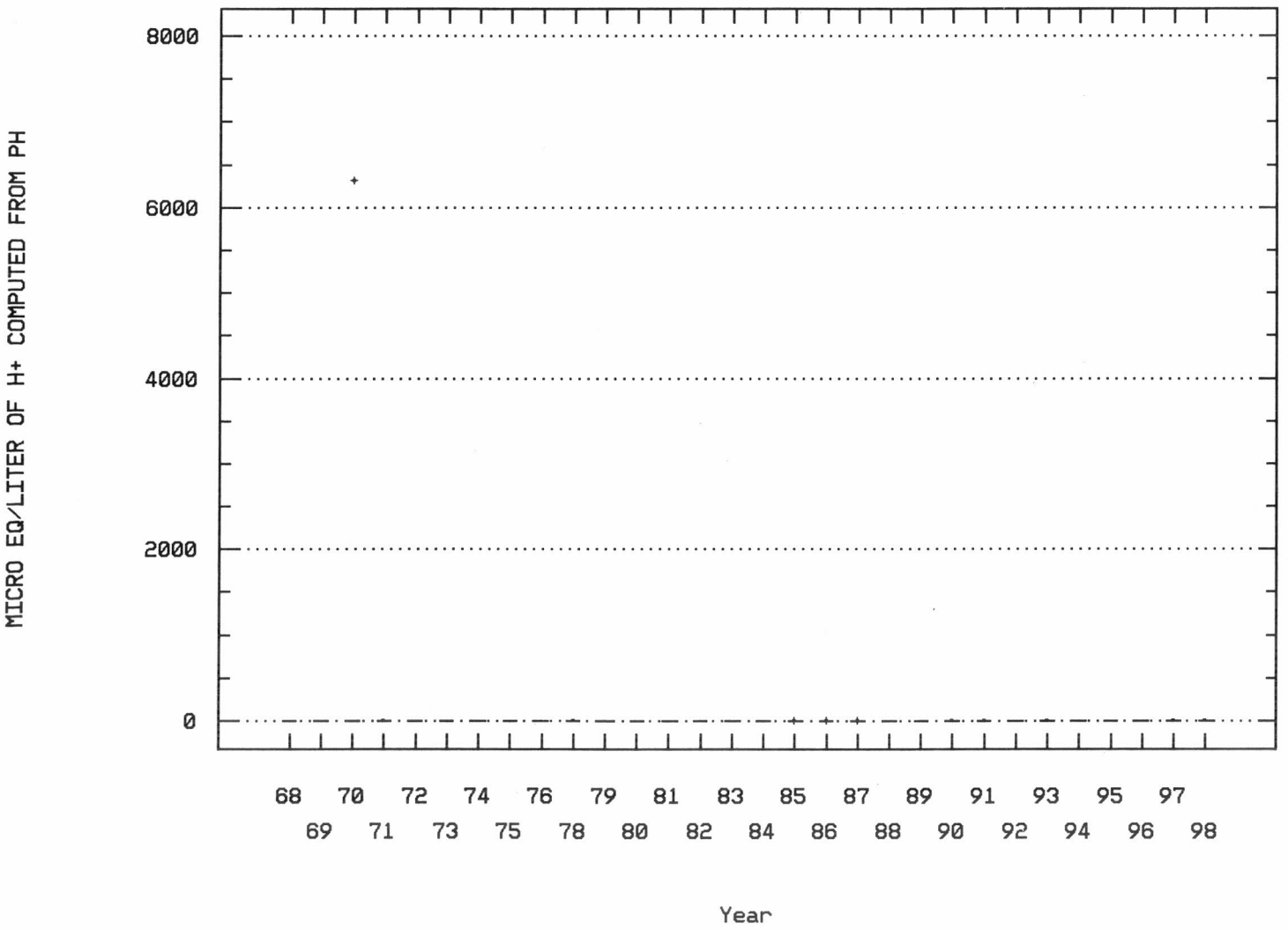
OXYGEN ,DISSOLVED, ANALYSIS BY PROBE



BUOY 157

Station: RICH0032 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH



BUOY 157

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	395	27.	26.074	33.1	5.	15.237	3.903	20.56	23.6	29.1	30.24
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	25	6.8	6.928	18.5	2.	12.705	3.564	3.12	4.45	7.85	12.48
00078 TRANSPARENCY, SECCHI DISC (METERS)		06/28/83-12/15/98	70	1.	0.93	1.6	0.105	0.135	0.368	0.207	0.7	1.2	1.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	359	280.	276.284	441.	105.	5921.562	76.952	163.	228.	335.	380.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		12/20/88-12/15/98	29	244.	244.793	402.	21.	4456.313	66.756	171.	218.	291.	308.
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	303	0.	0.002	0.1	0.	0.	0.014	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	347	7.1	6.96	9.4	2.1	1.201	1.096	5.8	6.3	7.7	8.4
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-11/09/87	52	6.75	6.256	9.2	1.6	3.073	1.753	3.66	5.	7.525	8.4
00310p BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	40	1.8	1.668	6.8	0.5	1.315	1.147	0.5	1.	2.	2.99
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	26	10.	10.423	20.	2.5	18.234	4.27	4.25	7.	14.	15.3
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	137	7.51	7.534	8.7	2.2	0.371	0.609	7.	7.3	7.81	8.106
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	137	7.51	4.336	8.7	2.2	10.668	3.266	7.	7.3	7.81	8.106
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	137	0.031	46.094	6309.573	0.002	290585.552	539.06	0.008	0.015	0.05	0.1
00403p PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	21	7.4	7.429	8.	6.7	0.135	0.368	6.84	7.1	7.7	7.9
00403p CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	21	7.4	7.276	8.	6.7	0.16	0.4	6.84	7.1	7.7	7.9
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	21	0.04	0.053	0.2	0.01	0.002	0.05	0.013	0.02	0.079	0.147
00410p ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	22	57.5	58.773	76.	44.	81.232	9.013	46.9	51.75	68.	72.7
00500p RESIDUE, TOTAL (MG/L)		03/20/69-06/01/95	16	151.5	154.063	220.	110.	799.396	28.274	111.4	135.5	172.5	195.5
00505p RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/01/95	16	33.5	36.063	68.	14.	273.396	16.535	15.4	22.5	46.	67.3
00510p RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/01/95	16	120.5	118.	152.	81.	396.8	19.92	91.5	101.75	133.5	147.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	78	9.	11.179	38.	1.	45.779	6.766	5.	7.	13.25	21.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	78	2.25	3.295	18.	0.	8.789	2.965	1.	1.5	4.	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	75	6.	8.107	30.	0.5	32.171	5.672	3.6	5.	10.	14.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	67	0.3	0.38	1.3	0.016	0.086	0.293	0.059	0.173	0.5	0.814
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/69-06/01/95	41	0.28	0.323	0.8	0.03	0.029	0.171	0.108	0.2	0.425	0.528
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	72	0.03	0.051	0.26	0.003	0.003	0.052	0.005	0.01	0.07	0.12
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/69-06/01/95	41	0.02	0.05	0.9	0.005	0.019	0.139	0.006	0.01	0.04	0.096
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		07/12/84-12/15/98	70	0.26	0.286	0.63	0.1	0.013	0.113	0.16	0.21	0.353	0.449
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		03/20/69-06/01/95	41	0.38	0.433	1.649	0.01	0.12	0.347	0.05	0.15	0.595	0.88
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/69-06/01/95	97	0.8	0.838	3.599	0.1	0.235	0.485	0.4	0.6	1.	1.52
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)		09/20/83-12/15/98	11	0.4	0.455	1.	0.2	0.067	0.258	0.2	0.2	0.6	0.96
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-12/14/95	69	0.2	0.203	1.15	0.05	0.026	0.161	0.07	0.1	0.26	0.34
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)		07/12/84-01/29/96	62	0.12	0.139	0.41	0.02	0.009	0.096	0.04	0.05	0.21	0.277
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-12/15/98	77	0.08	0.125	0.42	0.001	0.011	0.104	0.022	0.035	0.2	0.3
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	86	4.5	5.108	12.	2.9	3.011	1.735	3.24	3.9	6.	7.72
00900 HARDNESS, TOTAL (MG/L AS CACO3)		06/18/92-12/15/98	18	78.5	81.	115.	63.	188.471	13.728	63.9	70.	89.25	99.7
00940p CHLORIDE,TOTAL IN WATER	MG/L	05/05/70-12/15/98	36	14.5	16.222	39.	5.	69.149	8.316	5.7	10.25	22.	28.3
00945 SULFATE, TOTAL (MG/L AS SO4)		07/27/81-12/15/98	20	25.5	25.602	48.	0.03	133.119	11.538	11.3	17.	33.	44.2
00955 SILICA, DISSOLVED (MG/L AS SI02)		02/13/90-12/15/98	40	7.1	7.082	10.3	3.9	2.43	1.559	5.03	6.025	8.175	9.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-12/02/93	44	175.	961.886	8000.	5.	3358380.987	1832.589	41.5	50.	982.5	3800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-12/02/93	44	2.239	2.349	3.903	0.699	0.584	0.765	1.618	1.699	2.992	3.579
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	223.252								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/21/70-04/24/79	27	0.1	0.154	0.7	0.05	0.019	0.137	0.05	0.05	0.2	0.28
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/21/70-06/01/95	34	0.085	0.09	0.29	0.01	0.003	0.057	0.035	0.05	0.113	0.175

** - Less 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: 10/15 to 3/15 - Station RICH0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	348	8.3	9.478	21.	1.5	23.324	4.829	4.3	5.6	14.	16.9
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	29	10.	22.693	209.	3.3	1617.641	40.22	5.5	6.55	20.3	48.
00078 TRANSPARENCY, SECCHI DISC (METERS)		06/28/83-12/15/98	66	0.85	0.911	2.	0.1	0.246	0.496	0.3	0.5	1.3	1.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	344	165.	189.826	462.	70.	7484.704	86.514	95.	121.25	238.75	327.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		12/20/88-12/15/98	35	179.	202.086	514.	94.	7818.492	88.422	111.2	142.	262.	307.4
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-11/18/98	301	0.	0.008	0.2	0.	0.001	0.037	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/12/84-12/15/98	340	11.4	11.16	14.4	6.4	2.973	1.724	8.7	9.9	12.4	13.3

** - 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

Station Inventory for Station: RICH0046

NPS Station ID: RICH0046 LAT/LON: 37.420837/ -77.297503 Agency: 21VASWCB Date Created: 05/06/95
Location: BAILEY CREEK,, RT. 5 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-BAY000.42
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: BAILEY CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP

Parameter Inventory for Station: RICH0046

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-06/04/97	2	11.2	11.2	15.	7.4	28.88	5.374	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-06/04/97	2	58.5	58.5	68.	49.	180.5	13.435	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/94-06/04/97	2	9.8	9.8	10.3	9.3	0.5	0.707	**	**	**	**
00400 PH (STANDARD UNITS)	12/09/94-06/04/97	2	5.81	5.81	5.83	5.79	0.001	0.028	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	12/09/94-06/04/97	2	5.81	5.81	5.83	5.79	0.001	0.028	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/94-06/04/97	2	1.55	1.55	1.622	1.479	0.01	0.101	**	**	**	**

** - Less 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: RICH0046

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00				1	0	0.00	1	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00				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

Parameter Inventory for Station: RICH0045

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	1.73	1.73	1.73	1.73	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	2.55	2.55	2.55	2.55	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		09/02/97-09/02/97	2##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
75043	PENTACHLOROANISOLE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.84	0.84	0.84	0.84	0.	0.	**	**	**	**
75558	BIPHENYL	SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN*	SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	5.	5.	5.	5.	0.	0.	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT,	UG/KG	09/02/97-09/02/97	1	2.65	2.65	2.65	2.65	0.	0.	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	1.15	1.15	1.15	1.15	0.	0.	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5-	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.96	0.96	0.96	0.96	0.	0.	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4-	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
79790	PENTACHLOROBENZENE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
79792	CHLORPYRIFOS	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	5.68	5.68	5.68	5.68	0.	0.	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLE	PERCENT DRY WEIGHT (%)	09/02/97-09/02/97	2	47.1	47.1	47.1	47.1	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. **********

Parameter Inventory for Station: RICH0045

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	09/02/97-09/02/97	1	4.69	4.69	4.69	4.69	0.	0.	**	**	**	**
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	09/02/97-09/02/97	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.82	0.82	0.82	0.82	0.	0.	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	2.12	2.12	2.12	2.12	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.71	0.71	0.71	0.71	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	1	2.06	2.06	2.06	2.06	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.68	0.68	0.68	0.68	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.72	0.72	0.72	0.72	0.	0.	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	5.09	5.09	5.09	5.09	0.	0.	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	51.4	51.4	51.4	51.4	0.	0.	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	87.	87.	87.	87.	0.	0.	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	91.4	91.4	91.4	91.4	0.	0.	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	32.8	32.8	32.8	32.8	0.	0.	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	38.7	38.7	38.7	38.7	0.	0.	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.52	0.52	0.52	0.52	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	09/02/97-09/02/97	1	1551.	1551.	1551.	1551.	0.	0.	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.79	0.79	0.79	0.79	0.	0.	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.28	0.28	0.28	0.28	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	1	1571.7	1571.7	1571.7	1571.7	0.	0.	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	1.48	1.48	1.48	1.48	0.	0.	**	**	**	**
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.66	0.66	0.66	0.66	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.42	0.42	0.42	0.42	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	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: RICH0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	19.7	19.7	19.7	19.7	0.	0.	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	56.6	56.6	56.6	56.6	0.	0.	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	1	23.3	23.3	23.3	23.3	0.	0.	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	25.8	25.8	25.8	25.8	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	30.7	30.7	30.7	30.7	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	25.9	25.9	25.9	25.9	0.	0.	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	11.	11.	11.	11.	0.	0.	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	22.8	22.8	22.8	22.8	0.	0.	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	1.55	1.55	1.55	1.55	0.	0.	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	29.4	29.4	29.4	29.4	0.	0.	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	23.1	23.1	23.1	23.1	0.	0.	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	48.7	48.7	48.7	48.7	0.	0.	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	1	1.56	1.56	1.56	1.56	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	1.11	1.11	1.11	1.11	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	1.77	1.77	1.77	1.77	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	3.17	3.17	3.17	3.17	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.94	0.94	0.94	0.94	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	1	66.6	66.6	66.6	66.6	0.	0.	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	20.4	20.4	20.4	20.4	0.	0.	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	40.7	40.7	40.7	40.7	0.	0.	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	25.7	25.7	25.7	25.7	0.	0.	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	71.	71.	71.	71.	0.	0.	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	147.5	147.5	147.5	147.5	0.	0.	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	13.9	13.9	13.9	13.9	0.	0.	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	75.2	75.2	75.2	75.2	0.	0.	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	2.05	2.05	2.05	2.05	0.	0.	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	34.7	34.7	34.7	34.7	0.	0.	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	138.9	138.9	138.9	138.9	0.	0.	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	84.9	84.9	84.9	84.9	0.	0.	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	126.1	126.1	126.1	126.1	0.	0.	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	50.	50.	50.	50.	0.	0.	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.64	0.64	0.64	0.64	0.	0.	**	**	**	**
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.16	1.16	1.16	1.16	0.	0.	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.39	0.39	0.39	0.39	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

Station Inventory for Station: RICH0045

NPS Station ID: RICH0045 LAT/LON: 37.420726/ -77.423003 Agency: 11NPSWRD Date Created: 07/17/99
Location: UNNAMED TRIBUTARY OF JAMES RIVER FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_NPS_4
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT AN UNNAMED TRIBUTARY OF JAMES RIVER NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY'S GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0045

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924 MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	09/02/97-09/02/97	2	1655.5	1655.5	1945.	1366.	167620.5	409.415	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	2	5.09	5.09	9.59	0.59	40.5	6.364	**	**	**	**
01008 BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	2	87.38	87.38	94.67	80.09	106.288	10.31	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	2	1.73	1.73	2.02	1.44	0.168	0.41	**	**	**	**
01018 IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	2	22989.95	22989.95	35782.8	10197.1	327314022.245	18091.822	**	**	**	**
01023 BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	2##	4.575	4.575	7.8	1.35	20.801	4.561	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	2	0.185	0.185	0.19	0.18	0.	0.007	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	2	13.78	13.78	19.46	8.1	64.525	8.033	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	2	12.325	12.325	16.13	8.52	28.956	5.381	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	2	37.305	37.305	39.21	35.4	7.258	2.694	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	2	197.8	197.8	226.1	169.5	1601.78	40.022	**	**	**	**
01063 MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	2##	0.008	0.008	0.015	0.	0.	0.011	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	2	10.575	10.575	12.7	8.45	9.031	3.005	**	**	**	**
01083 STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	2	11.24	11.24	13.05	9.43	6.552	2.56	**	**	**	**
01088 VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	2	12.07	12.07	22.82	1.32	231.125	15.203	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	2	7115.25	7115.25	8682.5	5548.	4912545.125	2216.426	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	2##	0.015	0.015	0.03	0.	0.	0.021	**	**	**	**
01157 ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	2	43.44	43.44	51.04	35.84	115.52	10.748	**	**	**	**
34203 ACENAPHTHYLENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	5.8	5.8	5.8	5.8	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: RICH0044

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01027 CADMIUM, TOTAL	Fresh Acute	3.9	0&	0	0.00												
	Drinking Water	5.	0&	0	0.00												
01030 CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	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.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1300.	2	0	0.00	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.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	15.	0&	0	0.00												
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00				1	0	0.00						
	Drinking Water	15.	0&	0	0.00												
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	100.	2	0	0.00	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						
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	5000.	2	0	0.00	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						
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	1	0.50	1	1	1.00	1	0	0.00						
	Drinking Water	2.	2	1	0.50	1	1	1.00	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

Parameter Inventory for Station: RICH0044

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01046 IRON, DISSOLVED (UG/L AS FE)	12/06/89-07/24/91	2	4260.	4260.	8390.	130.	34113800.	5840.702	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)	12/06/89-07/24/91	2##	25.	25.	25.	25.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	12/06/89-12/06/89	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	12/06/89-12/06/89	1	1180.	1180.	1180.	1180.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	12/06/89-07/24/91	2	1470.	1470.	1690.	1250.	96800.	311.127	**	**	**	**
01060 MOLYBDENUM, DISSOLVED (UG/L AS MO)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01062 MOLYBDENUM, TOTAL (UG/L AS MO)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	12/06/89-07/24/91	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01080 STRONTIUM, DISSOLVED (UG/L AS SR)	12/06/89-12/06/89	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01082 STRONTIUM, TOTAL (UG/L AS SR)	12/06/89-12/06/89	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)	12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	12/06/89-07/24/91	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01105 ALUMINUM, TOTAL (UG/L AS AL)	12/06/89-12/06/89	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)	12/06/89-07/24/91	2##	50.	50.	50.	50.	0.	0.	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	12/06/89-12/06/89	1	7650.	7650.	7650.	7650.	0.	0.	**	**	**	**
01142 SILICON, TOTAL (UG/L AS SI)	12/06/89-12/06/89	1	7600.	7600.	7600.	7600.	0.	0.	**	**	**	**
01145 SELENIUM, DISSOLVED (UG/L AS SE)	12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01150 TITANIUM, DISSOLVED (UG/L AS TI)	12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01152 TITANIUM, TOTAL (UG/L AS TI)	12/06/89-12/06/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
50119 ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	14500.	14500.	21700.	7300.	103680000.	10182.338	**	**	**	**
50120 ARSENIC,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-12/06/89	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
50122 BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	79.5	79.5	113.	46.	2244.5	47.376	**	**	**	**
50125 CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2##	0.9	0.9	1.3	0.5	0.32	0.566	**	**	**	**
50127 CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	11.35	11.35	12.	10.7	0.845	0.919	**	**	**	**
50128 COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	8.5	8.5	12.	5.	24.5	4.95	**	**	**	**
50129 IRON,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	12555.	12555.	23500.	1610.	239586050.	15478.567	**	**	**	**
50132 MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	140.	140.	180.	100.	3200.	56.569	**	**	**	**
50133 MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2##	0.275	0.275	0.5	0.05	0.101	0.318	**	**	**	**
50135 NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	7.05	7.05	10.	4.1	17.405	4.172	**	**	**	**
50136 LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	54.	54.	93.	15.	3042.	55.154	**	**	**	**
50138 SELENIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-12/06/89	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
50140 STRONTIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-12/06/89	1	6.	6.	6.	6.	0.	0.	**	**	**	**
50141 TITANIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-12/06/89	1	600.	600.	600.	600.	0.	0.	**	**	**	**
50142 VANADIUM,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-12/06/89	1	28.	28.	28.	28.	0.	0.	**	**	**	**
50143 ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL MG/KG	12/06/89-07/24/91	2	45.	45.	63.	27.	648.	25.456	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	12/06/89-07/24/91	2##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	12/06/89-07/24/91	2##	0.025	0.025	0.025	0.025	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: RICH0044

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	1	1.00							1	1	1.00			
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			
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						
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						
01005 BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00	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	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

Station Inventory for Station: RICH0044

NPS Station ID: RICH0044 LAT/LON: 37.420615/ -77.423115 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-04
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes:
RMI-Miles:
HUC: 02080206 Depth of Water: 0
Major Basin: NORTH ATLANTIC Elevation: 0
Minor Basin: JAMES RIVER
RF1 Index: 02080206 RF1 Mile Point: 0.000
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
STORET Station ID(s): RICH_FD_04
Within Park Boundary: Yes
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 0.00 On/Off RF1:
Distance from RF3: 0.29 On/Off RF3:

Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS INSIDE THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLEFIELD PARK. THE SITE IS LOCATED 121 METERS BELOW THE VISITOR FOOT BRIDGE AND BELOW THE GREATEST VOLUME OF THE LEACHATE STAIN. THE STUDY MEASURED POSSIBLE CONTAMINATION OF AN UNNAMED TRIBUTARY TO THE JAMES RIVER. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBSIDENCE IN THE LANDFILL'S EARTHEN CAP AND AN ORANGE-REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0044

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	1	4000.	4000.	4000.	4000.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/16/89-06/16/89	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/16/89-06/16/89	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/16/89-06/16/89	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/16/89-06/16/89	1	3.981	3.981	3.981	3.981	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/06/89-12/06/89	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/89-07/24/91	2	85.	85.	150.	20.	8450.	91.924	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	12/06/89-12/06/89	1	150.	150.	150.	150.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/89-12/06/89	1	290.	290.	290.	290.	0.	0.	**	**	**	**
01022	BORON, TOTAL (UG/L AS B)	12/06/89-12/06/89	1	280.	280.	280.	280.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	12/06/89-12/06/89	1	8000.	8000.	8000.	8000.	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: RICH0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.58	0.58	0.58	0.58	0.	0.	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	1.09	1.09	1.09	1.09	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.73	0.73	0.73	0.73	0.	0.	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.54	0.54	0.54	0.54	0.	0.	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	1.04	1.04	1.04	1.04	0.	0.	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.77	0.77	0.77	0.77	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	129.1	129.1	129.1	129.1	0.	0.	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	1	1.17	1.17	1.17	1.17	0.	0.	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	24.8	24.8	24.8	24.8	0.	0.	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.82	0.82	0.82	0.82	0.	0.	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	1	64.2	64.2	64.2	64.2	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. **********

Parameter Inventory for Station: RICH0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM UG/KG	09/02/97-09/02/97	1	328.3	328.3	328.3	328.3	0.	0.	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	171.7	171.7	171.7	171.7	0.	0.	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENTUG/KG	09/02/97-09/02/97	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	0.77	0.77	0.77	0.77	0.	0.	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	1.18	1.18	1.18	1.18	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	0.73	0.73	0.73	0.73	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED UG/KG	09/02/97-09/02/97	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT UG/KG	09/02/97-09/02/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	1	588.4	588.4	588.4	588.4	0.	0.	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	1	171.7	171.7	171.7	171.7	0.	0.	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	1	413.8	413.8	413.8	413.8	0.	0.	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	1	647.6	647.6	647.6	647.6	0.	0.	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	885.8	885.8	885.8	885.8	0.	0.	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT UG/KG	09/02/97-09/02/97	1	24451.	24451.	24451.	24451.	0.	0.	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	2.98	2.98	2.98	2.98	0.	0.	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.38	1.38	1.38	1.38	0.	0.	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.15	1.15	1.15	1.15	0.	0.	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	30.1	30.1	30.1	30.1	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	2.35	2.35	2.35	2.35	0.	0.	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.94	0.94	0.94	0.94	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRYUG/KG	09/02/97-09/02/97	1	24607.	24607.	24607.	24607.	0.	0.	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT UG/KG	09/02/97-09/02/97	1	1.28	1.28	1.28	1.28	0.	0.	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.55	0.55	0.55	0.55	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	2.02	2.02	2.02	2.02	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: RICH0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	133.4	133.4	133.4	133.4	0.	0.	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	759.4	759.4	759.4	759.4	0.	0.	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	2261.6	2261.6	2261.6	2261.6	0.	0.	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	1	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1547.5	1547.5	1547.5	1547.5	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1082.3	1082.3	1082.3	1082.3	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2837.1	2837.1	2837.1	2837.1	0.	0.	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	134.3	134.3	134.3	134.3	0.	0.	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	957.8	957.8	957.8	957.8	0.	0.	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	46.	46.	46.	46.	0.	0.	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2998.9	2998.9	2998.9	2998.9	0.	0.	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2343.2	2343.2	2343.2	2343.2	0.	0.	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	777.1	777.1	777.1	777.1	0.	0.	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	2211.5	2211.5	2211.5	2211.5	0.	0.	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	1	91.9	91.9	91.9	91.9	0.	0.	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	155.6	155.6	155.6	155.6	0.	0.	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	924.9	924.9	924.9	924.9	0.	0.	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	31.8	31.8	31.8	31.8	0.	0.	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	50.	50.	50.	50.	0.	0.	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	103.8	103.8	103.8	103.8	0.	0.	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	74.	74.	74.	74.	0.	0.	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	44.5	44.5	44.5	44.5	0.	0.	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	54.9	54.9	54.9	54.9	0.	0.	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	42.9	42.9	42.9	42.9	0.	0.	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	56.2	56.2	56.2	56.2	0.	0.	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	29.	29.	29.	29.	0.	0.	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	1150.2	1150.2	1150.2	1150.2	0.	0.	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	458.6	458.6	458.6	458.6	0.	0.	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	31.2	31.2	31.2	31.2	0.	0.	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.49	0.49	0.49	0.49	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.88	1.88	1.88	1.88	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.92	1.92	1.92	1.92	0.	0.	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP UG/KG	09/02/97-09/02/97	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

Station Inventory for Station: RICH0043

NPS Station ID: RICH0043 LAT/LON: 37.420366/ -77.421893 Agency: 11NPSWRD Date Created: 07/17/99
Location: UNNAMED TRIBUTARY OF JAMES RIVER
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): RICH_NPS_3
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT AN UNNAMED TRIBUTARY OF JAMES RIVER NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY'S GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	09/02/97-09/02/97	1	1046.5	1046.5	1046.5	1046.5	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	1	3.28	3.28	3.28	3.28	0.	0.	**	**	**	**
01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	1	124.19	124.19	124.19	124.19	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
01018	IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	1	25780.6	25780.6	25780.6	25780.6	0.	0.	**	**	**	**
01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	1##	3.35	3.35	3.35	3.35	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	13.11	13.11	13.11	13.11	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	1	12.88	12.88	12.88	12.88	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	1	15.77	15.77	15.77	15.77	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	1	138.98	138.98	138.98	138.98	0.	0.	**	**	**	**
01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	1##	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	12.15	12.15	12.15	12.15	0.	0.	**	**	**	**
01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	1	29.97	29.97	29.97	29.97	0.	0.	**	**	**	**
01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	1	24.08	24.08	24.08	24.08	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	1	7776.8	7776.8	7776.8	7776.8	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	1##	0.105	0.105	0.105	0.105	0.	0.	**	**	**	**
01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	1	75.49	75.49	75.49	75.49	0.	0.	**	**	**	**
34203	ACENAPHTHYLENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	7.	7.	7.	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: RICH0042

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
34210	ACROLEIN	Fresh Acute	68.	1	0	0.00							1	0	0.00			
34215	ACRYLONITRILE	Fresh Acute	7550.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE	Drinking Water	100.	1	0	0.00							1	0	0.00			
34371	ETHYLBENZENE	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34376	FLUORANTHENE	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	Fresh Acute	980.	1	0	0.00							1	0	0.00			
34408	ISOPHORONE	Fresh Acute	117000.	1	0	0.00							1	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34447	NITROBENZENE	Fresh Acute	27000.	1	0	0.00							1	0	0.00			
34452	PARACHLOROMETA CRESOL	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34461	PHENANTHRENE	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34475	TETRACHLOROETHYLENE	Fresh Acute	5280.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
34501	1,1-DICHLOROETHYLENE	Drinking Water	7.	1	0	0.00							1	0	0.00			
34506	1,1,1-TRICHLOROETHANE	Drinking Water	200.	1	0	0.00							1	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34536	1,2-DICHLOROBENZENE	Drinking Water	600.	1	0	0.00							1	0	0.00			
34541	1,2-DICHLOROPROPANE	Drinking Water	5.	1	0	0.00							1	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	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	Drinking Water	600.	1	0	0.00							1	0	0.00			
34571	1,4-DICHLOROBENZENE	Drinking Water	75.	1	0	0.00							1	0	0.00			
34586	2-CHLOROPHENOL	Fresh Acute	4380.	1	0	0.00							1	0	0.00			
34601	2,4-DICHLOROPHENOL	Fresh Acute	2020.	1	0	0.00							1	0	0.00			
34606	2,4-DIMETHYLPHENOL	Fresh Acute	2120.	1	0	0.00							1	0	0.00			
34611	2,4-DINITROTOLUENE	Fresh Acute	330.	1	0	0.00							1	0	0.00			
34694	PHENOL (C6H5OH) - SINGLE COMPOUND	Fresh Acute	10200.	1	0	0.00							1	0	0.00			
34696	NAPHTHALENE	Fresh Acute	2300.	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	0&	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	1	1.00							1	1	1.00			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	1	0	0.00							1	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	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			
77093	CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	Drinking Water	70.	1	0	0.00							1	0	0.00			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
77687	2,4,5-TRICHLOROPHENOL, WHOLE WATER	Fresh Acute	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

Parameter Inventory for Station: RICH0042

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
78200 N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
78206 N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
78207 N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78300 3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
81281 KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81302 DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81309 CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81520 CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
81551 XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
81552 ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81553 ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81593 METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81595 METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81596 METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81597 METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
81888 DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82191 2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82204 2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
82213 DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	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

EPA Water Quality Criteria Analysis for Station: RICH0042

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00997 ARSENIC, INORGANIC TOT	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			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	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	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.	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			
32101 BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32102 CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32103 1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32104 BROMOFORM, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32105 DIBROMOCHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32106 CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	1	0	0.00							1	0	0.00			
	Drinking Water	100.	1	0	0.00							1	0	0.00			
34205 ACENAPHTHENE	Fresh Acute	1700.	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

Parameter Inventory for Station: RICH0042

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
61290	BENZENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
61291	TOLUENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73559	BENZiAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
73591	BENZiJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77793	PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78109	ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78142	ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	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 time series plot

Parameter Inventory for Station: RICH0042

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	1##	100.	100.	100.	100.	0.	0.	**	**	**	**
34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER	UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER	UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
38462	FAMPHUR	WATER, TOTUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	05/03/96-05/03/96	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 time series plot

Station Inventory for Station: RICH0042

NPS Station ID: RICH0042 LAT/LON: 37.420615/ -77.423115 Agency: 11NPSWRD Date Created: 07/03/99
Location: UNNAMED STREAM DOWNSTREAM OF LARGEST SEEP FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_DAA_SS-02
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF; VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. STATION SS-02 WAS AT AN UNNAMED STREAM NORTH OF FORT DARLING SANITARY LANDFILL DOWNSTREAM OF THE LARGEST SEEP. THE SITE IS INSIDE OF RICHMOND NATIONAL BATTLEFIELD PARK (RICH). THE STREAM WAS SAMPLED AS PART SITE OF A INVESTIGATION OF FORT DARLING LANDFILL BY DRAPER ADEN ASSOCIATES FOR CHESTERFIELD COUNTY. SAMPLES WERE COLLECTED AT A LEACHATE SEEP AND THREE SITES ALONG AN UNNAMED CREEK AT THE NORTHERN BORDER OF THE LANDFILL. THE STREAM AT STATION SS-02 WAS ORANGE IN COLOR AND ODOROUS. DATA ARE FROM MISCELLANEOUS LABORATORY SHEETS AND A MEMORANDUM FROM DRAPER ADEN ASSOCIATES. FOR MORE INFORMATION CONTACT RICH'S CHIEF OF RESOURCES AT 3215 EAST BROAD STREET; RICHMOND VA 23223 (TEL. 804-226-1981). DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: RICH0042

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00997 ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01007 BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	1	180.	180.	180.	180.	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01059 THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01077 SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01097 ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	1##	3.	3.	3.	3.	0.	0.	**	**	**	**
01102 TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	1##	5000.	5000.	5000.	5000.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
32101 BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32102 CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32103 1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32104 BROMOFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32105 DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32106 CHLOROFORM,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	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

EPA Water Quality Criteria Analysis for Station: RICH0041

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
34205	ACENAPHTHENE	Fresh Acute	1700.	1	0	0.00							1	0	0.00			
34210	ACROLEIN	Fresh Acute	68.	1	0	0.00							1	0	0.00			
34215	ACRYLONITRILE	Fresh Acute	7550.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE	Drinking Water	100.	1	0	0.00							1	0	0.00			
34371	ETHYLBENZENE	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34376	FLUORANTHENE	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	Fresh Acute	980.	1	0	0.00							1	0	0.00			
34408	ISOPHORONE	Fresh Acute	117000.	1	0	0.00							1	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34447	NITROBENZENE	Fresh Acute	27000.	1	0	0.00							1	0	0.00			
34452	PARACHLOROMETA CRESOL	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34461	PHENANTHRENE	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34475	TETRACHLOROETHYLENE	Fresh Acute	5280.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
34501	1,1-DICHLOROETHYLENE	Drinking Water	7.	1	0	0.00							1	0	0.00			
34506	1,1,1-TRICHLOROETHANE	Drinking Water	200.	1	0	0.00							1	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34536	1,2-DICHLOROBENZENE	Drinking Water	600.	1	0	0.00							1	0	0.00			
34541	1,2-DICHLOROPROPANE	Drinking Water	5.	1	0	0.00							1	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	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	Drinking Water	600.	1	0	0.00							1	0	0.00			
34571	1,4-DICHLOROBENZENE	Drinking Water	75.	1	0	0.00							1	0	0.00			
34586	2-CHLOROPHENOL	Fresh Acute	4380.	1	0	0.00							1	0	0.00			
34601	2,4-DICHLOROPHENOL	Fresh Acute	2020.	1	0	0.00							1	0	0.00			
34606	2,4-DIMETHYLPHENOL	Fresh Acute	2120.	1	0	0.00							1	0	0.00			
34611	2,4-DINITROTOLUENE	Fresh Acute	330.	1	0	0.00							1	0	0.00			
34694	PHENOL (C6H5OH) - SINGLE COMPOUND	Fresh Acute	10200.	1	0	0.00							1	0	0.00			
34696	NAPHTHALENE	Fresh Acute	2300.	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	0&	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			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	1	0	0.00							1	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	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			
77093	CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	Drinking Water	70.	1	0	0.00							1	0	0.00			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
77687	2,4,5-TRICHLOROPHENOL, WHOLE WATER	Fresh Acute	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

Parameter Inventory for Station: RICH0041

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
77793 PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78109 ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78142 ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
78200 N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
78206 N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
78207 N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78300 3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
81281 KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81302 DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81309 CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81520 CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
81551 XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
81552 ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81553 ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81593 METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81595 METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81596 METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81597 METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
81888 DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82191 2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82204 2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
82213 DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	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

EPA Water Quality Criteria Analysis for Station: RICH0041

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00997 ARSENIC, INORGANIC TOT	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	1	1.00							1	1	1.00			
	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			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	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	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.	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			
32101 BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32102 CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32103 1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32104 BROMOFORM, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32105 DIBROMOCHLOROMETHANE, WHOLE WATER	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

Parameter Inventory for Station: RICH0041

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	3.	3.	3.	3.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
61290	BENZENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
61291	TOLUENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	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: RICH0041

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
32104	BROMOFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	1##	100.	100.	100.	100.	0.	0.	**	**	**	**
34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34581	[illegible]ORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	[illegible]LOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER	UG/L	05/03/96-05/03/96	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

Station Inventory for Station: RICH0041

NPS Station ID: RICH0041 LAT/LON: 37.421337/ -77.423837 Agency: 11NPSWRD Date Created: 07/03/99
Location: UNNAMED STREAM UPSTREAM OF LEACHATE SEEPS FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_DAA_SS-01
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF; VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. STATION SS-01 WAS AT AN UNNAMED STREAM NORTH OF FORT DARLING SANITARY LANDFILL UPSTREAM OF LEACHATE SEEPS. THE SITE IS INSIDE OF RICHMOND NATIONAL BATTLEFIELD PARK (RICH). THE STREAM WAS SAMPLED AS PART OF A SITE INVESTIGATION OF FORT DARLING LANDFILL BY DRAPER ADEN ASSOCIATES FOR CHESTERFIELD COUNTY. SAMPLES WERE COLLECTED AT A LEACHATE SEEP AND THREE SITES ALONG AN UNNAMED CREEK AT THE NORTHERN BORDER OF THE LANDFILL. THE STREAM AT STATION SS-01 WAS CLEAR; AND THE SUBSTRATE WAS BROWN IN COLOR. DATA ARE FROM MISCELLANEOUS LABORATORY SHEETS AND A MEMORANDUM FROM DRAPER ADEN ASSOCIATES. FOR MORE INFORMATION CONTACT RICH'S CHIEF OF RESOURCES AT 3215 EAST BROAD STREET; RICHMOND VA 23223 (TEL. 804-226-1981). DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: RICH0041

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00997 ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01007 BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	1	51.	51.	51.	51.	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	1	28.	28.	28.	28.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01059 THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01077 SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	1	52.	52.	52.	52.	0.	0.	**	**	**	**
01097 ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	1##	3.	3.	3.	3.	0.	0.	**	**	**	**
01102 TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	1##	5000.	5000.	5000.	5000.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
32101 BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32102 CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32103 1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	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

Station Inventory for Station: RICH0040

NPS Station ID: RICH0040 LAT/LON: 37.419448/ -77.245281 Agency: 21VASWCB Date Created: 05/06/95
Location: WESTERN RUN, RT. 156 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-WSN000.85
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: WESTERN RUN SECTION: 07 TOPO MAP #: 0141 TOPO MAP NAME: ROXBURY, VA

Parameter Inventory for Station: RICH0040

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/94-12/09/94	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	12/09/94-12/09/94	1	6.23	6.23	6.23	6.23	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	12/09/94-12/09/94	1	6.23	6.23	6.23	6.23	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/94-12/09/94	1	0.589	0.589	0.589	0.589	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: RICH0040

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0039

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
34205	ACENAPHTHENE	Fresh Acute	1700.	1	0	0.00							1	0	0.00			
34210	ACROLEIN	Fresh Acute	68.	1	0	0.00							1	0	0.00			
34215	ACRYLONITRILE	Fresh Acute	7550.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE	Drinking Water	100.	1	0	0.00							1	0	0.00			
34371	ETHYLBENZENE	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34376	FLUORANTHENE	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	Fresh Acute	980.	1	0	0.00							1	0	0.00			
34408	ISOPHORONE	Fresh Acute	117000.	1	0	0.00							1	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34447	NITROBENZENE	Fresh Acute	27000.	1	0	0.00							1	0	0.00			
34452	PARACHLOROMETA CRESOL	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34461	PHENANTHRENE	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34475	TETRACHLOROETHYLENE	Fresh Acute	5280.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
34501	1,1-DICHLOROETHYLENE	Drinking Water	7.	1	0	0.00							1	0	0.00			
34506	1,1,1-TRICHLOROETHANE	Drinking Water	200.	1	0	0.00							1	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34536	1,2-DICHLOROBENZENE	Drinking Water	600.	1	0	0.00							1	0	0.00			
34541	1,2-DICHLOROPROPANE	Drinking Water	5.	1	0	0.00							1	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	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	Drinking Water	600.	1	0	0.00							1	0	0.00			
34571	1,4-DICHLOROBENZENE	Drinking Water	75.	1	0	0.00							1	0	0.00			
34586	2-CHLOROPHENOL	Fresh Acute	4380.	1	0	0.00							1	0	0.00			
34601	2,4-DICHLOROPHENOL	Fresh Acute	2020.	1	0	0.00							1	0	0.00			
34606	2,4-DIMETHYLPHENOL	Fresh Acute	2120.	1	0	0.00							1	0	0.00			
34611	2,4-DINITROTOLUENE	Fresh Acute	330.	1	0	0.00							1	0	0.00			
34694	PHENOL (C6H5OH) - SINGLE COMPOUND	Fresh Acute	10200.	1	0	0.00							1	0	0.00			
34696	NAPHTHALENE	Fresh Acute	2300.	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	0&	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	1	1.00							1	1	1.00			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	1	0	0.00							1	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	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			
77093	CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	Drinking Water	70.	1	0	0.00							1	0	0.00			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
77687	2,4,5-TRICHLOROPHENOL, WHOLE WATER	Fresh Acute	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

Parameter Inventory for Station: RICH0039

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
77793 PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78109 ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78142 ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
78200 N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
78206 N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
78207 N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78300 3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
81281 KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81302 DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81309 CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81520 CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
81551 XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
81552 ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81553 ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81593 METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81595 METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81596 METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81597 METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
81888 DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82191 2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82204 2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
82213 DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	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

EPA Water Quality Criteria Analysis for Station: RICH0039

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00997 ARSENIC, INORGANIC TOT	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	1	1.00							1	1	1.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
	Drinking Water	4.	1	1	1.00							1	1	1.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	1	1.00							1	1	1.00			
	Drinking Water	5.	1	1	1.00							1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	1	1	1.00							1	1	1.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	1	1.00							1	1	1.00			
	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			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	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	1	1.00							1	1	1.00			
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	1	1.00							1	1	1.00			
	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.	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			
32101 BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32102 CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32103 1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32104 BROMOFORM, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32105 DIBROMOCHLOROMETHANE, WHOLE WATER	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

Parameter Inventory for Station: RICH0039

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34704 CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
38462 FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
39080 PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100 BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1	28.	28.	28.	28.	0.	0.	**	**	**	**
39110 DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39175 VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
39180 TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39430 ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39460 CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39600 METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702 HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39920 DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
45007 TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
45622 DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
46313 PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
61290 BENZENE, TOTAL WATER UG/L	05/03/96-05/03/96	1	9.	9.	9.	9.	0.	0.	**	**	**	**
61291 TOLUENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
73529 BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73540 CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73559 BENZ1AòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73570 2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73571 METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73576 1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73582 1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73589 1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
73591 BENZ1JòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73595 METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73599 1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73600 1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73605 BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73613 ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73619 1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73626 ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73628 1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73653 BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
76997 METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77007 PROPANENITRILE(PROPIONITRILE,ETHY* WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77033 ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77093 CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77103 2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
77128 STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77142 O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77146 P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77151 M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77152 O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77168 1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77170 2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
77173 1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77268 1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77297 CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77416 2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77424 IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77443 1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77545 SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77562 1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77579 DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77581 P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
77596 METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77687 2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77734 1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77770 2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	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: RICH0039

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
32104	BROMOFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	1##	100.	100.	100.	100.	0.	0.	**	**	**	**
34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1	18.	18.	18.	18.	0.	0.	**	**	**	**
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER	UG/L	05/03/96-05/03/96	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

Station Inventory for Station: RICH0039

NPS Station ID: RICH0039 LAT/LON: 37.420886/ -77.423667 Agency: 11NPSWRD Date Created: 07/03/99
Location: LEACHATE SEEP AT FORT DARLING LANDFILL FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/SPRING STORET Station ID(s): RICH_DAA_LCP-01
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF; VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. STATION LCP-01 WAS AT A LEACHATE SEEP ALONG THE NORTHERN EDGE OF THE FORT DARLING SANITARY LANDFILL INSIDE OF RICHMOND NATIONAL BATTLEFIELD PARK (RICH). THE SEEP WAS SAMPLED AS PART OF A SITE INVESTIGATION OF FORT DARLING LANDFILL BY DRAPER ADEN ASSOCIATES FOR CHESTERFIELD COUNTY. SAMPLES WERE COLLECTED AT A LEACHATE SEEP AND THREE SITES ALONG AN UNNAMED CREEK AT THE NORTHERN BORDER OF THE LANDFILL. THE LEACHATE SEEP SITE WAS EXCAVATED; AND A COLLECTION DEVICE AND SAMPLING PORT WAS INSTALLED. DATA ARE FROM MISCELLANEOUS LABORATORY SHEETS AND A MEMORANDUM FROM DRAPER ADEN ASSOCIATES. FOR MORE INFORMATION CONTACT RICH'S CHIEF OF RESOURCES AT 3215 EAST BROAD STREET; RICHMOND VA 23223 (TEL. 804-226-1981). DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: RICH0039

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00997 ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01007 BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	1	4540.	4540.	4540.	4540.	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	1	715.	715.	715.	715.	0.	0.	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	1	282.	282.	282.	282.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	1	615.	615.	615.	615.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01059 THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	1	634.	634.	634.	634.	0.	0.	**	**	**	**
01077 SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	1	1320.	1320.	1320.	1320.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	1	3850.	3850.	3850.	3850.	0.	0.	**	**	**	**
01097 ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	1##	3.	3.	3.	3.	0.	0.	**	**	**	**
01102 TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	1	28400.	28400.	28400.	28400.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
32101 BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32102 CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32103 1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	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

Station Inventory for Station: RICH0038

NPS Station ID: RICH0038 LAT/LON: 37.413892/ -77.350837 Agency: 21VASWCB Date Created: 05/06/95
Location: ROUNDABOUT CREEK, AT KINGSLAND RD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ROT003.12
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: ROUNDABOUT CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0038

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-06/04/97	2	11.05	11.05	15.7	6.4	43.245	6.576	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-06/04/97	2	67.	67.	80.	54.	338.	18.385	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/94-06/04/97	2	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/09/94-06/04/97	2	6.06	6.06	6.12	6.	0.007	0.085	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/09/94-06/04/97	2	6.056	6.056	6.12	6.	0.007	0.085	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/94-06/04/97	2	0.879	0.879	1.	0.759	0.029	0.171	**	**	**	**

** - Less 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: RICH0038

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00				1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00				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: RICH0037

NPS Station ID: RICH0037 LAT/LON: 37.410559/ -77.322503 Agency: 21VASWCB Date Created: 05/06/95
Location: ROUNDABOUT CREEK AT WRVA RD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-ROT001.15
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: ROUNDABOUT CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/94-12/09/94	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/09/94-12/09/94	1	67.	67.	67.	67.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/09/94-12/09/94	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/09/94-12/09/94	1	6.25	6.25	6.25	6.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/09/94-12/09/94	1	6.25	6.25	6.25	6.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/09/94-12/09/94	1	0.562	0.562	0.562	0.562	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: RICH0037

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	1	1.00				1	1	1.00						
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						

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

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	52	19.8	19.667	32.2	8.1	30.339	5.508	12.44	15.85	23.075	25.91
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	32	87.	92.813	177.	49.	862.738	29.372	61.6	72.25	111.	135.7
00300	OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	50	8.6	8.95	13.	5.6	3.219	1.794	6.21	8.	10.025	10.89
00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	36	2.	1.931	5.	0.5	0.945	0.972	1.	1.	2.	3.3
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	36	17.5	17.806	40.	3.	68.047	8.249	6.7	12.25	21.75	28.8
00400	PH (STANDARD UNITS)	10/02/74-06/20/90	52	6.8	6.892	8.85	5.7	0.453	0.673	6.	6.5	7.173	7.751
00400	CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	52	6.8	6.489	8.85	5.7	0.618	0.786	6.	6.5	7.172	7.751
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	52	0.158	0.324	1.995	0.001	0.253	0.503	0.018	0.068	0.316	1.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	36	8.5	22.931	302.	0.5	3090.974	55.597	2.5	2.625	12.75	62.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	36	2.75	12.153	282.	0.	2186.569	46.761	0.5	2.	5.75	8.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	36	4.	11.292	118.	0.5	497.934	22.314	0.5	2.5	8.75	30.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	46##	0.05	0.105	0.5	0.02	0.012	0.11	0.05	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	46##	0.005	0.012	0.06	0.005	0.	0.013	0.005	0.005	0.01	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	39	0.33	0.38	2.239	0.025	0.129	0.36	0.14	0.18	0.45	0.66
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	43	0.5	0.615	4.	0.05	0.403	0.634	0.2	0.3	0.7	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	31	0.1	0.09	0.3	0.05	0.003	0.051	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	34	0.03	0.033	0.08	0.01	0.	0.016	0.01	0.02	0.04	0.055
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	36	7.55	7.778	17.	1.7	9.954	3.155	4.	6.	9.	11.6
00940	CHLORIDE,TOTAL IN WATER MG/L	06/23/77-06/20/90	9	10.	11.778	20.	9.	11.694	3.42	9.	10.	13.	20.
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	47	300.	945.745	8000.	50.	2763351.064	1662.333	50.	50.	1200.	2500.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	47	2.477	2.521	3.903	1.699	0.434	0.658	1.699	1.699	3.079	3.398
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	332.001								

** - Less 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 10/14 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	44	25.	23.5	34.	2.4	36.412	6.034	16.9	21.2	26.65	30.25
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	27	117.	142.481	356.	68.	5916.182	76.917	74.8	89.	166.	301.6
00300	OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	44	8.	8.152	14.2	1.4	3.863	1.966	6.65	7.2	9.15	10.1
00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	30	2.	2.417	9.	0.5	4.501	2.122	0.55	1.	3.25	5.9
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	28	16.5	17.571	42.	9.	53.958	7.346	10.	12.	20.	30.2
00400	PH (STANDARD UNITS)	10/02/74-06/20/90	44	7.	7.058	9.5	6.	0.496	0.705	6.355	6.5	7.37	8.26
00400	CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	44	7.	6.72	9.5	6.	0.614	0.783	6.355	6.5	7.37	8.26
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	44	0.1	0.191	1.	0.	0.049	0.222	0.006	0.043	0.316	0.442
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	28	9.	12.714	101.	1.	345.582	18.59	2.35	5.25	11.	24.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	28	4.	4.661	19.	0.5	17.149	4.141	1.	2.5	5.	8.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	28	4.5	8.464	84.	0.	247.165	15.721	0.95	2.5	7.	17.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	41##	0.05	0.117	0.7	0.02	0.022	0.148	0.034	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	41	0.01	0.035	0.5	0.005	0.007	0.085	0.005	0.005	0.02	0.118
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	39	0.36	0.333	0.72	0.005	0.035	0.188	0.025	0.22	0.45	0.53
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	40	0.425	0.574	2.5	0.2	0.213	0.462	0.3	0.3	0.6	0.97
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	27	0.1	0.134	0.4	0.005	0.009	0.093	0.05	0.05	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	27	0.05	0.071	0.33	0.02	0.005	0.07	0.028	0.04	0.06	0.148
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	26	8.	8.7	19.	4.1	14.214	3.77	5.	5.75	10.225	15.6
00940	CHLORIDE,TOTAL IN WATER MG/L	06/23/77-06/20/90	1	8.	8.	8.	8.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	42	200.	727.381	4100.	50.	1055146.632	1027.203	50.	50.	1025.	2270.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	42	2.301	2.412	3.613	1.699	0.432	0.658	1.699	1.699	3.01	3.356
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	258.178								

** - Less 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: 10/15 to 3/15 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	65	9.	9.523	34.5	0.7	35.918	5.993	1.92	5.8	12.5	16.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	45	81.	92.156	256.	45.	1424.589	37.744	55.4	68.	109.	136.
00300	OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	65	11.2	11.068	15.2	5.8	3.441	1.855	8.82	9.8	12.3	13.48
00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	47	2.	1.713	6.	0.5	0.997	0.999	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	48	17.	18.708	35.	6.	51.488	7.175	10.	14.	24.5	31.
00400	PH (STANDARD UNITS)	10/02/74-06/20/90	64	6.5	6.633	8.6	5.	0.502	0.709	5.6	6.3	7.	7.575
00400	CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	64	6.5	6.073	8.6	5.	0.82	0.906	5.6	6.3	7.	7.575
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	64	0.316	0.845	10.	0.003	3.632	1.906	0.027	0.1	0.501	2.579
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	48	6.	21.813	326.	1.	3064.496	55.358	2.5	2.5	11.	52.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	48	2.5	6.052	42.	0.	68.556	8.28	1.	2.125	6.75	22.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	48	2.5	16.615	284.	0.	2307.088	48.032	1.	2.5	8.	33.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	64##	0.05	0.096	1.5	0.02	0.036	0.189	0.05	0.05	0.09	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	64##	0.005	0.013	0.37	0.005	0.002	0.046	0.005	0.005	0.005	0.015
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	60	0.37	0.374	1.01	0.005	0.031	0.177	0.172	0.285	0.448	0.548
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	64	0.3	0.48	5.	0.05	0.426	0.653	0.2	0.3	0.4	0.8
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	48##	0.05	0.099	0.7	0.05	0.012	0.109	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	48	0.02	0.032	0.2	0.005	0.001	0.032	0.01	0.02	0.038	0.061
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	43	8.	8.163	18.	1.	13.08	3.617	4.4	6.	9.	15.
00940	CHLORIDE,TOTAL IN WATER MG/L	06/23/77-06/20/90	8	14.5	14.5	21.	9.	17.429	4.175	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	64	100.	324.219	2900.	50.	364126.364	603.429	50.	50.	300.	800.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	64	2.	2.132	3.462	1.699	0.257	0.507	1.699	1.699	2.477	2.9
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	135.668								

** - Less 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 RICH0036

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	5	17.4	15.88	23.1	7.6	42.537	6.522	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	5	9.9	9.64	13.4	6.	10.133	3.183	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	6	2.	2.167	3.	1.	0.567	0.753	**	**	**	**
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	6	17.	15.333	24.	3.	49.467	7.033	**	**	**	**
00400	PH (STANDARD UNITS)		10/02/74-06/20/90	5	6.99	7.062	7.91	6.39	0.431	0.656	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	5	6.99	6.757	7.91	6.39	0.547	0.74	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	5	0.102	0.175	0.407	0.012	0.032	0.18	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	6	7.	7.917	16.	0.5	40.242	6.344	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	6	2.	2.75	7.	0.5	5.775	2.403	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	6	5.	5.25	12.	0.5	20.375	4.514	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	5	0.05	0.06	0.15	0.02	0.003	0.053	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	5##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	5	0.45	0.474	0.66	0.4	0.011	0.106	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	5	0.5	0.48	0.8	0.1	0.067	0.259	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	5	0.03	0.028	0.05	0.01	0.	0.015	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	6	7.25	6.517	9.	1.7	7.414	2.723	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	5	500.	840.	2500.	50.	1046750.	1023.108	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	5	2.699	2.507	3.398	1.699	0.606	0.778	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		321.55									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	12	20.	16.783	25.3	5.	70.402	8.391	5.45	7.275	24.95	25.21
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	8	86.5	93.625	133.	69.	528.554	22.99	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	12	10.05	10.275	13.	8.	3.9	1.975	8.03	8.5	12.375	13.
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	8	1.5	1.625	3.	1.	0.554	0.744	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	8	21.5	19.625	30.	6.	93.411	9.665	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	12	7.205	7.426	8.85	6.73	0.502	0.709	6.76	6.973	7.553	8.85
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	12	7.202	7.147	8.85	6.73	0.587	0.766	6.76	6.972	7.552	8.85
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	12	0.063	0.071	0.186	0.001	0.003	0.057	0.001	0.028	0.107	0.175
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	8	7.	13.125	52.	2.5	284.911	16.879	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	8	3.25	4.5	10.	1.	12.5	3.536	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	8	2.75	9.313	42.	0.5	201.424	14.192	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	9	0.06	0.066	0.12	0.03	0.001	0.029	0.03	0.045	0.085	0.12
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	9	0.02	0.079	0.5	0.01	0.025	0.159	0.01	0.01	0.055	0.5
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	9	0.38	0.346	0.72	0.04	0.036	0.191	0.04	0.215	0.43	0.72
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	8	0.55	0.55	0.9	0.3	0.037	0.193	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	9	0.1	0.133	0.3	0.1	0.005	0.071	0.1	0.1	0.15	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	9	0.05	0.049	0.07	0.02	0.	0.015	0.02	0.04	0.06	0.07
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	6	7.25	7.133	10.9	4.1	8.267	2.875	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	200.	745.455	2800.	50.	1032227.273	1015.986	50.	100.	1700.	2700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	2.301	2.447	3.447	1.699	0.426	0.652	1.699	2.	3.23	3.43
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		279.746									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	11	16.8	16.364	26.7	2.2	62.215	7.888	3.6	9.5	25.	26.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	8	88.5	89.	115.	75.	157.714	12.558	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	11	10.5	10.927	14.5	8.2	4.46	2.112	8.26	9.5	12.7	14.32
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	11	2.	1.955	6.	0.5	2.873	1.695	0.5	0.5	2.	5.6
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	11	21.	21.364	35.	15.	35.455	5.954	15.	16.	25.	33.2
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	11	7.47	7.545	8.22	6.99	0.179	0.424	7.006	7.15	7.95	8.19
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	11	7.47	7.382	8.22	6.99	0.209	0.457	7.006	7.15	7.95	8.19
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	11	0.034	0.041	0.102	0.006	0.001	0.034	0.007	0.011	0.071	0.099
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	3.	32.773	326.	0.5	9470.168	97.315	0.6	1.	5.	263.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	1.	5.182	42.	0.5	150.264	12.258	0.5	0.5	3.	34.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	1.	27.909	284.	0.5	7227.391	85.014	0.5	0.5	3.	229.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	10##	0.02	0.027	0.06	0.02	0.	0.015	0.02	0.02	0.028	0.059
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	10##	0.008	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	10	0.4	0.467	0.86	0.32	0.026	0.161	0.322	0.363	0.553	0.83
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	10	0.45	0.46	0.8	0.3	0.02	0.143	0.3	0.375	0.5	0.77
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	10	0.1	0.091	0.1	0.005	0.001	0.03	0.015	0.1	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	10	0.035	0.034	0.06	0.02	0.	0.014	0.02	0.02	0.043	0.059
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	11	7.2	7.391	9.1	5.7	1.053	1.026	5.84	6.6	8.2	9.02
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	900.	1095.455	2900.	50.	1004227.273	1002.111	60.	100.	1700.	2820.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	2.954	2.745	3.462	1.699	0.398	0.631	1.759	2.	3.23	3.45
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		556.458									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	12	13.25	16.608	29.5	4.	74.468	8.629	5.35	9.125	25.375	28.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	12	101.	97.5	128.	61.	570.273	23.88	64.3	74.	120.75	126.8
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	12	9.25	9.3	12.1	6.2	3.658	1.913	6.38	7.525	11.075	11.83
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	12	1.	1.25	2.	1.	0.205	0.452	1.	1.	1.75	2.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	12	15.5	16.	21.	9.	13.818	3.717	9.9	14.	20.	21.
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	12	6.95	6.82	7.18	6.09	0.109	0.329	6.153	6.703	7.05	7.153
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	12	6.95	6.677	7.18	6.09	0.131	0.362	6.153	6.702	7.05	7.153
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	12	0.112	0.21	0.813	0.066	0.05	0.223	0.071	0.089	0.198	0.719
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	12##	3.75	5.083	12.	2.5	9.947	3.154	2.5	2.5	7.75	10.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	12##	2.75	3.333	6.	2.5	1.561	1.249	2.5	2.5	4.5	5.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	12##	2.5	3.	6.	1.	1.864	1.365	1.3	2.5	3.75	5.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	12##	0.05	0.067	0.2	0.05	0.002	0.044	0.05	0.05	0.05	0.17
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	12##	0.008	0.009	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.024
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	12	0.355	0.361	0.79	0.06	0.028	0.167	0.111	0.313	0.393	0.688
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	12	0.4	0.733	4.	0.3	1.088	1.043	0.3	0.3	0.675	3.04
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	12	0.1	0.087	0.2	0.05	0.002	0.043	0.05	0.05	0.1	0.17
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	12	0.03	0.029	0.04	0.01	0.	0.01	0.013	0.02	0.04	0.04
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	12	7.	6.833	9.	5.	1.606	1.267	5.	6.	8.	8.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	200.	618.182	3400.	50.	955136.364	977.311	50.	100.	800.	2920.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	2.301	2.426	3.531	1.699	0.336	0.579	1.699	2.	2.903	3.425
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		266.9									

** - 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 1987 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	11	15.8	17.3	31.5	5.5	80.62	8.979	5.8	11.	26.	31.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	11	92.	99.	156.	63.	838.	28.948	64.8	73.	120.	151.2
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	10	10.8	10.77	12.8	8.6	1.853	1.361	8.67	9.675	11.9	12.74
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	11	1.	1.409	4.	0.5	0.941	0.97	0.6	1.	2.	3.6
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	11	19.	18.182	27.	9.	38.164	6.178	9.2	11.	22.	27.
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	11	7.02	7.06	7.96	6.4	0.237	0.487	6.416	6.67	7.38	7.892
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	11	7.02	6.854	7.96	6.4	0.284	0.533	6.416	6.67	7.38	7.892
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	11	0.095	0.14	0.398	0.011	0.017	0.129	0.014	0.042	0.214	0.385
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	6.	41.727	302.	2.5	7967.918	89.263	2.5	2.5	60.	254.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	2.5	30.591	282.	2.	7009.941	83.725	2.1	2.5	5.	231.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	11	2.5	11.955	58.	2.	327.623	18.1	2.1	2.5	20.	52.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	11	0.38	0.308	0.5	0.025	0.03	0.172	0.025	0.2	0.45	0.494
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	11	0.3	0.355	0.9	0.2	0.041	0.202	0.2	0.2	0.4	0.82
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	11##	0.05	0.082	0.2	0.05	0.002	0.046	0.05	0.05	0.1	0.18
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	11	0.03	0.032	0.05	0.01	0.	0.013	0.012	0.02	0.04	0.05
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	6	8.	7.5	9.	5.	1.9	1.378	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	10	650.	1490.	8000.	50.	5951555.556	2439.581	50.	87.5	1875.	7470.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	10	2.801	2.654	3.903	1.699	0.592	0.77	1.699	1.925	3.261	3.856
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		450.669									

** - Less 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 1984 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	7	21.5	19.929	28.	11.	38.702	6.221	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	7	68.	78.	139.	45.	940.333	30.665	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	7	8.6	8.8	10.7	6.8	2.047	1.431	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	7	2.	2.5	5.	0.5	2.25	1.5	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	7	14.	18.714	40.	7.	150.571	12.271	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	7	6.36	6.544	8.6	5.4	1.065	1.032	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	7	6.36	5.983	8.6	5.4	1.432	1.197	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	7	0.437	1.039	3.981	0.003	2.126	1.458	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	7	18.	64.571	160.	10.	4318.619	65.716	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	7	7.	14.857	42.	2.	214.81	14.656	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	7	14.	49.714	118.	5.	2690.905	51.874	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	7##	0.05	0.086	0.2	0.05	0.003	0.056	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.01	0.011	0.03	0.005	0.	0.009	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.16	0.202	0.49	0.025	0.036	0.19	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	7	0.4	0.371	0.7	0.2	0.029	0.17	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	7	0.1	0.121	0.2	0.05	0.003	0.057	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	7	0.08	0.07	0.11	0.01	0.002	0.04	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	7	6.	9.714	18.	5.	32.571	5.707	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	7	500.	1742.857	8000.	50.	8328690.476	2885.947	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	7	2.699	2.632	3.903	1.699	0.748	0.865	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		428.211									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	10	18.25	16.74	26.	3.7	58.912	7.675	3.98	11.15	24.25	25.9
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	10	80.5	95.	156.	65.	1014.667	31.854	65.2	72.25	117.25	154.6
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	10	9.7	9.78	14.	7.5	4.18	2.044	7.51	7.9	10.975	13.78
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	10	1.	1.05	2.	0.5	0.136	0.369	0.55	1.	1.	1.9
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	14.5	16.	36.	6.	82.444	9.08	6.2	9.5	19.75	34.9
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	10	6.65	6.583	8.1	5.3	0.516	0.718	5.37	6.225	6.825	7.98
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	10	6.647	6.103	8.1	5.3	0.771	0.878	5.37	6.225	6.825	7.98
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	10	0.225	0.788	5.012	0.008	2.283	1.511	0.02	0.15	0.626	4.611
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	10##	4.25	8.65	25.	2.5	75.003	8.66	2.5	2.5	14.	24.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	10##	2.5	4.85	22.	0.	39.781	6.307	0.2	2.375	5.5	20.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	10##	2.75	5.05	16.	2.5	18.025	4.246	2.5	2.5	6.25	15.1
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	8##	0.05	0.063	0.1	0.05	0.001	0.023	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	8	0.355	0.366	0.6	0.19	0.023	0.15	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	5	0.4	1.28	5.	0.3	4.327	2.08	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	5##	0.05	0.12	0.4	0.05	0.025	0.157	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	8	0.025	0.029	0.08	0.005	0.001	0.023	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	10	5.5	5.9	9.	1.	6.989	2.644	1.3	4.	9.	9.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	10	200.	340.	1500.	50.	182111.111	426.745	50.	87.5	400.	1390.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	10	2.301	2.316	3.176	1.699	0.199	0.446	1.699	1.925	2.602	3.119
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		206.936									

** - Less 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 RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	129.516										

** - Less 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 RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	11	16.	15.909	31.	1.5	71.741	8.47	2.4	10.	22.5	29.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	108.	132.818	356.	70.	8257.564	90.871	70.2	72.	127.	336.
00300 OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	10	9.	8.76	11.6	6.3	2.945	1.716	6.32	6.95	10.2	11.46
00310 BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	11	2.	2.091	4.	1.	0.491	0.701	1.2	2.	2.	3.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	20.	20.545	35.	10.	42.673	6.532	10.4	19.	23.	33.
00400 PH (STANDARD UNITS)	10/02/74-06/20/90	11	6.5	6.464	7.	5.7	0.159	0.398	5.76	6.	6.7	6.96
00400 CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	11	6.5	6.278	7.	5.7	0.196	0.443	5.76	6.	6.7	6.96
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	11	0.316	0.527	1.995	0.1	0.338	0.581	0.112	0.2	1.	1.796
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	9.	23.182	180.	2.5	2714.714	52.103	2.5	5.	11.	146.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	5.	5.727	22.	1.	33.568	5.794	1.	2.5	6.	19.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	3.	17.909	158.	0.	2169.241	46.575	0.2	1.	9.	128.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	11##	0.05	0.086	0.25	0.05	0.005	0.071	0.05	0.05	0.1	0.24
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	11	0.37	0.408	1.01	0.14	0.055	0.235	0.156	0.25	0.46	0.926
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	11	0.4	0.477	1.1	0.3	0.048	0.218	0.3	0.4	0.5	0.98
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11##	0.05	0.127	0.7	0.05	0.038	0.195	0.05	0.05	0.1	0.6
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.03	0.044	0.2	0.01	0.003	0.053	0.012	0.02	0.04	0.168
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	7.	7.364	11.	3.	4.655	2.157	3.6	6.	9.	10.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	11	300.	709.091	4100.	50.	1407909.091	1186.553	50.	50.	900.	3520.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	11	2.477	2.411	3.613	1.699	0.435	0.66	1.699	1.699	2.954	3.506
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	257.647										

** - Less 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 RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	10	13.25	15.3	32.	1.5	108.567	10.42	1.95	6.375	25.25	31.7
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	73.5	108.8	299.	58.	5673.733	75.324	58.5	64.5	132.75	286.2
00300 OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	10	11.2	10.98	13.7	8.	3.786	1.946	8.	9.575	12.475	13.6
00310 BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	9	2.	2.056	5.	0.5	1.778	1.333	0.5	1.	2.5	5.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	16.5	16.6	26.	12.	18.489	4.3	12.	12.75	18.5	25.4
00400 PH (STANDARD UNITS)	10/02/74-06/20/90	9	6.3	6.444	8.	5.5	0.598	0.773	5.5	5.75	6.9	8.
00400 CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	9	6.3	6.037	8.	5.5	0.785	0.886	5.5	5.75	6.9	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	9	0.501	0.918	3.162	0.01	1.188	1.09	0.01	0.129	1.79	3.162
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	8.5	8.15	18.	2.5	23.392	4.836	2.5	2.5	11.	17.3
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	4.	4.55	8.	2.	5.525	2.351	2.05	2.5	7.25	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	3.25	4.35	10.	0.	9.281	3.046	0.2	2.375	7.	9.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	10##	0.005	0.011	0.06	0.005	0.	0.017	0.005	0.005	0.005	0.055
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	10	0.37	0.378	0.53	0.12	0.014	0.116	0.14	0.328	0.468	0.526
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	10	0.35	0.455	1.	0.05	0.074	0.271	0.075	0.3	0.625	0.97
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10##	0.05	0.09	0.2	0.05	0.004	0.061	0.05	0.05	0.125	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.02	0.035	0.12	0.005	0.001	0.034	0.006	0.018	0.045	0.114
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	7.5	7.4	10.	3.	3.822	1.955	3.3	6.75	9.	9.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	10	200.	390.	1800.	50.	284888.889	533.75	50.	87.5	475.	1690.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	10	2.301	2.318	3.255	1.699	0.248	0.498	1.699	1.925	2.663	3.214
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	207.948										

** - Less 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 RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	9	2.	2.27	3.	1.699	0.312	0.558	1.699	1.699	2.866	3.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		186.274									

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Annual Analysis for 1980 - Station RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	12	19.	19.125	34.5	6.5	91.869	9.585	6.8	9.75	26.5	34.35
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	122.	127.636	231.	49.	4221.255	64.971	49.8	68.	177.	229.2
00300 OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	12	10.	10.242	14.2	7.	3.772	1.942	7.3	8.8	11.625	13.54
00310 BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	11	2.	2.818	9.	1.	4.764	2.183	1.	2.	3.	7.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	15.	16.636	33.	11.	33.455	5.784	11.4	14.	18.	30.
00400 PH (STANDARD UNITS)	10/02/74-06/20/90	12	6.8	6.892	9.5	6.	0.803	0.896	6.09	6.4	7.05	8.81
00400 CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	12	6.8	6.547	9.5	6.	0.932	0.966	6.09	6.4	7.05	8.81
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	12	0.158	0.284	1.	0.	0.077	0.278	0.019	0.091	0.398	0.85
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	11.	14.409	62.	2.5	287.591	16.959	2.5	2.5	14.	54.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	4.	5.318	19.	0.	30.264	5.501	0.	2.5	6.	17.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	11	5.	9.773	56.	2.5	243.418	15.602	2.5	2.5	9.	47.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	11##	0.05	0.068	0.2	0.05	0.002	0.046	0.05	0.05	0.05	0.18
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	11##	0.005	0.008	0.02	0.005	0.	0.006	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	11	0.43	0.434	0.8	0.025	0.063	0.251	0.048	0.19	0.7	0.78
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	11	0.4	0.336	0.8	0.1	0.039	0.196	0.1	0.2	0.4	0.72
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.127	0.3	0.05	0.007	0.085	0.05	0.05	0.2	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.03	0.034	0.06	0.01	0.	0.019	0.01	0.02	0.05	0.06
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	10.	10.727	16.	6.	9.418	3.069	6.4	8.	13.	15.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	11	200.	390.909	1600.	50.	233909.091	483.641	50.	50.	600.	1440.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	11	2.301	2.278	3.204	1.699	0.317	0.563	1.699	1.699	2.778	3.144
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		189.808									

** - Less 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 RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	10	19.	17.6	27.5	4.	90.711	9.524	4.05	7.125	26.625	27.45
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	108.	134.9	312.	89.	4553.878	67.482	89.8	98.5	152.75	298.4
00300 OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	10	8.85	9.18	12.8	5.8	4.882	2.209	5.96	7.7	10.65	12.78
00310 BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	10	2.	1.7	3.	1.	0.456	0.675	1.	1.	2.	2.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	15.5	14.1	19.	6.	16.989	4.122	6.3	11.25	17.25	18.9
00400 PH (STANDARD UNITS)	10/02/74-06/20/90	10	6.5	6.81	8.6	5.7	0.879	0.937	5.74	6.25	7.325	8.57
00400 CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	10	6.5	6.329	8.6	5.7	1.136	1.066	5.74	6.25	7.325	8.57
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	10	0.316	0.469	1.995	0.003	0.35	0.592	0.003	0.076	0.574	1.875
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	8.	7.9	13.	2.5	12.933	3.596	2.5	5.125	10.5	12.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	2.25	2.9	5.	2.	1.6	1.265	2.	2.	4.25	5.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	10	4.5	5.5	10.	2.5	7.556	2.749	2.5	2.875	8.	9.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	10##	0.05	0.075	0.3	0.05	0.006	0.079	0.05	0.05	0.05	0.275
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	10##	0.005	0.011	0.04	0.005	0.	0.011	0.005	0.005	0.013	0.038
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	10	0.24	0.26	0.5	0.09	0.02	0.14	0.093	0.135	0.368	0.495
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	10	0.4	0.37	0.7	0.1	0.031	0.177	0.11	0.2	0.5	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10##	0.075	0.095	0.3	0.05	0.006	0.076	0.05	0.05	0.1	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.035	0.06	0.26	0.01	0.006	0.074	0.011	0.028	0.055	0.244
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	9.	8.7	17.	3.	16.9	4.111	3.1	4.75	10.5	16.5
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	10##	75.	315.	1700.	50.	270027.778	519.642	50.	50.	500.	1580.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	10##	1.849	2.112	3.23	1.699	0.313	0.56	1.699	1.699	2.699	3.177

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	12	13.5	13.167	32.	1.	113.081	10.634	1.03	1.725	22.	29.3
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	12	8.9	9.1	14.	5.6	7.333	2.708	5.6	6.5	10.9	13.7
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	12	7.	6.95	7.8	5.5	0.29	0.539	5.89	6.85	7.	7.71
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	12	7.	6.453	7.8	5.5	0.559	0.748	5.89	6.85	7.	7.71
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	12	0.1	0.352	3.162	0.016	0.785	0.886	0.021	0.1	0.144	2.261
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	11	0.3	0.255	0.5	0.05	0.026	0.162	0.05	0.1	0.4	0.48
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	11	0.01	0.03	0.19	0.005	0.003	0.054	0.005	0.005	0.03	0.16
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	5	0.25	0.29	0.51	0.15	0.025	0.157	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	11	0.5	0.636	1.099	0.2	0.098	0.314	0.22	0.4	1.	1.079
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	100.	259.091	1400.	50.	163409.091	404.239	50.	50.	300.	1220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	11	2.	2.102	3.146	1.699	0.246	0.496	1.699	1.699	2.477	3.057
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		126.37									

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Annual Analysis for 1978 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	9	15.5	15.356	25.	0.7	79.388	8.91	0.7	7.5	25.	25.
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	9	8.4	8.756	15.2	6.2	8.118	2.849	6.2	6.8	9.9	15.2
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	9	6.5	6.822	7.5	6.	0.322	0.567	6.	6.45	7.5	7.5
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	9	6.5	6.549	7.5	6.	0.406	0.637	6.	6.45	7.5	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	9	0.316	0.282	1.	0.032	0.094	0.307	0.032	0.032	0.357	1.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	9##	0.05	0.072	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	9##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	4	0.25	0.293	0.46	0.21	0.013	0.114	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	9	0.3	0.328	0.6	0.05	0.031	0.175	0.05	0.25	0.45	0.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	9##	50.	338.889	2200.	50.	494861.111	703.464	50.	50.	250.	2200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	9##	1.699	2.068	3.342	1.699	0.316	0.563	1.699	1.699	2.389	3.342
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		117.052									

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Annual Analysis for 1979 - Station RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	10	14.	14.2	24.	3.	53.789	7.334	3.1	8.5	21.875	23.9
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	5	57.	73.2	115.	52.	779.2	27.914	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	10	9.15	9.61	13.2	6.4	4.303	2.074	6.55	8.35	11.8	13.06
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	5	2.	3.	6.	1.	4.	2.	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	5	32.	29.6	42.	10.	139.3	11.803	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	10	6.5	6.47	7.3	6.	0.127	0.356	6.	6.3	6.5	7.22
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	10	6.5	6.362	7.3	6.	0.14	0.374	6.	6.3	6.5	7.22
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	10	0.316	0.435	1.	0.05	0.097	0.311	0.077	0.316	0.549	1.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		08/15/79-06/20/90	5	13.	16.6	30.	5.	97.3	9.864	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		08/15/79-06/20/90	5	5.	4.8	8.	1.	6.2	2.49	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		08/15/79-06/20/90	5	8.	11.8	25.	4.	70.7	8.408	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	10##	0.05	0.115	0.5	0.05	0.021	0.143	0.05	0.05	0.125	0.47
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	10##	0.005	0.051	0.37	0.005	0.013	0.114	0.005	0.005	0.04	0.34
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	8	0.34	0.334	0.88	0.005	0.067	0.259	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	10	0.4	0.49	1.2	0.2	0.085	0.292	0.21	0.3	0.625	1.15
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	5##	0.05	0.12	0.4	0.05	0.025	0.157	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	5	0.03	0.088	0.33	0.01	0.019	0.137	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	5	17.	16.	19.	10.	12.	3.464	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	9	100.	361.111	1000.	50.	147986.111	384.69	50.	50.	750.	1000.

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	3	16.7	19.067	26.1	14.4	38.423	6.199	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	3	9.2	9.067	10.6	7.4	2.573	1.604	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	3	6.5	6.5	7.	6.	0.25	0.5	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	3	6.5	6.326	7.	6.	0.295	0.544	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	3	0.316	0.472	1.	0.1	0.221	0.47	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	3	0.1	0.55	1.5	0.05	0.678	0.823	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	3##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	3	0.32	0.225	0.35	0.005	0.037	0.191	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	3	0.7	1.1	2.299	0.3	1.119	1.058	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	3##	50.	133.333	300.	50.	20833.333	144.338	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	3##	1.699	1.958	2.477	1.699	0.202	0.449	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		90.856									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	9	17.8	16.	25.6	5.6	42.083	6.487	5.6	10.55	20.55	25.6
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	9	10.	9.289	12.	6.8	3.671	1.916	6.8	7.4	11.	12.
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	9	6.5	6.233	7.	5.	0.568	0.753	5.	5.5	6.8	7.
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	9	6.5	5.605	7.	5.	1.012	1.006	5.	5.5	6.8	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	9	0.316	2.485	10.	0.1	18.222	4.269	0.1	0.158	5.5	10.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.1	0.093	0.2	0.05	0.003	0.053	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7##	0.005	0.007	0.02	0.005	0.	0.006	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.32	0.266	0.44	0.05	0.025	0.158	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	7	0.4	0.457	0.9	0.2	0.063	0.251	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	8##	50.	462.5	3300.	50.	1314821.429	1146.657	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	8##	1.699	1.964	3.519	1.699	0.406	0.637	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		92.054									

** - Less 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 RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/02/74-06/20/90	7	22.8	20.786	32.2	7.2	74.355	8.623	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/02/74-06/20/90	7	8.	6.886	9.8	1.4	9.638	3.105	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/07/75-06/20/90	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		10/02/74-06/20/90	7	7.	7.129	8.3	6.5	0.326	0.571	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		10/02/74-06/20/90	7	7.	6.926	8.3	6.5	0.374	0.611	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/02/74-06/20/90	7	0.1	0.119	0.316	0.005	0.01	0.099	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.3	0.329	0.7	0.1	0.042	0.206	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.02	0.056	0.16	0.005	0.004	0.064	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/02/74-06/20/90	7	0.39	0.647	2.239	0.29	0.499	0.707	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/02/74-06/20/90	7	0.7	1.214	2.5	0.1	1.034	1.017	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	6##	50.	266.667	1200.	50.	212666.667	461.158	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		10/02/74-06/20/90	6##	1.699	2.029	3.079	1.699	0.323	0.568	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		106.991									

** - Less 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

EPA Water Quality Criteria Analysis for Station: RICH0036

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	2.	5	0	0.00				1	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

Parameter Inventory for Station: RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10/02/74-06/21/79	42##	0.05	0.131	0.7	0.05	0.022	0.148	0.05	0.05	0.1	0.37
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/02/74-06/21/79	41	0.04	0.081	0.7	0.005	0.017	0.129	0.005	0.02	0.095	0.17
71900 MERCURY, TOTAL (UG/L AS HG)	03/26/75-03/28/85	5##	0.25	0.21	0.25	0.15	0.003	0.055	**	**	**	**
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	2##	0.063	0.063	0.1	0.025	0.003	0.053	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	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

EPA Water Quality Criteria Analysis for Station: RICH0036

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	17	1	0.06	3	0	0.00	6	1	0.17	8	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	159	2	0.01	44	2	0.05	65	0	0.00	50	0	0.00			
00400 PH	Fresh Chronic	9.	160	1	0.01	44	1	0.02	64	0	0.00	52	0	0.00			
	Other-Lo Lim.	6.5	160	60	0.38	44	12	0.27	64	33	0.52	52	15	0.29			
00403 PH, LAB	Fresh Chronic	9.	20	0	0.00	3	0	0.00	9	0	0.00	8	0	0.00			
	Other-Lo Lim.	6.5	20	12	0.60	3	1	0.33	9	7	0.78	8	4	0.50			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	151	0	0.00	41	0	0.00	64	0	0.00	46	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	138	0	0.00	39	0	0.00	60	0	0.00	39	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	13	0	0.00	2	0	0.00	4	0	0.00	7	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	18	0	0.00	1	0	0.00	8	0	0.00	9	0	0.00			
	Drinking Water	250.	18	0	0.00	1	0	0.00	8	0	0.00	9	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	16	0	0.00	1	0	0.00	7	0	0.00	8	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	17	0	0.00	2	0	0.00	7	0	0.00	8	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	2&	0	0.00							2	0	0.00			
	Drinking Water	5.	2&	0	0.00							2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	5	0	0.00				1	0	0.00	4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	1300.	5	0	0.00				1	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	15.	5	0	0.00				1	0	0.00	4	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00				1	0	0.00	2	0	0.00			
	Drinking Water	100.	3	0	0.00				1	0	0.00	2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00							2	0	0.00			
	Drinking Water	100.	2	0	0.00							2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	5000.	5	0	0.00				1	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	153	78	0.51	42	23	0.55	64	24	0.38	47	31	0.66			
34356 ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	3.	1	0	0.00							1	0	0.00			
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	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

Parameter Inventory for Station: RICH0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/19/89-06/20/90	14	11.95	12.086	16.5	8.6	3.96	1.99	9.3	11.125	12.775	15.55
01002 ARSENIC, TOTAL (UG/L AS AS)	06/23/77-03/28/85	3	1.	2.167	5.	0.5	6.083	2.466	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	2	3.38	3.38	5.9	0.86	12.701	3.564	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	06/23/77-03/28/85	4##	2.75	2.75	5.	0.5	6.75	2.598	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2##	0.085	0.085	0.1	0.07	0.	0.021	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2	7.07	7.07	7.5	6.64	0.37	0.608	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/26/75-03/28/85	5##	5.	4.1	5.	0.5	4.05	2.012	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	03/26/75-03/28/85	5##	5.	5.	5.	5.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	2	4.355	4.355	5.2	3.51	1.428	1.195	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	03/26/75-03/28/85	5	1.	1.9	4.	0.5	2.3	1.517	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	2##	2.3	2.3	3.9	0.7	5.12	2.263	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	03/26/75-11/17/77	3##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	2	1.7	1.7	2.	1.4	0.18	0.424	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/26/75-03/28/85	5	10.	14.	30.	5.	117.5	10.84	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	2	16.65	16.65	17.3	16.	0.845	0.919	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	153	200.	625.817	8000.	50.	1344608.703	1159.573	50.	50.	650.	1700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/02/74-06/20/90	153	2.301	2.329	3.903	1.699	0.384	0.62	1.699	1.699	2.812	3.23
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	213.098								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	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

Station Inventory for Station: RICH0036

NPS Station ID: RICH0036 LAT/LON: 37.407781/ -77.398337 Agency: 21VASWCB Date Created: / /
Location: 100 YDS FROM MOUTH, ON LONE STAR CEMENT CO.LAND
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-KSL000.18 /VA2-07-X0161/VA2-4X0161
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 10.540 Distance from RF1: 11.90 On/Off RF1: OFF
RF3 Index: 02080206135703.57 RF3 Mile Point: 4.02 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: KINGSLAND CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/02/74-06/20/90	161	17.	16.619	34.5	0.7	70.32	8.386	5.1	9.5	24.	26.66
00070	TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-06/20/90	17	6.1	16.788	148.	2.6	1169.939	34.204	3.72	4.75	13.4	47.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	104	91.	105.423	356.	45.	2847.936	53.366	63.	73.	119.5	161.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-06/20/90	8	83.	87.125	106.	74.	166.696	12.911	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/02/74-06/20/90	159	9.6	9.595	15.2	1.4	5.047	2.247	6.8	8.	11.2	12.7
00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/75-06/20/90	113	2.	1.969	9.	0.5	1.952	1.397	1.	1.	2.	4.
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	112	17.	18.134	42.	3.	56.64	7.526	10.	13.	21.	29.7
00400	PH (STANDARD UNITS)	10/02/74-06/20/90	160	6.8	6.834	9.5	5.	0.51	0.714	6.	6.483	7.098	7.782
00400	CONVERTED PH (STANDARD UNITS)	10/02/74-06/20/90	160	6.8	6.305	9.5	5.	0.791	0.89	6.	6.483	7.097	7.782
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/74-06/20/90	160	0.158	0.496	10.	0.	1.618	1.272	0.017	0.08	0.329	1.
00403	PH, LAB, STANDARD UNITS SU	01/23/80-06/20/90	20	6.4	6.46	7.4	6.1	0.119	0.345	6.1	6.2	6.675	6.89
00403	CONVERTED PH, LAB, STANDARD UNITS	01/23/80-06/20/90	20	6.389	6.358	7.4	6.1	0.13	0.361	6.1	6.2	6.675	6.89
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/23/80-06/20/90	20	0.409	0.439	0.794	0.04	0.067	0.258	0.129	0.212	0.631	0.794
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/23/80-06/20/90	20	10.	10.4	33.	4.	39.305	6.269	4.1	7.	12.	14.9
00500	RESIDUE, TOTAL (MG/L)	08/15/79-06/20/90	17	84.	97.647	366.	63.	4925.118	70.179	67.8	71.	85.5	158.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	08/15/79-06/20/90	17	27.	29.706	72.	14.	168.596	12.984	15.6	21.5	33.5	44.8
00510	RESIDUE, TOTAL FIXED (MG/L)	08/15/79-06/20/90	17	52.	67.941	294.	37.	3500.184	59.162	41.	46.5	64.5	120.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/15/79-06/20/90	112	7.5	19.897	326.	0.5	2373.856	48.722	2.5	2.5	11.75	28.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/15/79-06/20/90	112	2.75	7.665	282.	0.	732.592	27.066	1.	2.125	5.	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/15/79-06/20/90	112	3.	12.866	284.	0.	1205.77	34.724	1.	2.5	8.	19.1
00545	RESIDUE, SETTLEABLE (ML/L)	10/02/74-06/21/79	34##	0.05	0.132	2.	0.05	0.117	0.342	0.05	0.05	0.05	0.25
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/02/74-06/20/90	151##	0.05	0.104	1.5	0.02	0.025	0.157	0.05	0.05	0.1	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	151##	0.005	0.019	0.5	0.005	0.003	0.055	0.005	0.005	0.01	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/02/74-06/20/90	138	0.36	0.364	2.239	0.005	0.06	0.244	0.117	0.22	0.45	0.563
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/02/74-06/20/90	147	0.4	0.545	5.	0.05	0.36	0.6	0.2	0.3	0.6	0.9
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	13	0.27	0.298	0.5	0.17	0.011	0.107	0.174	0.195	0.39	0.472
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	106	0.1	0.105	0.7	0.005	0.008	0.092	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	109	0.03	0.042	0.33	0.005	0.002	0.045	0.01	0.02	0.05	0.07
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	105	8.	8.164	19.	1.	12.172	3.489	4.68	6.	9.	12.4
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/29/88-06/20/90	17	20.	21.059	40.	14.	34.059	5.836	15.6	18.	23.	28.8
00940	CHLORIDE,TOTAL IN WATER MG/L	06/23/77-06/20/90	18	11.5	12.778	21.	8.	15.948	3.993	8.9	10.	16.25	20.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/88-06/20/90	16	9.5	9.	11.	5.	2.533	1.592	6.4	8.	10.	11.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	17	0.1	0.092	0.16	0.05	0.001	0.035	0.05	0.05	0.12	0.136

** - Less 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: RICH0035

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	11	1	0.09	6	1	0.17				5	0	0.00			
00400 PH	Fresh Chronic	9.	11	2	0.18	6	2	0.33				5	0	0.00			
	Other-Lo Lim.	6.5	11	1	0.09	6	0	0.00				5	1	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	10	0	0.00	5	0	0.00				5	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	10	0	0.00	5	0	0.00				5	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									
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1&	1	1.00	1	1	1.00									
	Drinking Water	5.	1&	1	1.00	1	1	1.00									
01034 CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	3	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	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			
01051 LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
	Drinking Water	15.	3	1	0.33	3	1	0.33									
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			
01092 ZINC, TOTAL	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			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	11	5	0.45	6	2	0.33				5	3	0.60			
71900 MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	3	0	0.00				1	0	0.00			
	Drinking Water	2.	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

Station Inventory for Station: RICH0035

NPS Station ID: RICH0035 LAT/LON: 37.407615/ -77.380977 Agency: 21VASWCB Date Created: / /
Location: AT MOUTH OF PETERSBURG BOAT HARBOR BELOW STP FIPS State/County: 51730 VIRGINIA/PETERSBURG (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-APP010.32 /VA2-02-X0010/VA2-4X0010
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 9.900 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080207000304.53 RF3 Mile Point: 4.66 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: APPOMATTOX RIVER SECTION: 02 TOPO MAP #: 0134 TOPO MAP NAME: PETERSBURG, VA

Parameter Inventory for Station: RICH0035

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-07/08/74	9	27.8	26.5	30.	19.	17.395	4.171	19.	23.35	30.	30.
00300 OXYGEN, DISSOLVED MG/L	07/31/72-07/08/74	11	7.	8.382	18.7	3.8	15.934	3.992	4.16	6.	10.2	17.08
00310 BOD, 5 DAY, 20 DEG C MG/L	07/31/72-07/31/72	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	07/31/72-07/08/74	11	7.2	7.518	9.	6.5	0.892	0.944	6.52	6.8	8.5	9.
00400 CONVERTED PH (STANDARD UNITS)	07/31/72-07/08/74	11	7.2	6.995	9.	6.5	1.193	1.092	6.52	6.8	8.5	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-07/08/74	11	0.063	0.101	0.316	0.001	0.012	0.108	0.001	0.003	0.158	0.303
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/09/72-08/09/72	1	61.	61.	61.	61.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/09/72-08/09/72	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/09/72-08/09/72	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/31/72-07/08/74	10	0.2	0.231	0.75	0.05	0.043	0.207	0.05	0.088	0.308	0.708
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/31/72-07/08/74	10	0.01	0.015	0.05	0.005	0.	0.015	0.005	0.005	0.023	0.048
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/31/72-07/08/74	10	0.17	0.202	0.67	0.01	0.034	0.184	0.01	0.115	0.25	0.628
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/31/72-07/08/74	10	0.6	0.58	0.9	0.3	0.028	0.169	0.31	0.475	0.7	0.88
00940 CHLORIDE,TOTAL IN WATER MG/L	08/09/72-08/09/72	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	07/31/72-08/09/72	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-05/03/73	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	07/31/72-05/03/73	4##	5.	6.25	10.	5.	6.25	2.5	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	07/31/72-10/04/72	3	10.	15.	30.	5.	175.	13.229	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/03/73	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	07/31/72-05/03/73	4##	7.5	7.5	10.	5.	8.333	2.887	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/31/72-07/08/74	11	100.	450.	2500.	50.	563500.	750.666	50.	50.	500.	2220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/31/72-07/08/74	11	2.	2.219	3.398	1.699	0.377	0.614	1.699	1.699	2.699	3.327
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	165.657								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	07/31/72-07/08/74	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/31/72-07/08/74	10##	0.05	0.059	0.12	0.04	0.001	0.024	0.041	0.05	0.058	0.116
71900 MERCURY, TOTAL (UG/L AS HG)	07/31/72-05/03/73	4##	0.25	0.25	0.25	0.25	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

Station Inventory for Station: RICH0034

NPS Station ID: RICH0034 LAT/LON: 37.406393/ -77.305559 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, OFF DEEP BOTTOM LANDING FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS091.00
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0034

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-10/26/98	51	26.4	25.312	32.2	16.1	20.189	4.493	18.04	22.	28.8	30.86
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	47	219.	238.234	452.	121.	5153.357	71.787	153.	178.	290.	336.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/14/94-10/26/98	50	7.9	8.236	11.8	5.9	2.111	1.453	6.6	7.175	9.025	10.1
00400 PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.55	7.659	8.6	6.53	0.278	0.528	7.084	7.23	8.18	8.462
00400 CONVERTED PH (STANDARD UNITS)	07/14/94-10/26/98	51	7.55	7.377	8.6	6.53	0.36	0.6	7.084	7.23	8.18	8.462
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/94-10/26/98	51	0.028	0.042	0.295	0.003	0.003	0.056	0.003	0.007	0.059	0.082
31615 FECAL COLIFORM,MPN EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	51	78.	1151.843	16000.	9.	14265106.295	3776.918	10.8	20.	230.	1518.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	51	1.892	2.025	4.204	0.954	0.662	0.814	1.014	1.301	2.362	3.164
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	105.997								

** - Less 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: RICH0034

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400 PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	51	17	0.33	32	8	0.25	5	3	0.60	14	6	0.43			

& - 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: RICH0033

NPS Station ID: RICH0033 LAT/LON: 37.403059/ -77.391948 Agency: CHESBAY Date Created: 08/24/84
Location: BUOY 157 JRWQMP STA.8 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): TF5.3
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 10.120 Distance from RF1: 19.60 On/Off RF1: ON
RF3 Index: 02080207005603.14 RF3 Mile Point: 4.30 Distance from RF3: 0.32 On/Off RF3:
Description:

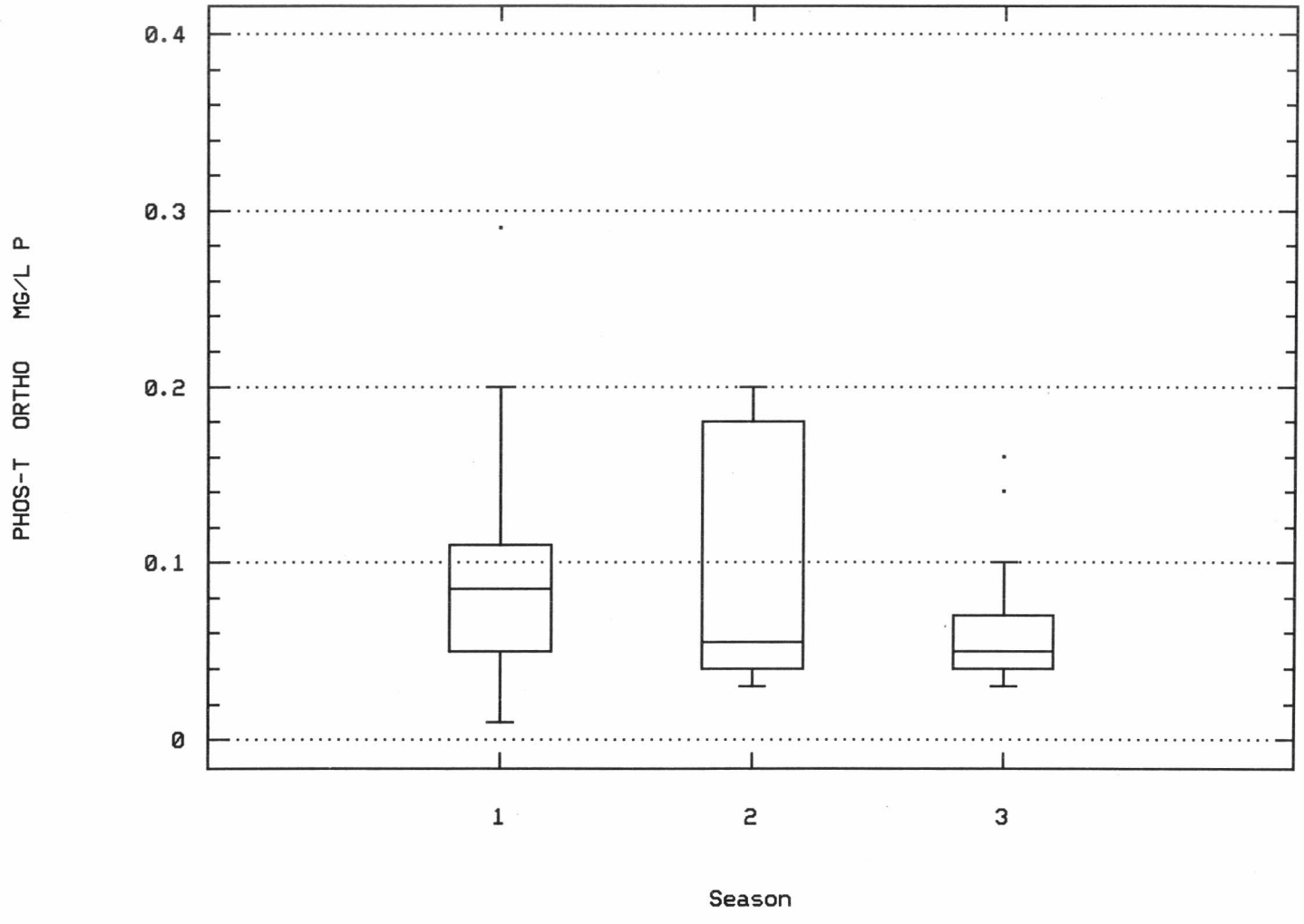
Parameter Inventory for Station: RICH0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station: RICH0032 Parameter Code: 70507

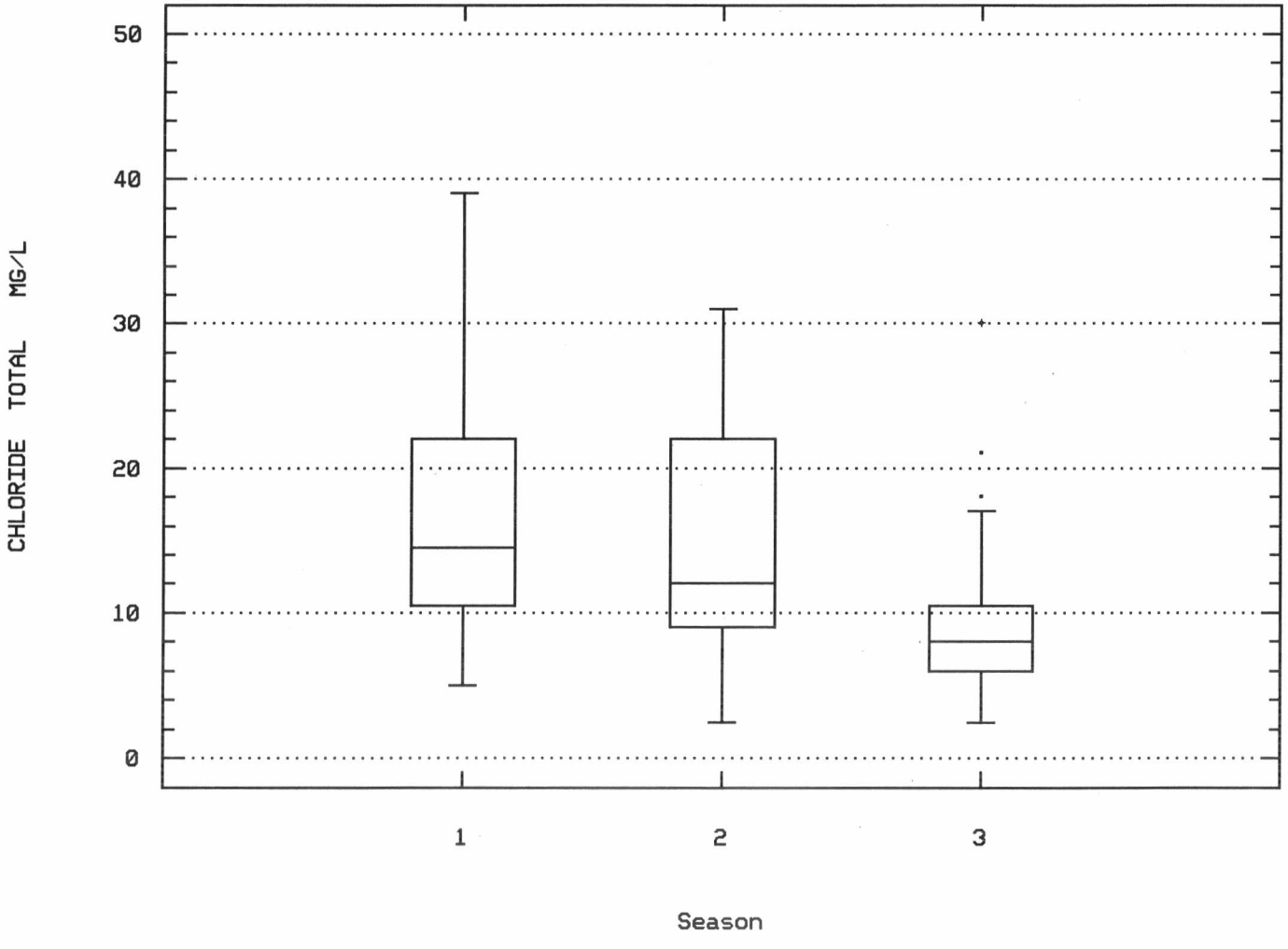
PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



BUOY 157

Station: RICH0032 Parameter Code: 00940

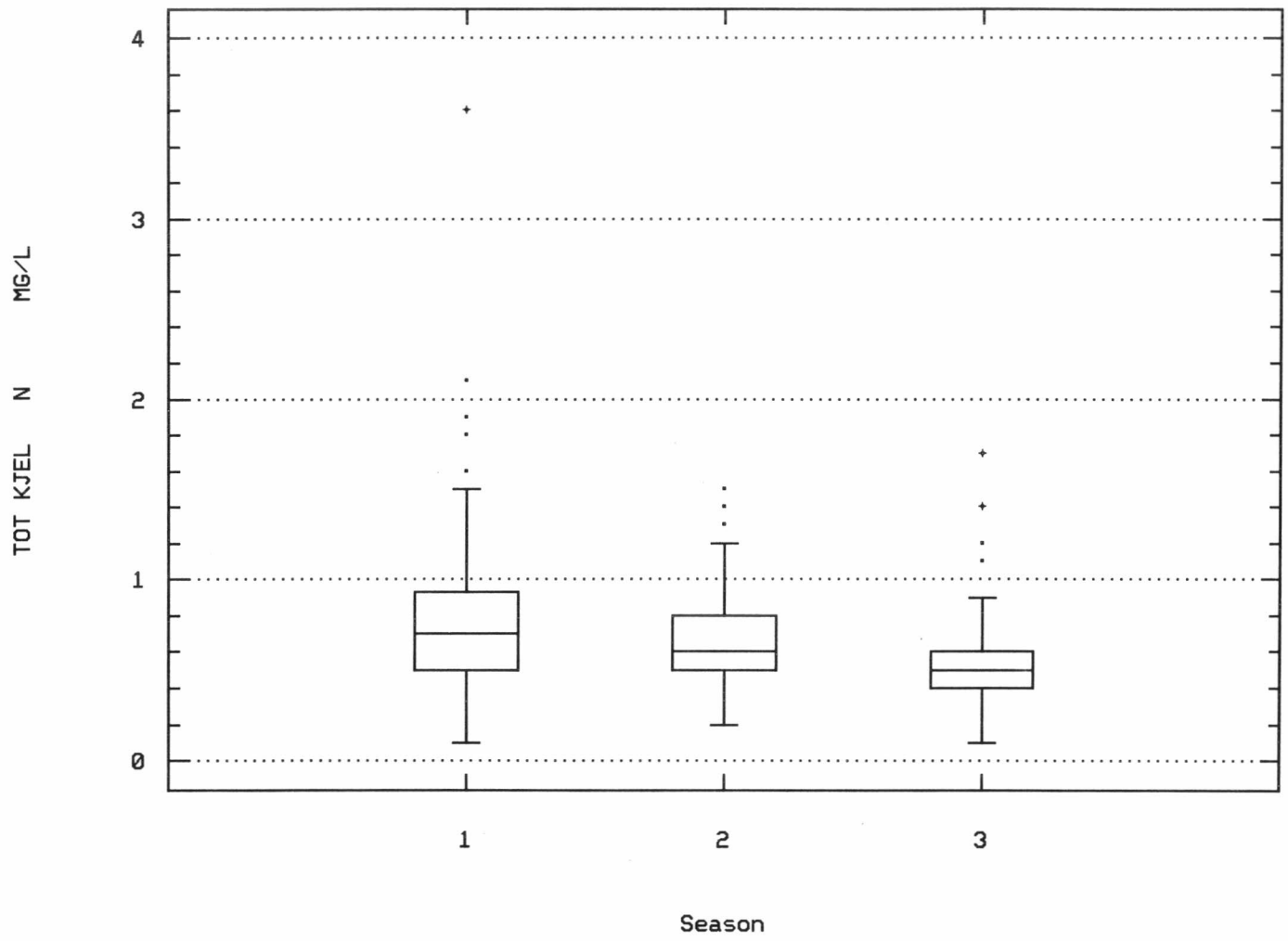
CHLORIDE,TOTAL IN WATER



BUOY 157

Station: RICH0032 Parameter Code: 00625

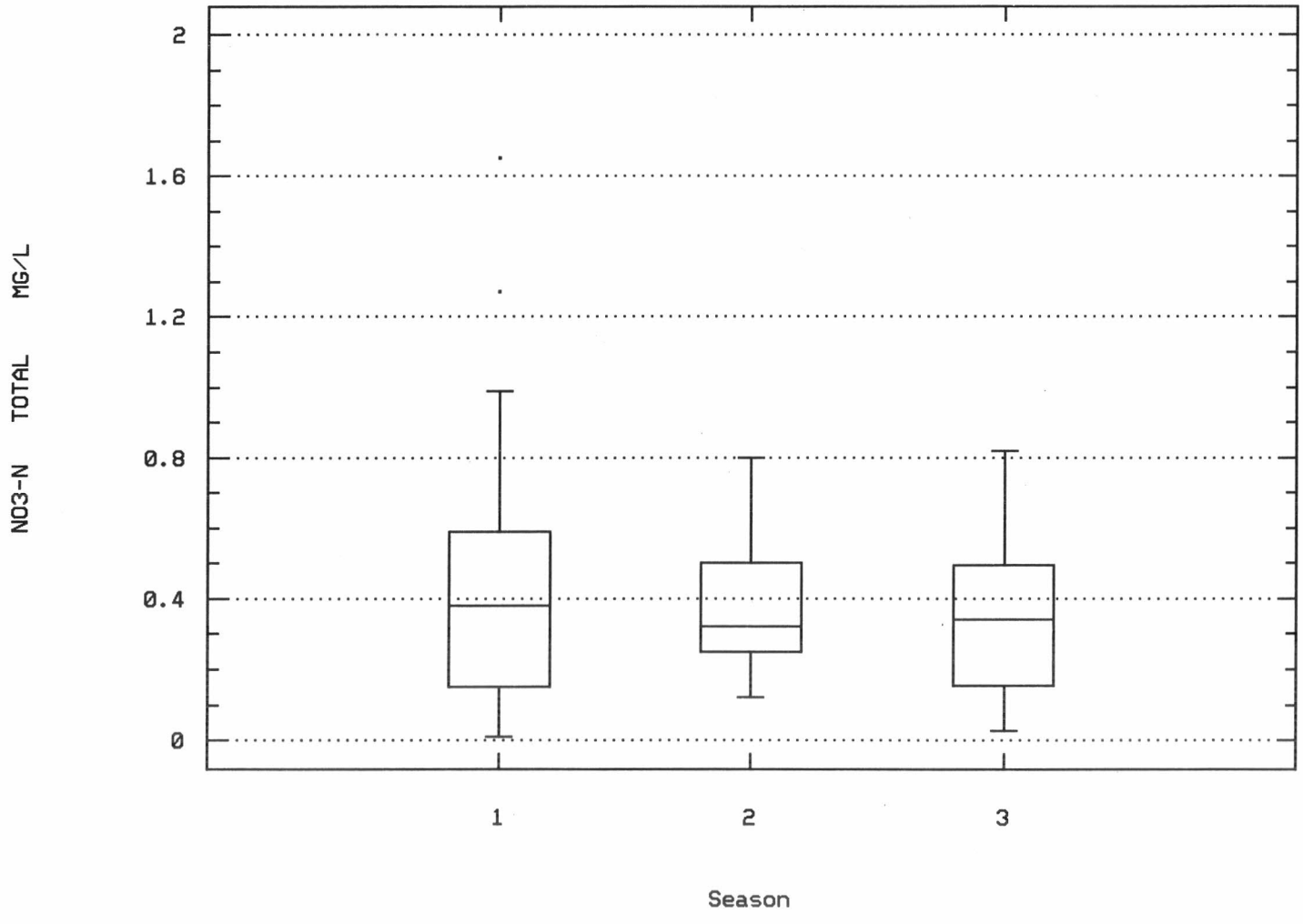
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



BUOY 157

Station: RICH0032 Parameter Code: 00620

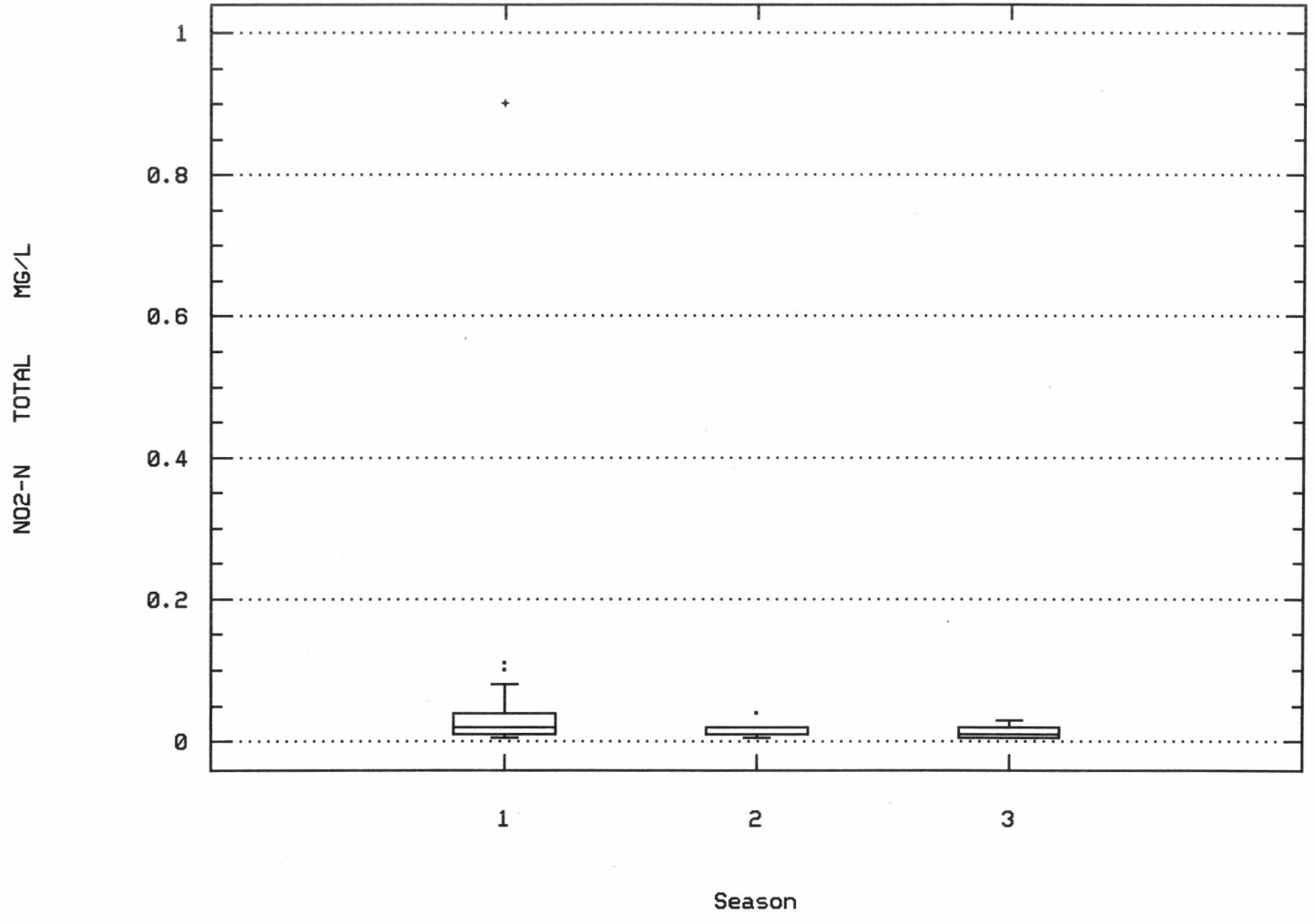
NITRATE NITROGEN, TOTAL (MG/L AS N)



BUOY 157

Station: RICH0032 Parameter Code: 00615

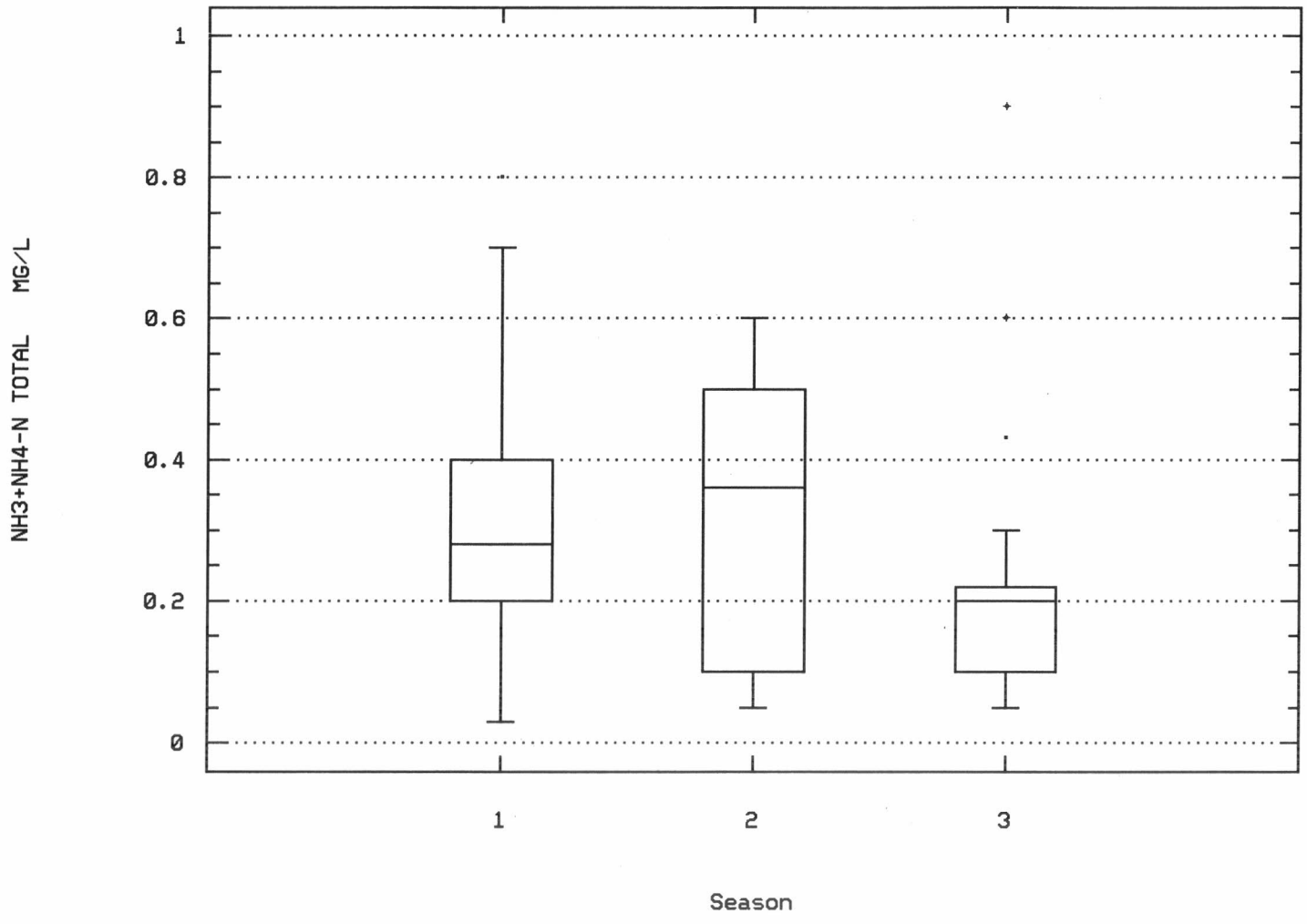
NITRITE NITROGEN, TOTAL (MG/L AS N)



BUOY 157

Station: RICH0032 Parameter Code: 00610

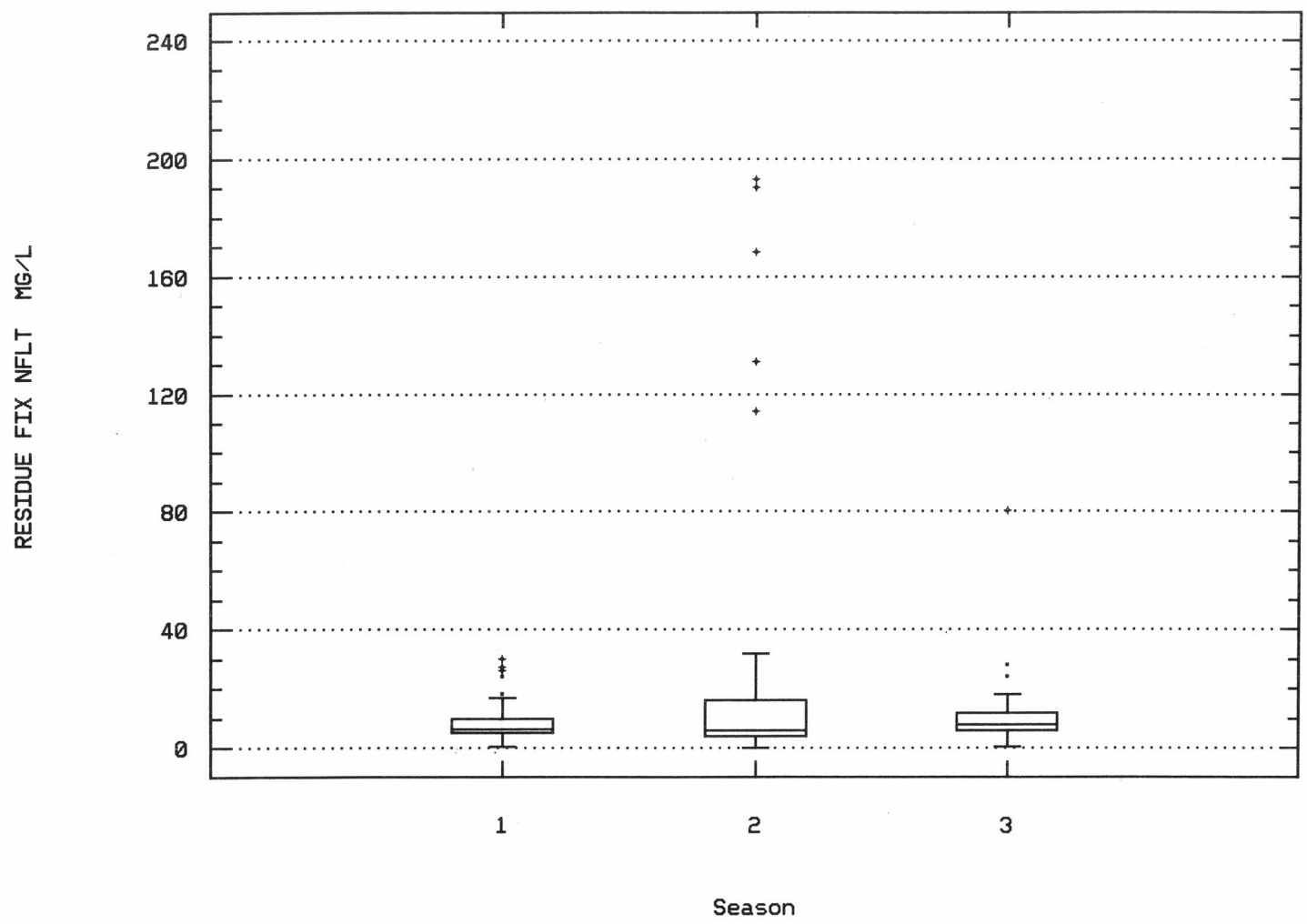
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



BUOY 157

Station: RICH0032 Parameter Code: 00540

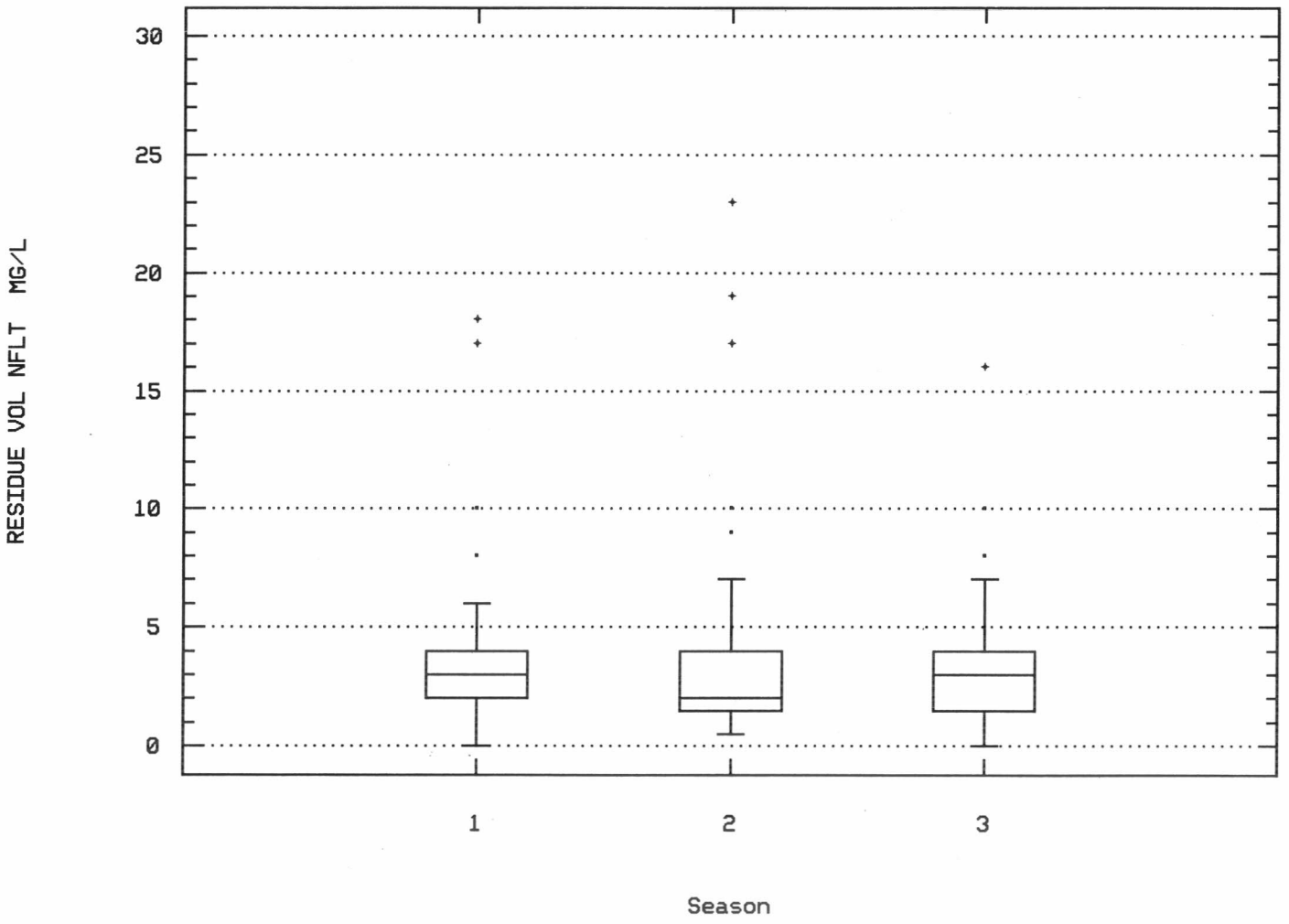
RESIDUE, FIXED NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00535

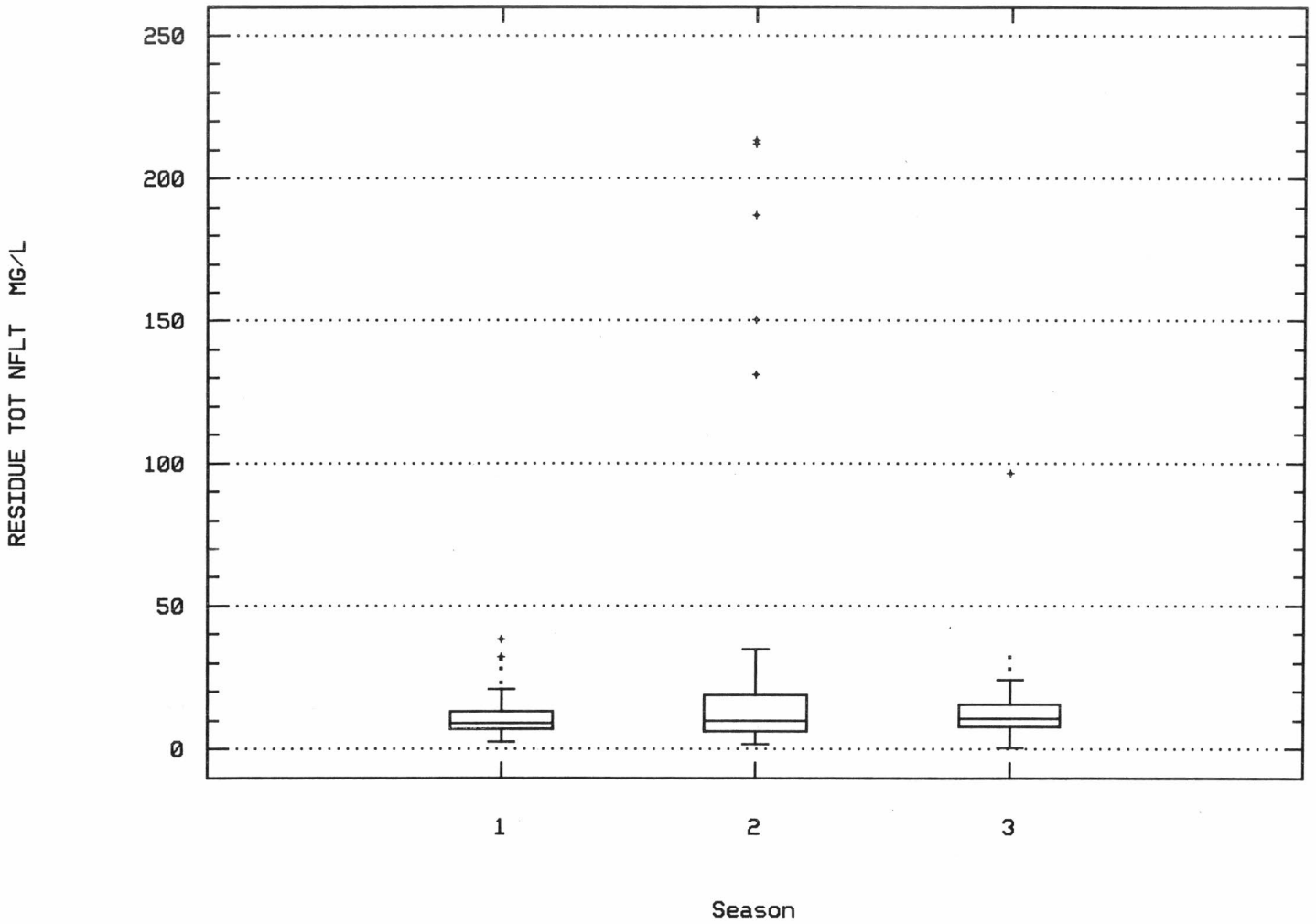
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00530

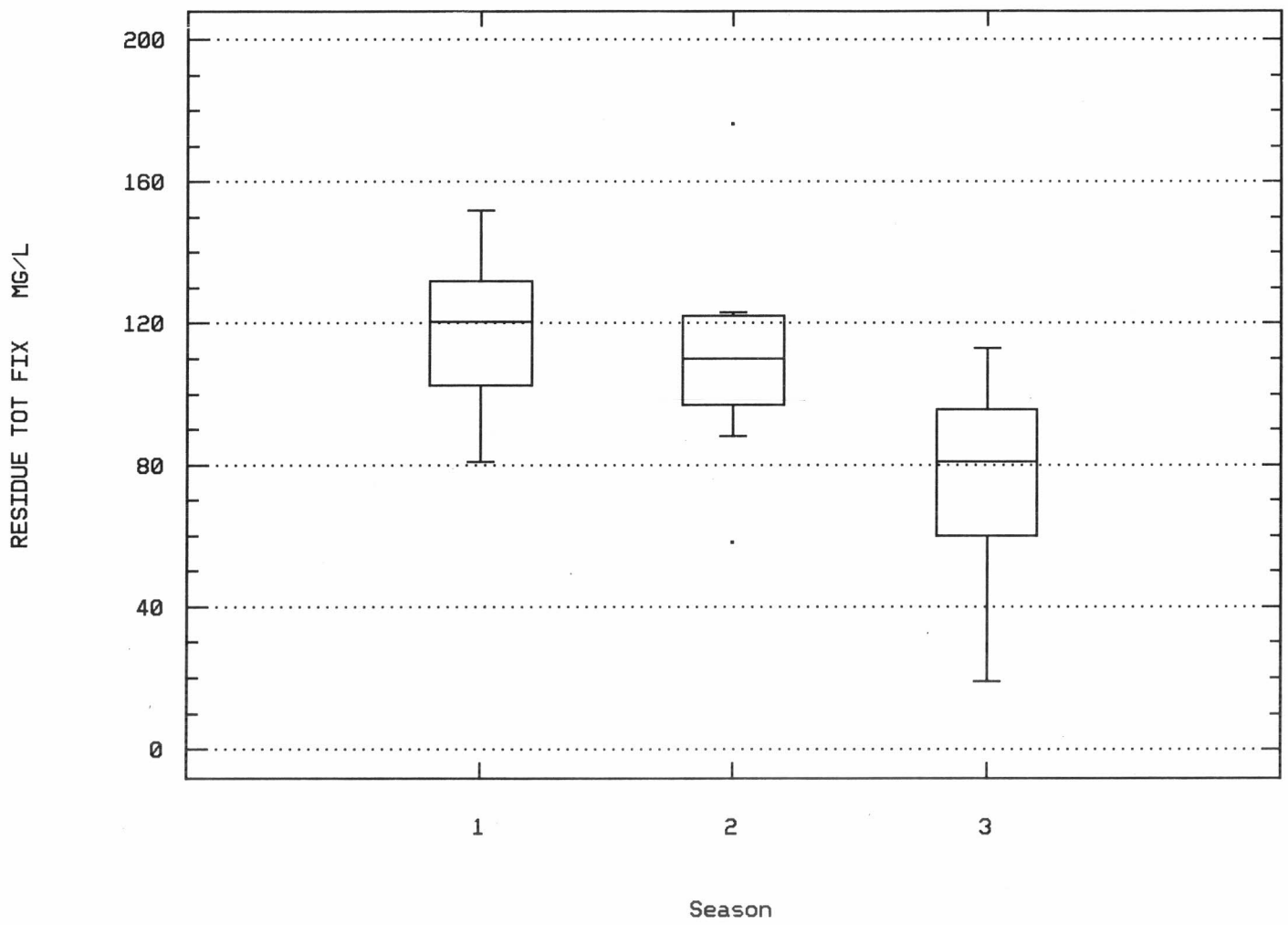
RESIDUE, TOTAL NONFILTRABLE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00510

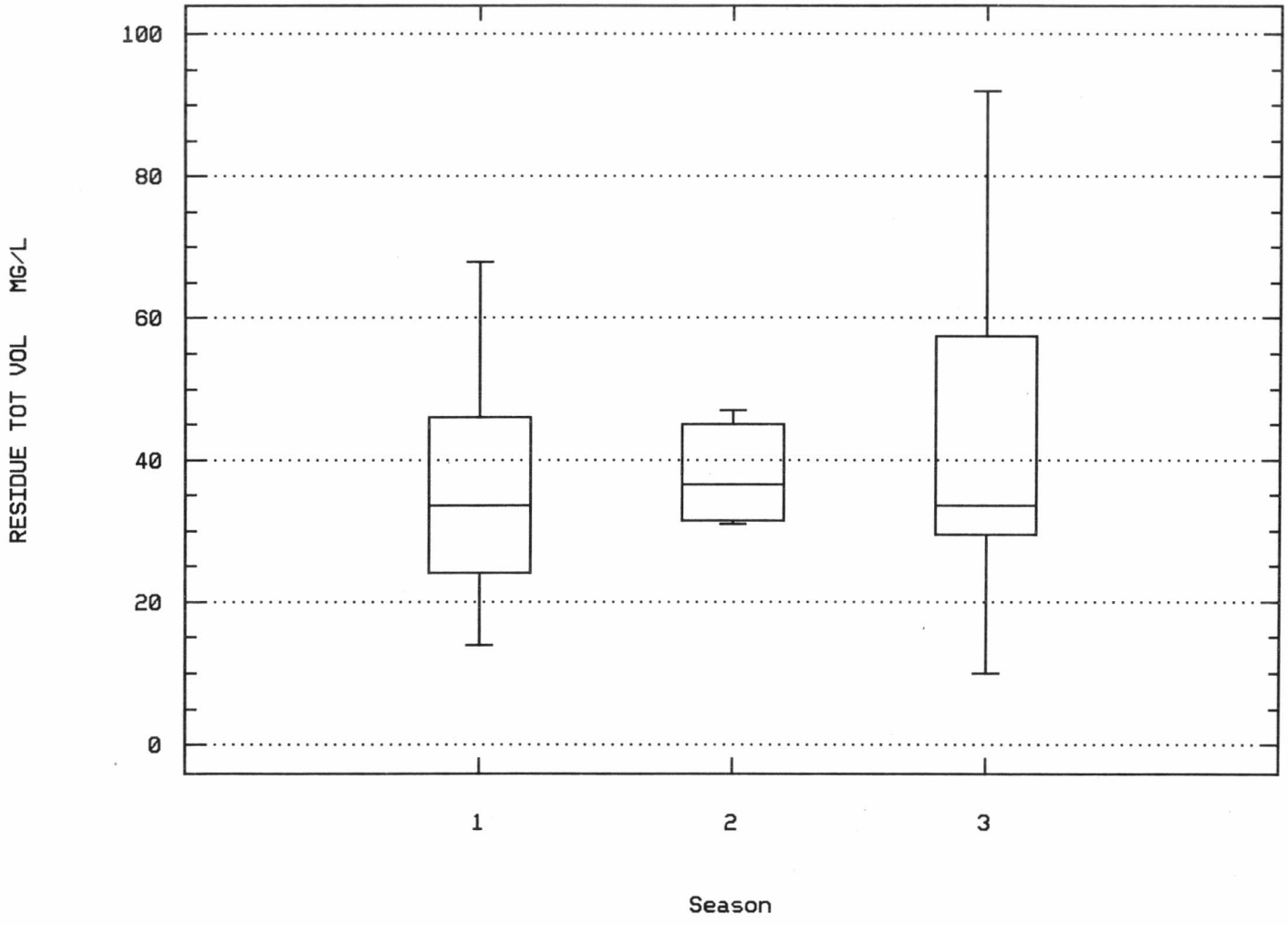
RESIDUE, TOTAL FIXED (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00505

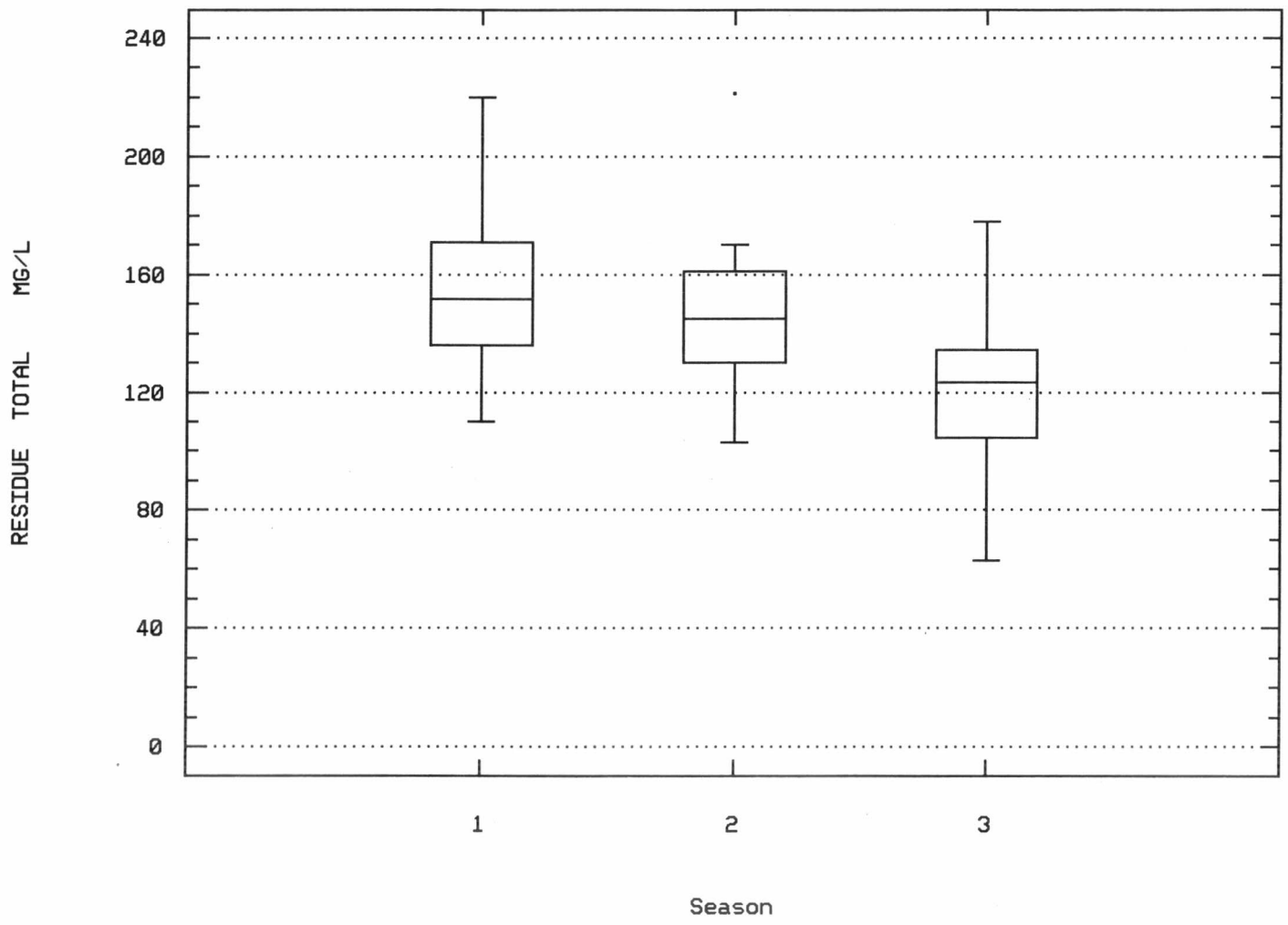
RESIDUE, TOTAL VOLATILE (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00500

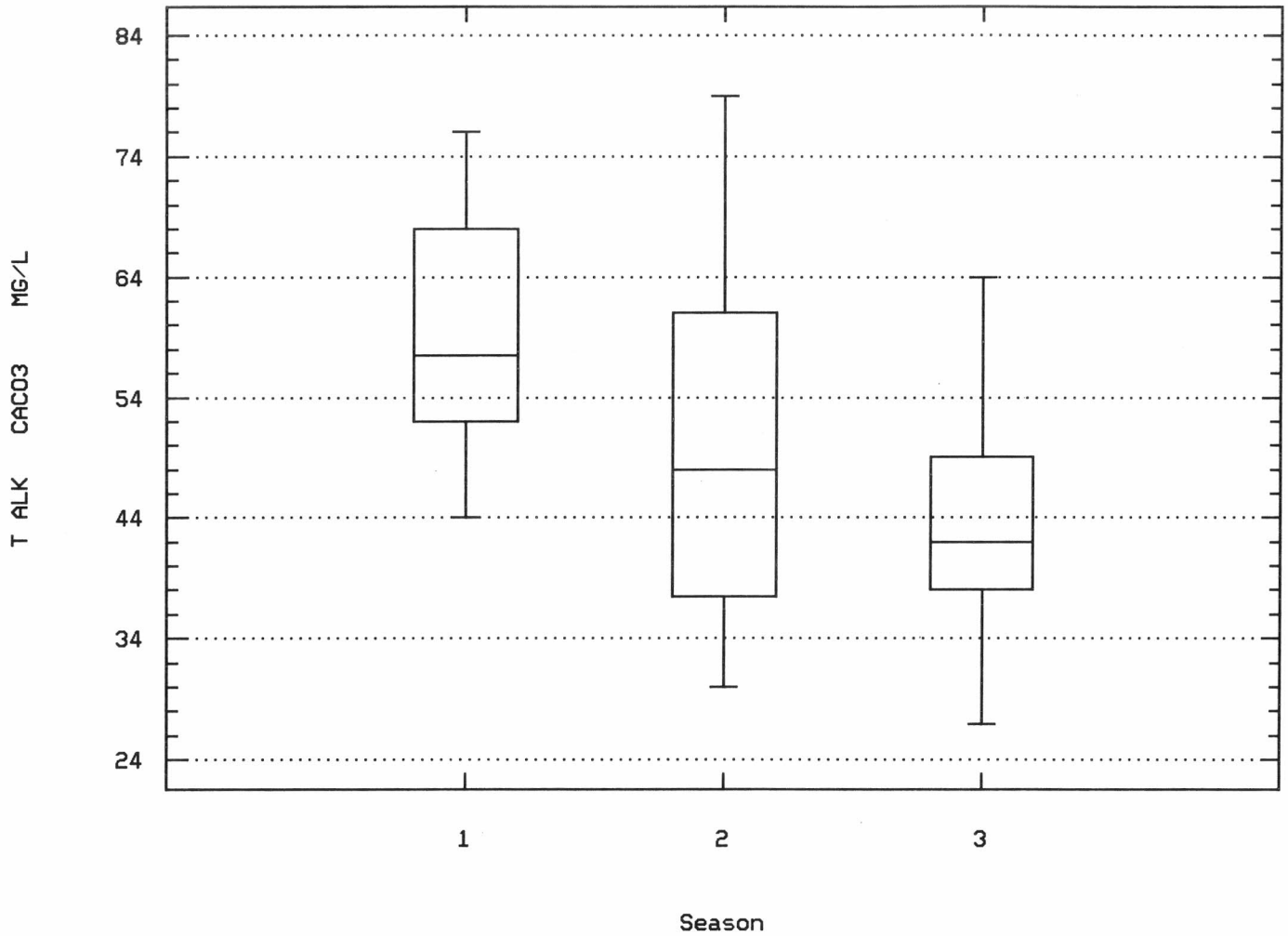
RESIDUE, TOTAL (MG/L)



BUOY 157

Station: RICH0032 Parameter Code: 00410

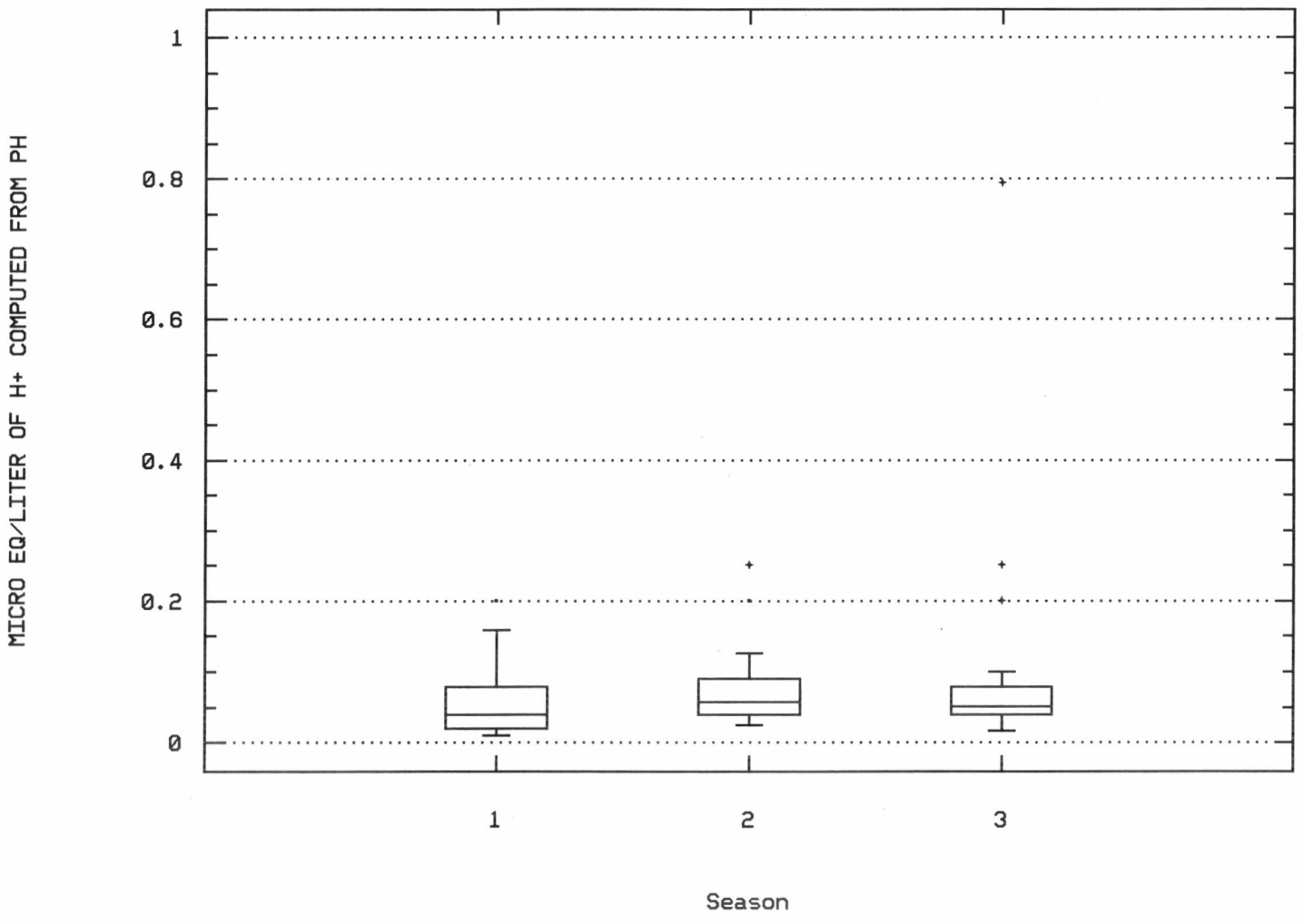
ALKALINITY, TOTAL (MG/L AS CACO3)



BUOY 157

Station: RICH0032 Parameter Code: 00403

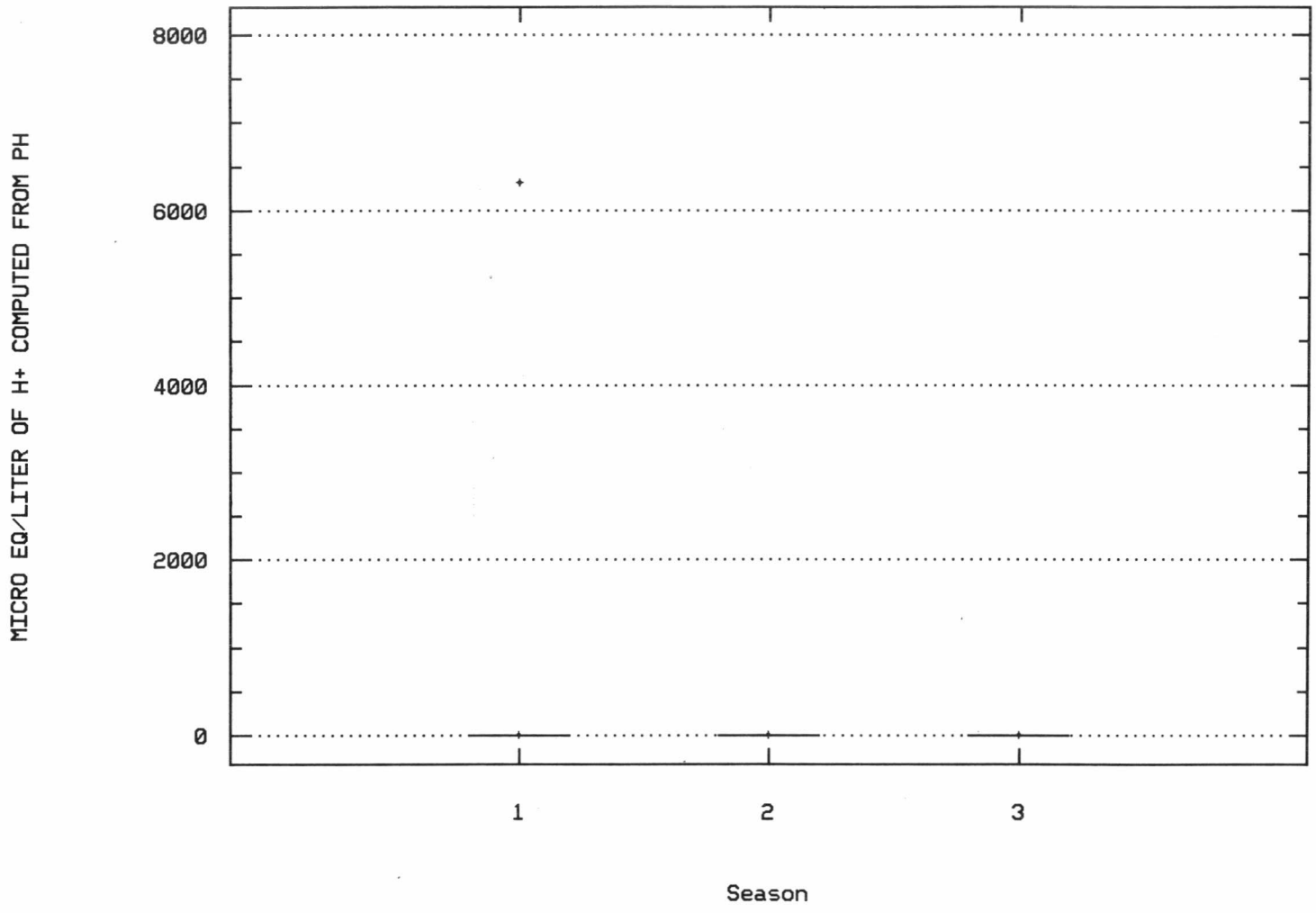
MICRO EQ/LITER OF H+ COMPUTED FROM PH



BUOY 157

Station: RICH0032 Parameter Code: 00400

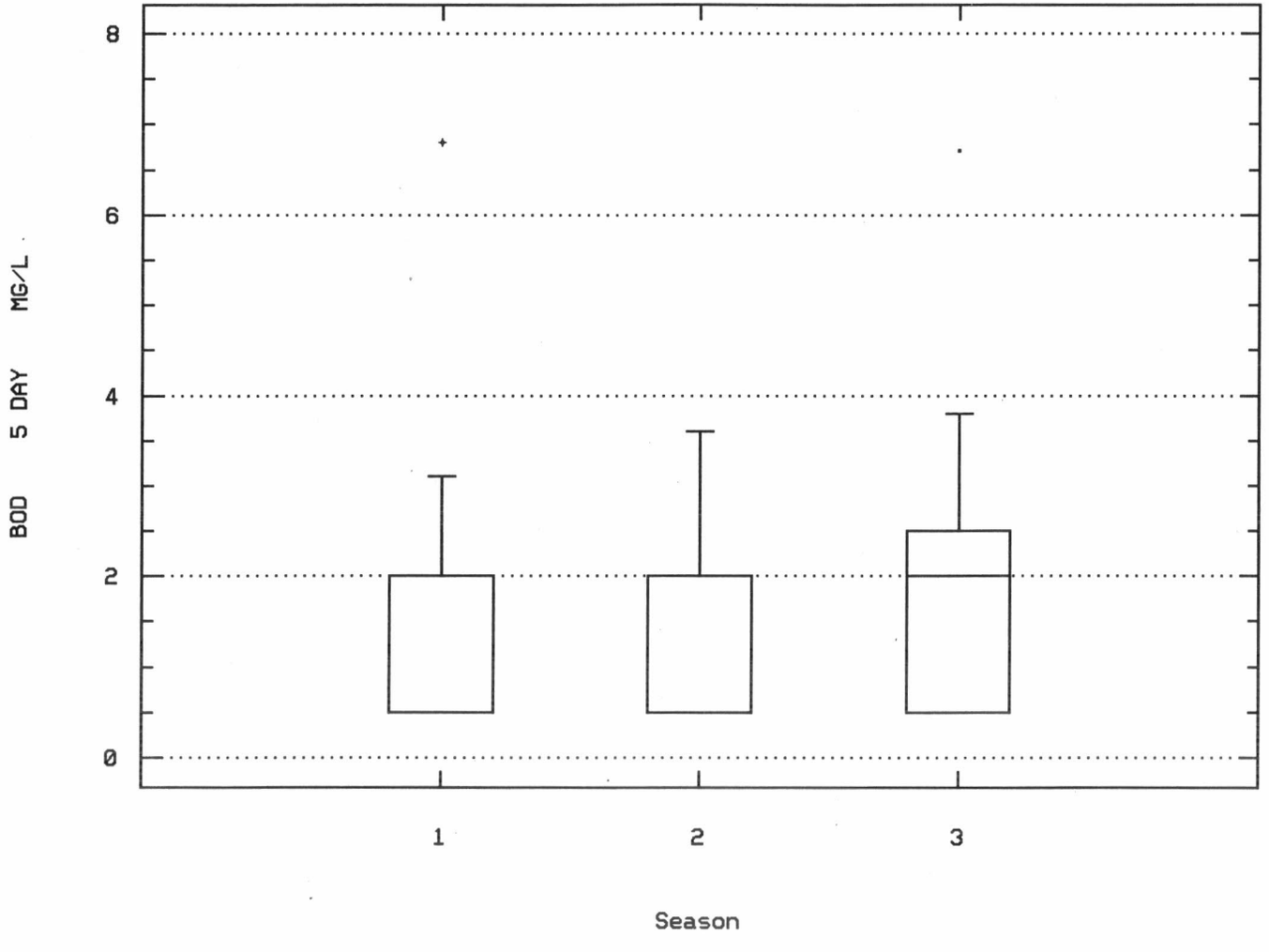
MICRO EQ/LITER OF H+ COMPUTED FROM PH



BUOY 157

Station: RICH0032 Parameter Code: 00310

BOD, 5 DAY, 20 DEG C



BUOY 157

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403p CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	29	7.3	7.029	7.8	6.1	0.193	0.439	6.7	7.1	7.45	7.7
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	29	0.05	0.094	0.794	0.016	0.021	0.146	0.02	0.036	0.079	0.2
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	29	42.	42.586	64.	27.	88.037	9.383	31.	35.5	50.	56.
00500p RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	20	123.5	118.9	178.	63.	855.568	29.25	72.6	103.75	135.25	161.8
00505p RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	20	33.5	42.75	92.	10.	388.303	19.705	25.	29.25	58.25	69.5
00510p RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	20	81.	76.15	113.	19.	610.029	24.699	35.7	59.	96.75	104.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	72	10.5	13.021	96.	0.5	130.792	11.436	6.	8.	15.75	19.7
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	72	2.	3.125	16.	0.	8.562	2.926	1.	1.5	4.	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	72	8.	9.896	80.	0.5	96.133	9.805	3.3	6.	11.75	16.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	70	0.155	0.209	0.8	0.004	0.033	0.183	0.026	0.08	0.28	0.49
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/69-06/01/95	29	0.2	0.219	0.9	0.05	0.031	0.177	0.05	0.1	0.255	0.43
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	70	0.005	0.013	0.11	0.002	0.	0.016	0.003	0.005	0.014	0.03
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	28	0.01	0.012	0.03	0.005	0.	0.007	0.005	0.005	0.02	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	70	0.27	0.253	0.97	0.002	0.025	0.158	0.05	0.138	0.333	0.419
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	28	0.34	0.336	0.82	0.025	0.041	0.201	0.059	0.153	0.498	0.584
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	78	0.5	0.541	1.699	0.1	0.08	0.282	0.3	0.4	0.6	0.91
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-12/15/98	12	0.25	0.245	0.4	0.04	0.012	0.109	0.058	0.2	0.3	0.4
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	58	0.105	0.121	0.25	0.04	0.003	0.059	0.059	0.07	0.17	0.211
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	54	0.06	0.078	0.24	0.02	0.003	0.051	0.03	0.04	0.103	0.165
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	75	0.04	0.06	0.21	0.002	0.002	0.048	0.019	0.03	0.08	0.14
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	79	3.9	4.044	10.	0.5	2.907	1.705	2.1	2.9	5.	6.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	22	58.5	55.591	80.	0.	260.348	16.135	37.7	49.25	66.25	70.8
00940p CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	32	8.	9.484	30.	2.5	32.153	5.67	4.	6.	10.75	17.7
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	19	14.	14.895	22.	10.	16.322	4.04	11.	11.	18.	22.
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	46	7.5	6.678	9.8	2.5	3.815	1.953	3.11	5.6	7.9	8.93
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	32	100.	3248.125	80000.	4.	199030434.435	14107.815	16.8	50.	482.5	4360.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	32	2.	2.262	4.903	0.602	0.832	0.912	1.22	1.699	2.683	3.638
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	182.615								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	18##	0.05	0.081	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.155
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-06/01/95	21	0.05	0.063	0.16	0.03	0.001	0.036	0.03	0.04	0.075	0.132

** - Less 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: 10/15 to 3/15 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	20	10.5	10.2	13.	6.2	4.056	2.014	6.98	8.725	12.	12.67
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	31##	1.	1.145	3.6	0.5	0.534	0.731	0.5	0.5	1.4	2.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	34	11.5	12.412	27.	2.5	40.477	6.362	5.	7.75	17.25	22.
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	84	7.435	7.45	8.18	6.6	0.109	0.33	7.045	7.2	7.708	7.905
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	84	7.435	7.33	8.18	6.6	0.124	0.352	7.045	7.2	7.708	7.905
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	84	0.037	0.047	0.251	0.007	0.001	0.038	0.012	0.02	0.063	0.09
00403p PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	24	7.25	7.196	7.6	6.6	0.064	0.253	6.8	7.025	7.4	7.5
00403p CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	24	7.247	7.118	7.6	6.6	0.07	0.265	6.8	7.025	7.4	7.5
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	24	0.057	0.076	0.251	0.025	0.003	0.054	0.032	0.04	0.095	0.163
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	24	48.	49.708	79.	30.	212.042	14.562	32.5	36.75	61.	73.5
00500p RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	8	145.	149.5	221.	103.	1253.714	35.408	**	**	**	**
00505p RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	8	36.5	38.	47.	31.	46.	6.782	**	**	**	**
00510p RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	8	110.	111.5	176.	58.	1119.143	33.454	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	59	10.	25.263	213.	1.	2367.71	48.659	4.	6.	19.	35.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	59	2.	4.042	23.	0.5	26.158	5.114	1.	1.5	4.	10.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	59	6.	21.297	193.	0.	1923.889	43.862	1.5	4.	16.	32.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	70	0.18	0.286	1.1	0.01	0.072	0.268	0.035	0.073	0.435	0.79
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/69-06/01/95	10	0.36	0.324	0.6	0.05	0.042	0.205	0.052	0.093	0.5	0.59
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	70	0.005	0.015	0.17	0.002	0.001	0.025	0.003	0.005	0.01	0.039
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	10	0.01	0.017	0.04	0.005	0.	0.013	0.005	0.009	0.025	0.04
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/12/84-12/15/98	68	0.33	0.33	0.77	0.02	0.016	0.126	0.139	0.25	0.418	0.48
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/69-06/01/95	10	0.32	0.39	0.8	0.12	0.048	0.219	0.125	0.23	0.545	0.788
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/69-06/01/95	57	0.6	0.698	1.5	0.2	0.091	0.301	0.3	0.5	0.85	1.2
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-12/15/98	13	0.4	0.408	0.8	0.2	0.021	0.144	0.24	0.3	0.45	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	53	0.16	0.429	12.	0.05	2.64	1.625	0.074	0.11	0.32	0.396
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/12/84-01/29/96	56	0.09	0.145	0.78	0.02	0.022	0.15	0.03	0.04	0.218	0.353
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	73	0.06	0.109	0.42	0.005	0.012	0.111	0.021	0.03	0.18	0.278
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	69	4.4	4.799	14.7	1.5	4.211	2.052	2.9	3.45	5.65	7.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	06/18/92-12/15/98	29	60.	63.621	126.	28.	489.458	22.124	41.	46.5	75.	94.
00940p CHLORIDE,TOTAL IN WATER MG/L	05/05/70-12/15/98	27	12.	14.741	31.	2.5	68.103	8.252	4.5	9.	22.	28.
00945 SULFATE, TOTAL (MG/L AS SO4)	07/27/81-12/15/98	23	18.	24.739	58.	8.	228.565	15.118	9.	13.	35.	52.2
00955 SILICA, DISSOLVED (MG/L AS SIO2)	02/13/90-12/15/98	43	7.5	7.193	10.4	3.3	3.126	1.768	4.4	6.4	8.7	9.38
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	23	200.	2374.304	24000.	9.	29418095.221	5423.845	44.	50.	1400.	9300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	23	2.301	2.514	4.38	0.954	0.824	0.908	1.641	1.699	3.146	3.968
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	326.328								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	5	0.1	0.11	0.2	0.05	0.003	0.055	**	**	**	**
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-06/01/95	6	0.055	0.093	0.2	0.03	0.006	0.076	**	**	**	**

** - Less 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: 3/16 to 6/30 - Station RICH0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	388	20.	19.377	30.3	6.9	38.856	6.233	10.2	14.	24.4	27.5
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	29	7.9	9.469	39.9	2.2	45.335	6.733	5.8	6.7	9.95	11.7
00078 TRANSPARENCY, SECCHI DISC (METERS)	06/28/83-12/15/98	68	1.	1.168	10.15	0.3	1.322	1.15	0.59	0.8	1.3	1.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	367	162.	166.613	320.	90.	1817.555	42.633	110.	138.	190.	223.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	38	149.	159.289	243.	102.	1438.806	37.932	115.9	130.75	193.	219.3
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-11/18/98	328	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/12/84-12/15/98	360	8.5	8.766	12.9	4.8	3.268	1.808	6.4	7.425	10.3	11.1
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/09/87	45	7.8	7.722	11.8	4.4	2.791	1.671	5.62	6.85	8.7	9.94
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	43	1.	1.572	6.7	0.5	1.348	1.161	0.5	1.	2.	2.96
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	29	10.	9.155	17.	2.5	14.716	3.836	2.5	6.	12.	15.
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	111	7.49	7.565	9.22	6.3	0.23	0.48	7.062	7.28	7.8	8.172
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	111	7.49	7.357	9.22	6.3	0.274	0.523	7.062	7.28	7.8	8.172
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	111	0.032	0.044	0.501	0.001	0.003	0.054	0.007	0.016	0.052	0.087
00403p PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	29	7.3	7.241	7.8	6.1	0.146	0.382	6.7	7.1	7.45	7.7

** - 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

Station Inventory for Station: RICH0047

NPS Station ID: RICH0047 LAT/LON: 37.420948/ -77.423449 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-03
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): RICH_FD_03
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS INSIDE THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLEFIELD PARK. THE SITE IS LOCATED 70 METERS BELOW THE VISITOR FOOT BRIDGE AND BELOW THE INITIAL LEACHATE STAIN. THE STUDY MEASURED POSSIBLE CONTAMINATION OF AN UNNAMED TRIBUTARY TO THE JAMES RIVER. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBSIDENCE IN THE LANDFILL'S EARTHEN CAP AND AN ORANGE-REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/89-06/16/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/16/89-06/16/89	1	4100.	4100.	4100.	4100.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/16/89-06/16/89	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/16/89-06/16/89	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/16/89-06/16/89	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/16/89-06/16/89	1	5.012	5.012	5.012	5.012	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/06/89-12/06/89	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	12/06/89-12/06/89	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/89-07/24/91	2	135.	135.	210.	60.	11250.	106.066	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	12/06/89-12/06/89	1	210.	210.	210.	210.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/89-12/06/89	1	540.	540.	540.	540.	0.	0.	**	**	**	**
01022	BORON, TOTAL (UG/L AS B)	12/06/89-12/06/89	1	540.	540.	540.	540.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	12/06/89-12/06/89	1	21400.	21400.	21400.	21400.	0.	0.	**	**	**	**

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Parameter Inventory for Station: RICH0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01046 IRON, DISSOLVED (UG/L AS FE)		12/06/89-07/24/91	2	15040.	15040.	21600.	8480.	86067200.	9277.241	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)		12/06/89-07/24/91	2##	25.	25.	25.	25.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		12/06/89-12/06/89	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)		12/06/89-12/06/89	1	1680.	1680.	1680.	1680.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)		12/06/89-07/24/91	2	865.	865.	1690.	40.	1361250.	1166.726	**	**	**	**
01060 MOLYBDENUM, DISSOLVED (UG/L AS MO)		12/06/89-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01062 MOLYBDENUM, TOTAL (UG/L AS MO)		12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		12/06/89-07/24/91	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)		12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080 STRONTIUM, DISSOLVED (UG/L AS SR)		12/06/89-12/06/89	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01082 STRONTIUM, TOTAL (UG/L AS SR)		12/06/89-12/06/89	1	110.	110.	110.	110.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)		12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)		12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)		12/06/89-07/24/91	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		12/06/89-12/06/89	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01105 ALUMINUM, TOTAL (UG/L AS AL)		12/06/89-12/06/89	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)		12/06/89-07/24/91	2##	6575.	6575.	13100.	50.	85151250.	9227.743	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)		12/06/89-12/06/89	1	6190.	6190.	6190.	6190.	0.	0.	**	**	**	**
01142 SILICON, TOTAL (UG/L AS SI)		12/06/89-12/06/89	1	6120.	6120.	6120.	6120.	0.	0.	**	**	**	**
01145 SELENIUM, DISSOLVED (UG/L AS SE)		12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)		12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01150 TITANIUM, DISSOLVED (UG/L AS TI)		12/06/89-12/06/89	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01152 TITANIUM, TOTAL (UG/L AS TI)		12/06/89-12/06/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
50119 ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	25200.	25200.	36700.	13700.	264500000.	16263.456	**	**	**	**
50120 ARSENIC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
50122 BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	187.	187.	266.	108.	12482.	111.723	**	**	**	**
50125 CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	1.15	1.15	1.2	1.1	0.005	0.071	**	**	**	**
50127 CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	13.1	13.1	25.	1.2	283.22	16.829	**	**	**	**
50128 COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	13.	13.	16.	10.	18.	4.243	**	**	**	**
50129 IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	22200.	22200.	26800.	17600.	42320000.	6505.382	**	**	**	**
50132 MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	315.	315.	330.	300.	450.	21.213	**	**	**	**
50133 MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2##	2.175	2.175	4.3	0.05	9.031	3.005	**	**	**	**
50135 NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	8.05	8.05	9.1	7.	2.205	1.485	**	**	**	**
50136 LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	15.5	15.5	28.	3.	312.5	17.678	**	**	**	**
50138 SELENIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
50140 STRONTIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	1	23.	23.	23.	23.	0.	0.	**	**	**	**
50141 TITANIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	1	800.	800.	800.	800.	0.	0.	**	**	**	**
50142 VANADIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-12/06/89	1	170.	170.	170.	170.	0.	0.	**	**	**	**
50143 ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	12/06/89-07/24/91	2	63.5	63.5	99.	28.	2520.5	50.205	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)		12/06/89-07/24/91	2##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)		12/06/89-12/06/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		12/06/89-07/24/91	2##	0.025	0.025	0.025	0.025	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: RICH0047

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	1	1.00							1	1	1.00			
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			
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						
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						
01005 BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00	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	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: RICH0047

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01027 CADMIUM, TOTAL	Fresh Acute	3.9	0&	0	0.00												
	Drinking Water	5.	0&	0	0.00												
01030 CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	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.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1300.	2	0	0.00	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.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	15.	0&	0	0.00												
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00				1	0	0.00						
	Drinking Water	15.	0&	0	0.00												
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	100.	2	0	0.00	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						
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	5000.	2	0	0.00	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						
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	1	0.50	1	1	1.00	1	0	0.00						
	Drinking Water	2.	2	1	0.50	1	1	1.00	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

Station Inventory for Station: RICH0048

NPS Station ID: RICH0048 LAT/LON: 37.420976/ -77.421088 Agency: 11NPSWRD Date Created: 07/17/99
Location: UNNAMED TRIBUTARY OF JAMES RIVER
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): RICH_NPS_2
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT AN UNNAMED TRIBUTARY OF JAMES RIVER NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY'S GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0048

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924 MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	09/02/97-09/02/97	1	247.5	247.5	247.5	247.5	0.	0.	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01008 BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	1	16.61	16.61	16.61	16.61	0.	0.	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
01018 IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	1	6260.8	6260.8	6260.8	6260.8	0.	0.	**	**	**	**
01023 BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	4.54	4.54	4.54	4.54	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	1	2.13	2.13	2.13	2.13	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	1	7.73	7.73	7.73	7.73	0.	0.	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	1	46.48	46.48	46.48	46.48	0.	0.	**	**	**	**
01063 MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1##	1.29	1.29	1.29	1.29	0.	0.	**	**	**	**
01083 STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	1##	1.02	1.02	1.02	1.02	0.	0.	**	**	**	**
01088 VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	1	5.82	5.82	5.82	5.82	0.	0.	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	1	1611.2	1611.2	1611.2	1611.2	0.	0.	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	1##	0.045	0.045	0.045	0.045	0.	0.	**	**	**	**
01157 ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	1	8.88	8.88	8.88	8.88	0.	0.	**	**	**	**
34203 ACENAPHTHYLENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	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: RICH0048

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	6.	6.	6.	6.	0.	0.	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	20.8	20.8	20.8	20.8	0.	0.	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	17.6	17.6	17.6	17.6	0.	0.	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	37.	37.	37.	37.	0.	0.	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.93	0.93	0.93	0.93	0.	0.	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	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: RICH0048

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	09/02/97-09/02/97	1	0.42	0.42	0.42	0.42	0.	0.	**	**	**	**
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	09/02/97-09/02/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.045	0.045	0.045	0.045	0.	0.	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.44	0.44	0.44	0.44	0.	0.	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	16.2	16.2	16.2	16.2	0.	0.	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	19.7	19.7	19.7	19.7	0.	0.	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	13.	13.	13.	13.	0.	0.	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	09/02/97-09/02/97	1	254.	254.	254.	254.	0.	0.	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.79	0.79	0.79	0.79	0.	0.	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	1	258.3	258.3	258.3	258.3	0.	0.	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.67	0.67	0.67	0.67	0.	0.	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	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

Parameter Inventory for Station: RICH0048

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.34	0.34	0.34	0.34	0.	0.	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN* SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	1.57	1.57	1.57	1.57	0.	0.	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	1	70.5	70.5	70.5	70.5	0.	0.	**	**	**	**

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

Station Inventory for Station: RICH0049

NPS Station ID: RICH0049 LAT/LON: 37.420431/ -77.421581 Agency: 11NPSWRD Date Created: 07/03/99
Location: UNNAMED STREAM DOWNSTREAM OF ALL SEEPS FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_DAA_SS-03
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF; VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. STATION SS-03 WAS AT AN UNNAMED STREAM NORTH OF FORT DARLING SANITARY LANDFILL DOWNSTREAM OF ALL SEEPS AND APPROXIMATELY 200 YARDS WEST OF THE DISCHARGE POINT TO THE JAMES RIVER INSIDE OF RICHMOND NATIONAL BATTLEFIELD PARK (RICH). THE STREAM WAS SAMPLED AS PART OF A SITE INVESTIGATION OF FORT DARLING LANDFILL BY DRAPER ADEN ASSOCIATES FOR CHESTERFIELD COUNTY. SAMPLES WERE COLLECTED AT A LEACHATE SEEP AND THREE SITES ALONG AN UNNAMED CREEK AT THE NORTHERN BORDER OF THE LANDFILL. THE STREAM AT STATION SS-03 WAS ORANGE IN COLOR WITH A SURFACE FILM. DATA ARE FROM MISCELLANEOUS LABORATORY SHEETS AND A MEMORANDUM FROM DRAPER ADEN ASSOCIATES. FOR MORE INFORMATION CONTACT RICH'S CHIEF OF RESOURCES AT 3215 EAST BROAD STREET; RICHMOND VA 23223 (TEL. 804-226-1981). DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: RICH0049

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00997 ARSENIC, INORGANIC TOT (UG/L AS AS)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01007 BARIUM, TOTAL (UG/L AS BA)	05/03/96-05/03/96	1	167.	167.	167.	167.	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	05/03/96-05/03/96	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/03/96-05/03/96	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01059 THALLIUM, TOTAL (UG/L AS TL)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01077 SILVER, TOTAL (UG/L AS AG)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01087 VANADIUM, TOTAL (UG/L AS V)	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01097 ANTIMONY, TOTAL (UG/L AS SB)	05/03/96-05/03/96	1##	3.	3.	3.	3.	0.	0.	**	**	**	**
01102 TIN, TOTAL (UG/L AS SN)	05/03/96-05/03/96	1##	5000.	5000.	5000.	5000.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
32101 BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32102 CARBON TETRACHLORIDE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32103 1,2-DICHLOROETHANE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	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: RICH0049

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
32104	BROMOFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34200	ACENAPHTHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34205	ACENAPHTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34210	ACROLEIN	TOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34215	ACRYLONITRILE	TOTWUG/L	05/03/96-05/03/96	1##	100.	100.	100.	100.	0.	0.	**	**	**	**
34220	ANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L		05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34301	CHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34311	CHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34320	CHRYSENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34371	ETHYLBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34376	FLUORANTHENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34408	ISOPHORONE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34413	METHYL BROMIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34418	METHYL CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34438	N-NITROSODIMETHYLAMINE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34447	NITROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34461	PHENANTHRENE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34469	PYRENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34591	2-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROBENZIDINE	TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL	TOTWUG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34668	DICHLORODIFUOROMETHANE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND	TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34696	NAPHTHALENE	TOTWUG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER	UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**

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34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
38462	FAMPHUR WATER, TOTUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
39080	PRONAMIDE IN WATER, TOTALUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1	11.	11.	11.	11.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39430	ISODRIN IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39460	CHLOROBENZILATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
45007	TOLUIDINE WH WAT UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
45622	DINITROBENZENE, M- , WATER, WHOLE UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
46313	PHORATE IN WHOLE WATER SAMPLE (UG/L)	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
61290	BENZENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
61291	TOLUENE, TOTAL WATER UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/03/96-05/03/96	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
73529	BENZENAMINE, 4-CHLORO- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73540	CARBMOTHACID,(1METHETH),S-(2,3DICL2PROP)ESTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73559	BENZíAòANTHRACENE, 7,12-DIMETHYL- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73570	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73571	METHANESULFONIC ACID, ETHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73576	1-PROPENE, 1,1,2,3,3,3-HEXACHLORO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73582	1,3-HBENZODIOXOLE, 5-(1-PROPENYL)- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73589	1,2-ETHDIAM,N,N-DI-N'-2-PYRID-N'-2-THNYMTHTOTWUG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
73591	BENZíJòACEANTHRYLENE, 1,2-DIHYDRO-3-METHYLTOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73595	METHANESULFONIC ACID, METHYL ESTER TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73599	1,4-NAPHTHALENEDIONE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73600	1-NAPHTHALENAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73605	BENZENAMINE, 4-NITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73613	ETHANAMINE, N-METHYL-N-NITROSO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73619	1-NITROSOPIPERIDINE TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73626	ACETAMIDE, N-(4-ETHOXYPHENYL)- TOTWUG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
73628	1,4-BENZENEDIAMINE TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
73653	BENZENE, 1,3,5-TRINITRO- TOTWUG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
76997	METHYL CYANIDE (ACETONITRILE) WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77007	PROPANENITRILE(PROPIONITRILE,ETHY*WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77033	ISOBUTYL ALCOHOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77103	2-HEXANONE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
77128	STYRENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77142	O-TOLUIDINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77146	P-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77151	M-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77152	O-CRESOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77268	1,4-DICHLOROBUTENE-2 WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77416	2-METHYLNAPHTHALENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77424	IODOMETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	75.	75.	75.	75.	0.	0.	**	**	**	**
77545	SAFROLE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
77579	DIPHENYLAMINE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77581	P-AMINOBIPHENYL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
77596	METHYLENE BROMIDE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77687	2,4,5-TRICHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77734	1,2,4,5-TETRACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
77770	2,3,4,6-TETRACHLOROPHENOL WHOLE WATER,UG/L	05/03/96-05/03/96	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: RICH0049

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
77793 PENTACHLOROBENZENE WHOLE WATER,UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78109 ALLYLCHLORIDE,TOTAL,WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78142 ORTHO NITROANILINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
78200 N-NITROSODIETHYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
78206 N-NITROSOPYRROLIDINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
78207 N-NITROSODIBUTYLAMINE IN WHOLE WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
78300 3-NITROANILINE, TOTAL, IN WATER UG/L	05/03/96-05/03/96	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
81281 KEPONE(C10CL10O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81302 DIBENZOFURAN(C12H8O) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81309 CARBONDISULFIDE(CS2) WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81520 CHLOROPRENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
81551 XYLENE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
81552 ACETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81553 ACETOPHENONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
81593 METHACRYLONITRILE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81595 METHYL ETHYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81596 METHYL-ISOBUTYL KETONE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
81597 METHYL METHACRYLATE WHL WATER SMPL UG/L	05/03/96-05/03/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
81888 DISULFOTON IN WHOLE WATER SAMPLE UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82191 2-NAPTHYLAMINE IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
82204 2-ACETYL AMINO FLUORENE, TOTAL, WATER UG/L	05/03/96-05/03/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
82213 DIMETHYL BENZIDINE IN WATER UG/L	05/03/96-05/03/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: RICH0049

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00997 ARSENIC, INORGANIC TOT	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			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	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	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.	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			
32101 BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32102 CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32103 1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
32104 BROMOFORM, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
32105 DIBROMOCHLOROMETHANE, WHOLE WATER	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: RICH0049

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
34205	ACENAPHTHENE	Fresh Acute	1700.	1	0	0.00							1	0	0.00			
34210	ACROLEIN	Fresh Acute	68.	1	0	0.00							1	0	0.00			
34215	ACRYLONITRILE	Fresh Acute	7550.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE	Drinking Water	100.	1	0	0.00							1	0	0.00			
34371	ETHYLBENZENE	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34376	FLUORANTHENE	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	Fresh Acute	980.	1	0	0.00							1	0	0.00			
34408	ISOPHORONE	Fresh Acute	117000.	1	0	0.00							1	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34447	NITROBENZENE	Fresh Acute	27000.	1	0	0.00							1	0	0.00			
34452	PARACHLOROMETA CRESOL	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34461	PHENANTHRENE	Fresh Acute	30.	1	0	0.00							1	0	0.00			
34475	TETRACHLOROETHYLENE	Fresh Acute	5280.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
34501	1,1-DICHLOROETHYLENE	Drinking Water	7.	1	0	0.00							1	0	0.00			
34506	1,1,1-TRICHLOROETHANE	Drinking Water	200.	1	0	0.00							1	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34536	1,2-DICHLOROBENZENE	Drinking Water	600.	1	0	0.00							1	0	0.00			
34541	1,2-DICHLOROPROPANE	Drinking Water	5.	1	0	0.00							1	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	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	Drinking Water	600.	1	0	0.00							1	0	0.00			
34571	1,4-DICHLOROBENZENE	Drinking Water	75.	1	0	0.00							1	0	0.00			
34586	2-CHLOROPHENOL	Fresh Acute	4380.	1	0	0.00							1	0	0.00			
34601	2,4-DICHLOROPHENOL	Fresh Acute	2020.	1	0	0.00							1	0	0.00			
34606	2,4-DIMETHYLPHENOL	Fresh Acute	2120.	1	0	0.00							1	0	0.00			
34611	2,4-DINITROTOLUENE	Fresh Acute	330.	1	0	0.00							1	0	0.00			
34694	PHENOL (C6H5OH) - SINGLE COMPOUND	Fresh Acute	10200.	1	0	0.00							1	0	0.00			
34696	NAPHTHALENE	Fresh Acute	2300.	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	0&	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	1	1.00							1	1	1.00			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	1	0	0.00							1	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	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			
77093	CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	Drinking Water	70.	1	0	0.00							1	0	0.00			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
77687	2,4,5-TRICHLOROPHENOL, WHOLE WATER	Fresh Acute	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

Station Inventory for Station: RICH0050

NPS Station ID: RICH0050 LAT/LON: 37.421116/ -77.425281 Agency: 112WRD Date Created: 04/14/78
Location: 51H 6 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 372516077253101
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: C Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206043600.00 RF3 Mile Point: 0.04 Distance from RF3: 0.22 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0050

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/30/76-07/25/78	2	15.5	15.5	16.	15.	0.5	0.707	**	**	**	**
00070 TURBIDITY, (JACKSON CANDLE UNITS)	11/30/76-07/25/78	2	47.5	47.5	70.	25.	1012.5	31.82	**	**	**	**
00080 COLOR (PLATINUM-COBALT UNITS)	11/30/76-07/25/78	2	50.	50.	50.	50.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/30/76-07/25/78	2	236.5	236.5	315.	158.	12324.5	111.016	**	**	**	**
00400 PH (STANDARD UNITS)	11/30/76-11/30/76	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	11/30/76-11/30/76	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/30/76-11/30/76	1	2.512	2.512	2.512	2.512	0.	0.	**	**	**	**
00405 CARBON DIOXIDE (MG/L AS CO2)	11/30/76-11/30/76	1	149.	149.	149.	149.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	11/30/76-07/25/78	2	49.	49.	68.	30.	722.	26.87	**	**	**	**
00440 BICARBONATE ION (MG/L AS HCO3)	11/30/76-07/25/78	2	60.	60.	83.	37.	1058.	32.527	**	**	**	**
00445 CARBONATE ION (MG/L AS CO3)	11/30/76-11/30/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	11/30/76-07/25/78	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	11/30/76-07/25/78	2	0.205	0.205	0.4	0.01	0.076	0.276	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/30/76-07/25/78	2	0.205	0.205	0.4	0.01	0.076	0.276	**	**	**	**
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	11/30/76-07/25/78	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/30/76-07/25/78	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	11/30/76-07/25/78	2	49.	49.	67.	31.	648.	25.456	**	**	**	**
00902 HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/30/76-07/25/78	2	0.5	0.5	1.	0.	0.5	0.707	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	11/30/76-07/25/78	2	8.5	8.5	11.	6.	12.5	3.536	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	11/30/76-07/25/78	2	6.8	6.8	9.7	3.9	16.82	4.101	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	11/30/76-07/25/78	2	24.	24.	33.	15.	162.	12.728	**	**	**	**
00931 SODIUM ADSORPTION RATIO	11/30/76-07/25/78	2	1.5	1.5	1.8	1.2	0.18	0.424	**	**	**	**
00932 SODIUM, PERCENT	11/30/76-07/25/78	2	47.	47.	48.	46.	2.	1.414	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	11/30/76-07/25/78	2	7.2	7.2	8.6	5.8	3.92	1.98	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	11/30/76-07/25/78	2	39.5	39.5	55.	24.	480.5	21.92	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	11/30/76-07/25/78	2	6.	6.	6.	6.	0.	0.	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	11/30/76-07/25/78	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	11/30/76-07/25/78	2	19.	19.	20.	18.	2.	1.414	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)	11/30/76-07/25/78	2	870.	870.	1700.	40.	1377800.	1173.797	**	**	**	**
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/30/76-07/25/78	2	145.5	145.5	187.	104.	3444.5	58.69	**	**	**	**
70301 SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/30/76-07/25/78	2	142.	142.	184.	100.	3528.	59.397	**	**	**	**
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/30/76-07/25/78	2	0.195	0.195	0.25	0.14	0.006	0.078	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/30/76-07/25/78	2	0.9	0.9	1.8	0.	1.62	1.273	**	**	**	**
71856 NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	11/30/76-07/25/78	2	0.	0.	0.	0.	0.	0.	**	**	**	**
72008 DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	11/30/76-11/30/76	1	205.	205.	205.	205.	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: RICH0050

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	1	1	1.00	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						
00613 NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
00618 NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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						
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.	2	0	0.00	1	0	0.00	1	0	0.00						
71856 NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	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: RICH0051

NPS Station ID: RICH0051 LAT/LON: 37.421199/ -77.420837 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-05
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes:
RMI-Miles:
HUC: 02080206 Depth of Water: 0
Major Basin: NORTH ATLANTIC Elevation: 0
Minor Basin: JAMES RIVER
RF1 Index: 02080206 RF1 Mile Point: 0.000
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
STORET Station ID(s): RICH_FD_05
Within Park Boundary: Yes
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 0.00 On/Off RF1:
Distance from RF3: 0.29 On/Off RF3:

Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE SOUTH-EAST BORDER OF THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLE-FIELD PARK. THE SITE IS LOCATED APPROXIMATELY 70 METERS ABOVE THE CONFLUENCE WITH THE JAMES RIVER IN AN UNNAMED TRIBUTARY. THE STUDY MEASURED POSSIBLE CONTAMINATION OF THE TRIBUTARY TO THE JAMES RIVER. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBSIDENCE IN THE LANDFILL'S EARTHEN CAP AND AN ORANGE-REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0051

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/16/89-06/16/89	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/16/89-06/16/89	1	2000.	2000.	2000.	2000.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS		06/16/89-06/16/89	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/16/89-06/16/89	1	3.981	3.981	3.981	3.981	0.	0.	**	**	**	**
01005 BARIUM, DISSOLVED (UG/L AS BA)		07/24/91-07/24/91	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030 CHROMIUM, DISSOLVED (UG/L AS CR)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)		07/24/91-07/24/91	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)		07/24/91-07/24/91	1	2710.	2710.	2710.	2710.	0.	0.	**	**	**	**
01060 MOLYBDENUM, DISSOLVED (UG/L AS MO)		07/24/91-07/24/91	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		07/24/91-07/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)		07/24/91-07/24/91	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
50119 ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	28400.	28400.	28400.	28400.	0.	0.	**	**	**	**
50122 BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	132.	132.	132.	132.	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: RICH0051

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	10.6	10.6	10.6	10.6	0.	0.	**	**	**	**
50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	51600.	51600.	51600.	51600.	0.	0.	**	**	**	**
50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	120.	120.	120.	120.	0.	0.	**	**	**	**
50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	12.	12.	12.	12.	0.	0.	**	**	**	**
50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	17.	17.	17.	17.	0.	0.	**	**	**	**
50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	42.	42.	42.	42.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)		07/24/91-07/24/91	1	4.	4.	4.	4.	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		07/24/91-07/24/91	1	0.09	0.09	0.09	0.09	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: RICH0051

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	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	1	1.00							1	1	1.00			
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									
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									

& - 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: RICH0052

NPS Station ID: RICH0052 LAT/LON: 37.421254/ -77.423837 Agency: 11NPSWRD Date Created: 07/17/99
Location: UNNAMED TRIBUTARY OF JAMES RIVER FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_NPS_5
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT AN UNNAMED TRIBUTARY OF JAMES RIVER NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY'S GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0052

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	09/02/97-09/02/97	1	791.4	791.4	791.4	791.4	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	1	50.49	50.49	50.49	50.49	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	1	1.56	1.56	1.56	1.56	0.	0.	**	**	**	**
01018	IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	1	12769.9	12769.9	12769.9	12769.9	0.	0.	**	**	**	**
01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	1##	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1##	0.085	0.085	0.085	0.085	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	16.73	16.73	16.73	16.73	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	1	38.74	38.74	38.74	38.74	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	1	52.02	52.02	52.02	52.02	0.	0.	**	**	**	**
01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	1##	0.175	0.175	0.175	0.175	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	9.46	9.46	9.46	9.46	0.	0.	**	**	**	**
01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	1##	1.955	1.955	1.955	1.955	0.	0.	**	**	**	**
01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	1	21.85	21.85	21.85	21.85	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	1	8264.3	8264.3	8264.3	8264.3	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	1	58.84	58.84	58.84	58.84	0.	0.	**	**	**	**
34203	ACENAPHTHYLENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.2	2.2	2.2	2.2	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: RICH0052

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	46.	46.	46.	46.	0.	0.	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	31.4	31.4	31.4	31.4	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	33.	33.	33.	33.	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	34.	34.	34.	34.	0.	0.	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	18.3	18.3	18.3	18.3	0.	0.	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	11.	11.	11.	11.	0.	0.	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	16.3	16.3	16.3	16.3	0.	0.	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	35.3	35.3	35.3	35.3	0.	0.	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	20.9	20.9	20.9	20.9	0.	0.	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	34.1	34.1	34.1	34.1	0.	0.	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	1	4.98	4.98	4.98	4.98	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	1.97	1.97	1.97	1.97	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	1.56	1.56	1.56	1.56	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	1	0.63	0.63	0.63	0.63	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	1	21.4	21.4	21.4	21.4	0.	0.	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	32.5	32.5	32.5	32.5	0.	0.	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	13.1	13.1	13.1	13.1	0.	0.	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	27.8	27.8	27.8	27.8	0.	0.	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	42.4	42.4	42.4	42.4	0.	0.	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	26.9	26.9	26.9	26.9	0.	0.	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	14.	14.	14.	14.	0.	0.	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	40.6	40.6	40.6	40.6	0.	0.	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	61.7	61.7	61.7	61.7	0.	0.	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	70.4	70.4	70.4	70.4	0.	0.	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	102.4	102.4	102.4	102.4	0.	0.	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	26.4	26.4	26.4	26.4	0.	0.	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	1.13	1.13	1.13	1.13	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: RICH0052

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	09/02/97-09/02/97	1	20.4	20.4	20.4	20.4	0.	0.	**	**	**	**
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	09/02/97-09/02/97	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.23	1.23	1.23	1.23	0.	0.	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.51	1.51	1.51	1.51	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.77	1.77	1.77	1.77	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	1	2.38	2.38	2.38	2.38	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.46	1.46	1.46	1.46	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.28	0.28	0.28	0.28	0.	0.	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	20.19	20.19	20.19	20.19	0.	0.	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	75.	75.	75.	75.	0.	0.	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	42.5	42.5	42.5	42.5	0.	0.	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	38.2	38.2	38.2	38.2	0.	0.	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	26.9	26.9	26.9	26.9	0.	0.	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	25.1	25.1	25.1	25.1	0.	0.	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	09/02/97-09/02/97	1	1044.	1044.	1044.	1044.	0.	0.	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.65	1.65	1.65	1.65	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.32	1.32	1.32	1.32	0.	0.	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	1.31	1.31	1.31	1.31	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.89	0.89	0.89	0.89	0.	0.	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.52	0.52	0.52	0.52	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	1.25	1.25	1.25	1.25	0.	0.	**	**	**	**
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	1	1051.3	1051.3	1051.3	1051.3	0.	0.	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.94	0.94	0.94	0.94	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.54	0.54	0.54	0.54	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	8.48	8.48	8.48	8.48	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.88	0.88	0.88	0.88	0.	0.	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.57	0.57	0.57	0.57	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.42	0.42	0.42	0.42	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	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: RICH0052

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.98	0.98	0.98	0.98	0.	0.	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.89	0.89	0.89	0.89	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	1	5.88	5.88	5.88	5.88	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN* SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	1	10.6	10.6	10.6	10.6	0.	0.	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	1	72.8	72.8	72.8	72.8	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

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

Station Inventory for Station: RICH0053

NPS Station ID: RICH0053 LAT/LON: 37.421337/ -77.423837 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-02 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_FD_02
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS INSIDE THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLEFIELD PARK. THE SITE IS LOCATED IMMEDIATELY BELOW THE VISITOR FOOT BRIDGE OR APPROXIMATELY 151 METERS FROM THE WESTERN PARK BOUNDARY AND ABOVE THE LEACHATE. THE STUDY MEASURED POSSIBLE CONTAMINATION OF AN UNNAMED TRIBUTARY TO THE JAMES RIVER. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBSIDENCE IN THE LANDFILL'S EARTHEN CAP AND REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0053

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/16/89-06/16/89	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/16/89-06/16/89	1	860.	860.	860.	860.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS		06/16/89-06/16/89	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/16/89-06/16/89	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)		07/24/91-07/24/91	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)		07/24/91-07/24/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)		07/24/91-07/24/91	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)		07/24/91-07/24/91	1	2530.	2530.	2530.	2530.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)		07/24/91-07/24/91	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)		07/24/91-07/24/91	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		07/24/91-07/24/91	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)		07/24/91-07/24/91	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)		07/24/91-07/24/91	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		07/24/91-07/24/91	1	3600.	3600.	3600.	3600.	0.	0.	**	**	**	**
50119	ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	27600.	27600.	27600.	27600.	0.	0.	**	**	**	**
50122	BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	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

Parameter Inventory for Station: RICH0053

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	6.	6.	6.	6.	0.	0.	**	**	**	**
50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	9650.	9650.	9650.	9650.	0.	0.	**	**	**	**
50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	190.	190.	190.	190.	0.	0.	**	**	**	**
50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	6.	6.	6.	6.	0.	0.	**	**	**	**
50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	1	42.	42.	42.	42.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)		07/24/91-07/24/91	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		07/24/91-07/24/91	1##	0.025	0.025	0.025	0.025	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: RICH0053

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	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	1	1.00							1	1	1.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	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.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	1	1.00	1	1	1.00									
		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									
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									

& - 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: RICH0054

NPS Station ID: RICH0054 LAT/LON: 37.421642/ -77.420726 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-06 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_FD_06
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS NEAR THE SOUTH-EAST BORDER OF THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLE-FIELD PARK. THE SITE IS LOCATED IMMEDIATELY BEFORE AN UNNAMED TRIBUTARY'S CONFLUENCE WITH THE JAMES RIVER. THE STUDY MEASURED POSSIBLE CONTAMINATION OF THE TRIBUTARY TO THE JAMES RIVER. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBSIDENCE IN THE LANDFILL'S EARTHEN CAP AND AN ORANGE-REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0054

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/16/89-06/16/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/16/89-06/16/89	1	2200.	2200.	2200.	2200.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/16/89-06/16/89	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS	SU	06/16/89-06/16/89	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS		06/16/89-06/16/89	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/16/89-06/16/89	1	2.512	2.512	2.512	2.512	0.	0.	**	**	**	**
01005 BARIUM, DISSOLVED (UG/L AS BA)		07/24/91-07/24/91	2	30.	30.	30.	30.	0.	0.	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)		07/24/91-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030 CHROMIUM, DISSOLVED (UG/L AS CR)		07/24/91-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)		07/24/91-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)		07/24/91-07/24/91	2##	132.5	132.5	260.	5.	32512.5	180.312	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)		07/24/91-07/24/91	2##	25.	25.	25.	25.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)		07/24/91-07/24/91	2	915.	915.	980.	850.	8450.	91.924	**	**	**	**
01060 MOLYBDENUM, DISSOLVED (UG/L AS MO)		07/24/91-07/24/91	2	20.	20.	20.	20.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		07/24/91-07/24/91	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)		07/24/91-07/24/91	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)		07/24/91-07/24/91	2##	50.	50.	50.	50.	0.	0.	**	**	**	**
50119 ALUMINUM, ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	7485.	7485.	7630.	7340.	42050.	205.061	**	**	**	**
50122 BARIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	53.	53.	60.	46.	98.	9.899	**	**	**	**

** - Less 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: RICH0054

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50125	CADMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	1.05	1.05	1.5	0.6	0.405	0.636	**	**	**	**
50127	CHROMIUM,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	6.55	6.55	9.	4.1	12.005	3.465	**	**	**	**
50128	COPPER,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	6.	6.	6.	6.	0.	0.	**	**	**	**
50129	IRON,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	19300.	19300.	26800.	11800.	112500000.	10606.602	**	**	**	**
50132	MANGANESE,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	165.	165.	200.	130.	2450.	49.497	**	**	**	**
50133	MOLYBDENUM,ICAP TEST METHOD,SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50135	NICKEL,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	4.	4.	4.	4.	0.	0.	**	**	**	**
50136	LEAD,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	11.	11.	16.	6.	50.	7.071	**	**	**	**
50143	ZINC,ICAP TEST METHOD, SEDIMENT,TOTAL	MG/KG	07/24/91-07/24/91	2	24.5	24.5	28.	21.	24.5	4.95	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)		07/24/91-07/24/91	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		07/24/91-07/24/91	2##	0.025	0.025	0.025	0.025	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: RICH0054

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	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	1	1.00							1	1	1.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	2	0	0.00	2	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.	2	0	0.00	2	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	2	0	0.00									
		Drinking Water	1300.	2	0	0.00	2	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	0&	0	0.00												
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	2	1.00	2	2	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: RICH0055

NPS Station ID: RICH0055 LAT/LON: 37.421892/ -77.420977 Agency: 11NPSWRD Date Created: 07/17/99
Location: MOUTH OF AN UNNAMED TRIBUTARY AT JAMES RIVER FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_NPS_1
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT THE MOUTH OF AN UNNAMED TRIBUTARY AT JAMES RIVER NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY'S GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0055

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)		09/02/97-09/02/97	1	249.7	249.7	249.7	249.7	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)		09/02/97-09/02/97	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)		09/02/97-09/02/97	1	30.16	30.16	30.16	30.16	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)		09/02/97-09/02/97	1	0.61	0.61	0.61	0.61	0.	0.	**	**	**	**
01018	IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)		09/02/97-09/02/97	1	15863.6	15863.6	15863.6	15863.6	0.	0.	**	**	**	**
01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)		09/02/97-09/02/97	1##	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		09/02/97-09/02/97	1	5.55	5.55	5.55	5.55	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)		09/02/97-09/02/97	1	2.76	2.76	2.76	2.76	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)		09/02/97-09/02/97	1	3.91	3.91	3.91	3.91	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)		09/02/97-09/02/97	1	149.63	149.63	149.63	149.63	0.	0.	**	**	**	**
01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)		09/02/97-09/02/97	1##	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		09/02/97-09/02/97	1	5.42	5.42	5.42	5.42	0.	0.	**	**	**	**
01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)		09/02/97-09/02/97	1##	1.125	1.125	1.125	1.125	0.	0.	**	**	**	**
01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)		09/02/97-09/02/97	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)		09/02/97-09/02/97	1	1966.4	1966.4	1966.4	1966.4	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)		09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)		09/02/97-09/02/97	1	14.06	14.06	14.06	14.06	0.	0.	**	**	**	**
34203	ACENAPHTHYLENE	DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

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Parameter Inventory for Station: RICH0055

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.045	0.045	0.09	0.	0.004	0.064	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1.	1.	1.	1.	0.	0.	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.85	0.85	0.85	0.85	0.	0.	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.55	0.55	0.55	0.55	0.	0.	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	2##	0.013	0.013	0.02	0.005	0.	0.011	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	2##	0.035	0.035	0.06	0.01	0.001	0.035	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	2##	0.45	0.45	0.9	0.	0.405	0.636	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	2##	0.003	0.003	0.005	0.	0.	0.004	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	16.8	16.8	16.8	16.8	0.	0.	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	1##	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2	0.065	0.065	0.07	0.06	0.	0.007	**	**	**	**
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.03	0.03	0.06	0.	0.002	0.042	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2	2.335	2.335	2.66	2.01	0.211	0.46	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2	1.575	1.575	1.88	1.27	0.186	0.431	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2	0.055	0.055	0.06	0.05	0.	0.007	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.008	0.008	0.015	0.	0.	0.011	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	2##	0.005	0.005	0.01	0.	0.	0.007	**	**	**	**

** - Less 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: RICH0055

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	09/02/97-09/02/97	2	0.04	0.04	0.05	0.03	0.	0.014	**	**	**	**
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2	0.265	0.265	0.41	0.12	0.042	0.205	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.003	0.003	0.005	0.	0.	0.004	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.005	0.005	0.01	0.	0.	0.007	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.025	0.025	0.05	0.	0.001	0.035	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.033	0.033	0.05	0.015	0.001	0.025	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	2	0.065	0.065	0.08	0.05	0.	0.021	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.025	0.025	0.04	0.01	0.	0.021	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	09/02/97-09/02/97	1	51.	51.	51.	51.	0.	0.	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2	0.34	0.34	0.38	0.3	0.003	0.057	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.14	0.14	0.28	0.	0.039	0.198	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.005	0.005	0.01	0.	0.	0.007	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.05	0.05	0.1	0.	0.005	0.071	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.043	0.043	0.08	0.005	0.003	0.053	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	1	67.8	67.8	67.8	67.8	0.	0.	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.045	0.045	0.09	0.	0.004	0.064	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.025	0.025	0.05	0.	0.001	0.035	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.05	0.05	0.1	0.	0.005	0.071	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2	0.03	0.03	0.04	0.02	0.	0.014	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	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

Parameter Inventory for Station: RICH0055

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.04	0.04	0.08	0.	0.003	0.057	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.003	0.003	0.005	0.	0.	0.004	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.013	0.013	0.015	0.01	0.	0.004	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2	0.195	0.195	0.29	0.1	0.018	0.134	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2	0.285	0.285	0.36	0.21	0.011	0.106	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.083	0.083	0.14	0.025	0.007	0.081	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.04	0.04	0.08	0.	0.003	0.057	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.055	0.055	0.11	0.	0.006	0.078	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	0.	0.	0.	0.	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)		09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.03	0.03	0.035	0.025	0.	0.007	**	**	**	**
75043	PENTACHLOROANISOLE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
75558	BIPHENYL	SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN*	SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT,	UG/KG	09/02/97-09/02/97	2	0.04	0.04	0.06	0.02	0.001	0.028	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5-	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.315	0.315	0.55	0.08	0.11	0.332	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4-	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.053	0.053	0.08	0.025	0.002	0.039	**	**	**	**
79790	PENTACHLOROBENZENE	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.023	0.023	0.025	0.02	0.	0.004	**	**	**	**
79792	CHLORPYRIFOS	SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	2##	0.06	0.06	0.12	0.	0.007	0.085	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLE	PERCENT DRY WEIGHT (%)	09/02/97-09/02/97	2	44.	44.	61.	27.	578.	24.042	**	**	**	**

** - Less 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: RICH0056

NPS Station ID: RICH0056 LAT/LON: 37.421892/ -77.424727 Agency: 11NPSWRD Date Created: 07/17/99
Location: POINT WHERE UNNAMED TRIB OF JAMES R. ENTERS PARK FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): RICH_NPS_6
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE STATION IS LOCATED ON THE DREWRYS BLUFF VA 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE AND IS INSIDE THE RICHMOND NATIONAL BATTLEFIELD PARK (RICH) BOUNDARIES. THE SITE IS AT THE POINT WHERE AN UNNAMED TRIBUTARY AT JAMES RIVER ENTERS RICH NEAR DREWRY'S BLUFF. DATA WERE COLLECTED ON 2 SEPTEMBER 1997 AS PART OF A BASELINE MONITORING PROJECT TO ASSESS THE IMPACT OF A NEARBY COUNTY LANDFILL (ACQUIRED BY RICH DURING THE 1970'S) ON THE TRIBUTARY. THE TRIBUTARY'S SOURCE COLLECTS RUNOFF FROM AN AREA NORTHEAST OF THE PARK THAT INCLUDES ASPHALT STORAGE CONTAINERS. DATA ARE FROM AN ANALYTICAL REPORT TITLED "DREWRY'S BLUFF PROJECT;" ANALYTICAL REPORT NO. 7C480-A; BY TEXAS A&M UNIVERSITY; GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP. FOR MORE INFORMATION CONTACT THE CHIEF OF RESOURCES AT RICH; 3215 EAST BROAD STREET; RICHMOND VA 23223; TEL(804)226-1981. DATA WERE PROCESSED AND UPLOADED TO STORET BY SHAWNDRA MAWHORTER; NPS-WRD; 1201 OAKRIDGE DRIVE SUITE 250; FORT COLLINS CO 80528; TEL(970)225-3516.

Parameter Inventory for Station: RICH0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00924	MAGNESIUM IN BOTTOM DEPOS. (MG/KG AS MG DRY WGT)	09/02/97-09/02/97	1	663.6	663.6	663.6	663.6	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	09/02/97-09/02/97	1	2.31	2.31	2.31	2.31	0.	0.	**	**	**	**
01008	BARIUM IN BOTTOM DEPOSITS (MG/KG AS BA DRY WGT)	09/02/97-09/02/97	1	24.78	24.78	24.78	24.78	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	09/02/97-09/02/97	1	0.71	0.71	0.71	0.71	0.	0.	**	**	**	**
01018	IRON,TOTAL IN BOTTOM DEPOSITS (MG/KG WT WGT-FE)	09/02/97-09/02/97	1	9329.8	9329.8	9329.8	9329.8	0.	0.	**	**	**	**
01023	BORON IN BOTTOM DEPOSITS (MG/KG AS B DRY WGT)	09/02/97-09/02/97	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1##	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	9.43	9.43	9.43	9.43	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	09/02/97-09/02/97	1	3.71	3.71	3.71	3.71	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	09/02/97-09/02/97	1	9.44	9.44	9.44	9.44	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/02/97-09/02/97	1	91.81	91.81	91.81	91.81	0.	0.	**	**	**	**
01063	MOLYBDENUM IN BOT. DEPOSITS (MG/KG AS MO DRY WGT)	09/02/97-09/02/97	1##	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	09/02/97-09/02/97	1	3.64	3.64	3.64	3.64	0.	0.	**	**	**	**
01083	STRONTIUM IN BOTTOM DEPOSITS(MG/KG AS SR DRY WGT)	09/02/97-09/02/97	1##	0.98	0.98	0.98	0.98	0.	0.	**	**	**	**
01088	VANADIUM IN BOTTOM DEPOSITS (MG/KG AS V DRY WGT)	09/02/97-09/02/97	1	12.75	12.75	12.75	12.75	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/02/97-09/02/97	1	3370.6	3370.6	3370.6	3370.6	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	09/02/97-09/02/97	1##	0.035	0.035	0.035	0.035	0.	0.	**	**	**	**
01157	ZINC, TOTAL IN BOTTOM DEPOSITS (MG/KG AS ZN)	09/02/97-09/02/97	1	29.6	29.6	29.6	29.6	0.	0.	**	**	**	**
34203	ACENAPHTHYLENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.65	0.65	1.2	0.1	0.605	0.778	**	**	**	**

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Parameter Inventory for Station: RICH0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34208	ACENAPHTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.125	0.125	0.15	0.1	0.001	0.035	**	**	**	**
34223	ANTHRACENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	1.7	1.7	3.3	0.1	5.12	2.263	**	**	**	**
34233	BENZO(B)FLUORANTHENE,SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	2##	4.225	4.225	7.9	0.55	27.011	5.197	**	**	**	**
34245	BENZO(K)FLUORANTHENE, DRY WT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	0.75	0.75	1.2	0.3	0.405	0.636	**	**	**	**
34250	BENZO-A-PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2	3.4	3.4	4.7	2.1	3.38	1.838	**	**	**	**
34257	B-BHC-BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1	0.34	0.34	0.34	0.34	0.	0.	**	**	**	**
34262	DELTA BENZENE HEXACHLORIDE DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34323	CHRYSENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
34359	ENDOSULFAN, BETA DRY WGTBOTUG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
34379	FLUORANTHENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2	3.3	3.3	4.9	1.7	5.12	2.263	**	**	**	**
34384	FLUORENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.425	0.425	0.6	0.25	0.061	0.247	**	**	**	**
34406	INDENO (1,2,3-CD) PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2	2.4	2.4	3.9	0.9	4.5	2.121	**	**	**	**
34445	NAPHTHALENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	0.725	0.725	0.9	0.55	0.061	0.247	**	**	**	**
34464	PHENANTHRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2##	2.025	2.025	3.5	0.55	4.351	2.086	**	**	**	**
34472	PYRENE DRY WGTBOTUG/KG	09/02/97-09/02/97	2	3.85	3.85	6.	1.7	9.245	3.041	**	**	**	**
34524	BENZO(GHI)PERYLENE1,12-BENZOPERYLENDRY WGTBOTUG/KG	09/02/97-09/02/97	2##	3.	3.	5.6	0.4	13.52	3.677	**	**	**	**
34529	BENZO(A)ANTHRACENE1,2-BENZANTHRACENDRY WGTBOTUG/KG	09/02/97-09/02/97	2	6.65	6.65	11.1	2.2	39.605	6.293	**	**	**	**
39070	CHLORDANE-NONACHLOR,CIS ISO BOTTOM DEPOS UG/KG	09/02/97-09/02/97	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
39076	BHC-ALPHA ISOMER, BOTTOM DEPOS (UG/KG DRY SOL)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39301	P,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39306	O,P' DDT IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39316	O,P' DDD IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39321	P,P' DDE IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
39328	O,P'DDE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	09/02/97-09/02/97	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
45095	C2 ALKYL DIBENZOTHIOPHENE SEDDRY UG/KG	09/02/97-09/02/97	2##	2.6	2.6	4.9	0.3	10.58	3.253	**	**	**	**
49724	PERYLENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	2.5	2.5	3.3	1.7	1.28	1.131	**	**	**	**
49743	BENZO(E)PYRENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	4.55	4.55	8.3	0.8	28.125	5.303	**	**	**	**
49759	C1 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	1.475	1.475	2.5	0.45	2.101	1.45	**	**	**	**
49760	C2 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	3.025	3.025	5.4	0.65	11.281	3.359	**	**	**	**
49761	C3 ALKYL FLUORENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	5.3	5.3	9.2	1.4	30.42	5.515	**	**	**	**
49767	C1 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	2##	0.875	0.875	1.6	0.15	1.051	1.025	**	**	**	**
49769	C3 ALKYL DIBENZOTHIOPHENE,DRY WEIGHT,SEDIMENTUG/KG	09/02/97-09/02/97	2	4.05	4.05	7.1	1.	18.605	4.313	**	**	**	**
49782	NAPHTHALENE, C1 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	0.775	0.775	0.9	0.65	0.031	0.177	**	**	**	**
49783	NAPHTHALENE, C2 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	1.7	1.7	2.6	0.8	1.62	1.273	**	**	**	**
49784	NAPHTHALENE, C3 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	3.7	3.7	4.6	2.8	1.62	1.273	**	**	**	**
49785	NAPHTHALENE, C4 ALKYL,DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	2.05	2.05	2.4	1.7	0.245	0.495	**	**	**	**
49805	C1 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	8.	8.	14.2	1.8	76.88	8.768	**	**	**	**
49806	C2 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2	15.65	15.65	28.8	2.5	345.845	18.597	**	**	**	**
49807	C3 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	4.35	4.35	8.3	0.4	31.205	5.586	**	**	**	**
49808	C4 ALKYL CHYRSENE, DRY WEIGHT, SEDIMENT UG/KG	09/02/97-09/02/97	2##	1.175	1.175	1.9	0.45	1.051	1.025	**	**	**	**
50590	PCB CONGENER IUPAC#107, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50592	PCB CONGENER IUPAC#207, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50595	PCB CONGENER IUPAC#25, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50596	PCB CONGENER IUPAC#29, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50601	PCB CONGENER IUPAC#53, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50602	PCB CONGENER IUPAC#63, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50603	PCB CONGENER IUPAC#81, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50604	PCB CONGENER IUPAC#84, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50605	PCB CONGENER IUPAC#1, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50607	PCB CONGENER IUPAC#205, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
50609	PCB CONGENER IUPAC#193, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50610	PCB CONGENER IUPAC#191, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50611	PCB CONGENER IUPAC#189, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
50612	PCB CONGENER IUPAC#175, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50614	PCB CONGENER IUPAC#130, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50615	PCB CONGENER IUPAC#119, SEDIMENT, DRY WEIGHT NG/G	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	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: RICH0056

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50784	ALPHA-CHLORDANE SEDIMENT,DRY WT,BOTTOM DEP	UG/KG	09/02/97-09/02/97	1	1.09	1.09	1.09	1.09	0.	0.	**	**	**	**
50910	DIBENZO(A,H)ANTHRACENE SED DRY WEIGHT BOTTOM	UG/KG	09/02/97-09/02/97	2##	0.975	0.975	1.8	0.15	1.361	1.167	**	**	**	**
50942	1-METHYLPHENANTHRENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.65	0.65	1.2	0.1	0.605	0.778	**	**	**	**
50943	2,6-DIMETHYLNAPHTHALENE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	2##	0.475	0.475	0.8	0.15	0.211	0.46	**	**	**	**
50947	PCB CONGENER #28 (CL3), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
50948	PCB CONGENER #52 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.13	1.13	1.13	1.13	0.	0.	**	**	**	**
50949	PCB CONGENER #44 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50950	PCB CONGENER #66 (CL4), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50951	PCB CONGENER #77/110 (CL4/CL5) DRY WGT,SED	UG/KG	09/02/97-09/02/97	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
50953	PCB CONGENER #118 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50955	PCB CONGENER #105 (CL5), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50958	PCB CONGENER #187 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50959	PCB CONGENER #128 (CL6), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.57	0.57	0.57	0.57	0.	0.	**	**	**	**
50960	PCB CONGENER #180 (CL7), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
50963	PCB CONGENER #206 (CL9), DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**
50964	PCB CONGENER #209 (CL10),DRY WEIGHT,SEDIMENT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
50966	GAMMA-CHLORDANE, DRY WEIGHT, SEDIMENT	UG/KG	09/02/97-09/02/97	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
61080	1,6,7-TRIMETHYLNAPHTHALENE SEDIMENT DRY WT	UG/KG	09/02/97-09/02/97	2##	0.425	0.425	0.8	0.05	0.281	0.53	**	**	**	**
61098	C4-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	2	4.9	4.9	8.3	1.5	23.12	4.808	**	**	**	**
61100	C3-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	2	6.95	6.95	12.4	1.5	59.405	7.707	**	**	**	**
61101	C2-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	2	5.9	5.9	10.5	1.3	42.32	6.505	**	**	**	**
61104	C1-PHENANTHRENE+ANTHRACENE SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	2	4.4	4.4	7.5	1.3	19.22	4.384	**	**	**	**
61105	C1-FLUORANTHENES+PYRENES SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	2##	3.675	3.675	6.8	0.55	19.531	4.419	**	**	**	**
61115	PCB CONGENER #169 (C16) SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61160	PCB CONGENER #126 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
61161	PCB CONGENER # 77 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61197	TRICHLOROBIPHENYL,2,3',5-,(PCB#26)DRY WT BOT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61239	PAHS WITHOUT PERYLENE,TOTAL,SEDIMENT,DRY WT	UG/KG	09/02/97-09/02/97	2	125.5	125.5	206.	45.	12960.5	113.844	**	**	**	**
61261	PCB CONGENER #8/5, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61262	PCB CONGENER #195/208, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61263	PCB CONGENER #18/17, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61264	PCB CONGENER #170/190, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
61265	PCB CONGENER #153/132, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
61266	PCB CONGENER #138/160, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
61268	PCB CONGENER #101/90, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61285	1-METHYLNAPHTHALENE, SEDIMENT, DRY WEIGHT	NG/G	09/02/97-09/02/97	2##	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
61783	PCB CONGERNER #80/95 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61784	PCB CONGERNER #61/74 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61785	PCB CONGERNER #41/64 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61786	PCB CONGERNER #37/42/59 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61787	PCB CONGERNER #47/75 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61788	PCB CONGERNER #22/51 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61789	PCB CONGERNER #20/33 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61794	POLYAMMATIC HYDROCARBON TOT W/ PERYLN SED DRY	UG/KG	09/02/97-09/02/97	2	128.	128.	208.1	47.9	12832.02	113.279	**	**	**	**
61795	PCB CONGERNER #196/203 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61796	PCB CONGERNER #153/173/201 SEDIMENT DRY WGHT	UG/KG	09/02/97-09/02/97	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
61797	PCB CONGERNER #171/202 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61798	PCB CONGERNER #176/137 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61799	PCB CONGERNER #141/179 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61800	PCB CONGERNER #123/149 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
61801	PCB CONGERNER #87/115 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61802	PCB CONGERNER #56/60 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61803	PCB CONGERNER #55/91 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61804	PCB CONGERNER #16/32 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.28	0.28	0.28	0.28	0.	0.	**	**	**	**
61805	PCB CONGERNER #24/27 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61806	PCB CONGERNER #7/9 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61807	PCB CONGERNER #194 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
61808	PCB CONGERNER #199 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
61809	PCB CONGERNER #200 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61810	PCB CONGERNER #197 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61811	PCB CONGERNER #172 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
61812	PCB CONGERNER #156 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
61813	PCB CONGERNER #177 SEDIMENT DRY WEIGHT	UG/KG	09/02/97-09/02/97	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

Parameter Inventory for Station: RICH0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
61814	PCB CONGERNER #174 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
61815	PCB CONGERNER #185 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61816	PCB CONGERNER #167 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61817	PCB CONGERNER #183 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
61818	PCB CONGERNER #166 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61819	PCB CONGERNER #178 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61820	PCB CONGERNER #129 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61821	PCB CONGERNER #158 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
61822	PCB CONGERNER #146 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
61823	PCB CONGERNER #114 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61824	PCB CONGERNER #135 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
61825	PCB CONGERNER #151 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61826	PCB CONGERNER #82 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61827	PCB CONGERNER #136 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61828	PCB CONGERNER #85 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
61829	PCB CONGERNER #97 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61830	PCB CONGERNER #83 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
61831	PCB CONGERNER #99 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61832	PCB CONGERNER #92 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61833	PCB CONGERNER #70 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61834	PCB CONGERNER #67 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61835	PCB CONGERNER #40 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
61836	PCB CONGERNER #72 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61837	PCB CONGERNER #48 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61838	PCB CONGERNER #49 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
61839	PCB CONGERNER #69 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61840	PCB CONGERNER #39 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61841	PCB CONGERNER #46 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61842	PCB CONGERNER #45 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61843	PCB CONGERNER #31 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61844	PCB CONGERNER #15 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
61845	PCB CONGERNER #30 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
61846	4,4' DDD/PCB CONGENER 114 SED. DRY WEIGT UG/KG	09/02/97-09/02/97	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
61847	OXYCHLORDANE/PCB 63 SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	09/02/97-09/02/97	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
75042	HEXACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
75043	PENTACHLOROANISOLE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
75558	BIPHENYL SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	2	0.4	0.4	0.5	0.3	0.02	0.141	**	**	**	**
75714	DIBENZO(BD)THIOPHENE(DIPHEN*SEDIMENT,DRY WGT,UG/KG	09/02/97-09/02/97	2##	0.225	0.225	0.4	0.05	0.061	0.247	**	**	**	**
78657	NONACHLOR, TRANS, SEDIMENT, DRY WEIGHT, UG/KG	09/02/97-09/02/97	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
78868	2-METHYLNAPHTHALENE IN SEDIMENT DRY WEIGHT UG/KG	09/02/97-09/02/97	2##	0.425	0.425	0.5	0.35	0.011	0.106	**	**	**	**
79787	TETRACHLOROBENZENE,1,2,4,5- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
79789	TETRACHLOROBENZENE,1,2,3,4- SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
79790	PENTACHLOROBENZENE SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1##	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
79792	CHLORPYRIFOS SEDIMENT,DRY,WT,UG/KG	09/02/97-09/02/97	1	4.38	4.38	4.38	4.38	0.	0.	**	**	**	**
81373	SOLIDS IN SEDIMENT SAMPLEPERCENT DRY WEIGHT (%)	09/02/97-09/02/97	2	62.95	62.95	68.9	57.	70.805	8.415	**	**	**	**

** - Less 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: RICH0057

NPS Station ID: RICH0057 LAT/LON: 37.421949/ -77.308893 Agency: 21VASWCB Date Created: 05/06/95
Location: FOURMILE CREEK, KINGSLAND ROAD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM001.85
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0057

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/07/94-03/27/95	3	12.1	11.633	13.5	9.3	4.573	2.139	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/07/94-03/27/95	2	71.5	71.5	74.	69.	12.5	3.536	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-03/27/95	3	10.4	10.367	10.7	10.	0.123	0.351	**	**	**	**
00400 PH (STANDARD UNITS)		12/07/94-03/27/95	3	5.7	5.687	5.74	5.62	0.004	0.061	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		12/07/94-03/27/95	3	5.7	5.684	5.74	5.62	0.004	0.061	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/07/94-03/27/95	3	1.995	2.071	2.399	1.82	0.088	0.297	**	**	**	**

** - Less 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: RICH0057

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				2	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	3	1.00				2	2	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: RICH0058

NPS Station ID: RICH0058 LAT/LON: 37.422198/ -77.424781 Agency: 11NPSWRD Date Created: 07/12/97
Location: LANDFILL ASSESSMENT FOR RICH STATION FD-01
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): RICH_FD_01
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

THE SITE IS LOCATED ON THE DREWRYS BLUFF VIRGINIA-CHESTERFIELD CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS OUTSIDE THE FORT DARLING UNIT OF THE RICHMOND NATIONAL BATTLEFIELD PARK. THE SITE IS LOCATED AT THE EXXON LAGOON OUTLET. THE STUDY MEASURED POSSIBLE CONTAMINATION OF AN UNNAMED TRIBUTARY TO THE JAMES RIVER. FLOW THROUGH THIS SITE IS NOT KNOWN TO BE PERMANENT. THE LEACHATE WAS PRESUMED TO BE FROM A LANDFILL ADJACENT TO THE PARK. THE LANDFILL CLOSED IN 1972 AND WAS COVERED WITH TOPSOIL; CONTOURED AND REVEGETATED. AT THE TIME OF THE STUDY THERE WAS VISIBLE SUBIDENCE IN THE LANDFILL'S EARTHEN CAP AND AN ORANGE-REDDISH LEACHATE STAIN IN THE CHANNEL. THE DATA IS FROM A STUDY BY DEL NIMMO ET AL. "ASSESSMENT OF AN URBAN LANDFILL ON TRIBUTARY WATER QUALITY." FOR MORE INFORMATION CONTACT MIKE BRENNAN RESOURCES MANAGEMENT SPECIALIST RICHMOND NATIONAL BATTLEFIELD PARK. PH.804-795-5019. DATA PROCESSED AND UPLOADED TO STORET BY CURTIS COOPER NPS-WRD FORT COLLINS CO 80525. PH.970-225-3516.

Parameter Inventory for Station: RICH0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/15/89-06/15/89	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/15/89-06/15/89	1	700.	700.	700.	700.	0.	0.	**	**	**	**
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	06/15/89-06/15/89	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS	SU	06/15/89-06/15/89	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS		06/15/89-06/15/89	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/15/89-06/15/89	1	2.512	2.512	2.512	2.512	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: RICH0058

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	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	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: RICH0059

NPS Station ID: RICH0059 LAT/LON: 37.425004/ -77.402781 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, BUOY 160 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS101.03
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0059

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	52	25.3	24.41	30.8	15.	19.624	4.43	17.29	21.6	28.5	29.24
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	11	6.5	5.982	9.4	3.4	4.288	2.071	3.42	3.8	7.3	9.16
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	48	231.	242.438	468.	121.	6025.911	77.627	145.8	182.25	294.25	331.7
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	11	231.	214.273	284.	130.	2914.618	53.987	130.2	161.	247.	282.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	51	7.9	7.931	10.2	6.2	0.919	0.959	6.7	7.2	8.7	9.18
00310 BOD, 5 DAY, 20 DEG C MG/L	06/28/94-06/01/95	12	1.05	1.033	2.4	0.5	0.346	0.588	0.5	0.5	1.45	2.13
00400 PH (STANDARD UNITS)	06/28/94-10/26/98	52	7.63	7.682	8.88	7.05	0.126	0.355	7.284	7.445	7.815	8.18
00400 CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	52	7.63	7.567	8.88	7.05	0.139	0.373	7.284	7.445	7.815	8.18
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	52	0.023	0.027	0.089	0.001	0.	0.019	0.007	0.015	0.036	0.052
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	10	7.4	7.31	7.7	6.7	0.103	0.321	6.72	7.05	7.525	7.69
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	10	7.389	7.19	7.7	6.7	0.119	0.345	6.72	7.05	7.525	7.69
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	10	0.041	0.065	0.2	0.02	0.003	0.057	0.02	0.03	0.091	0.192
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	10	54.	50.8	61.	32.	116.4	10.789	32.1	42.	60.25	61.
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	10	153.5	139.8	190.	65.	1433.289	37.859	68.3	104.	162.25	187.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	10	33.5	34.4	53.	16.	175.156	13.235	16.3	21.25	48.	52.8
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	10	106.5	107.4	143.	67.	868.267	29.466	67.2	74.25	136.75	142.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	7.	8.091	12.	5.	8.091	2.844	5.	6.	11.	12.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	11##	1.5	1.727	3.	1.	0.268	0.518	1.1	1.5	2.	2.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	5.	6.545	10.	4.	5.273	2.296	4.	5.	9.	9.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.25	0.26	0.45	0.11	0.01	0.102	0.122	0.18	0.35	0.438
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.02	0.022	0.04	0.005	0.	0.014	0.006	0.01	0.04	0.04
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.19	0.209	0.35	0.09	0.009	0.094	0.092	0.14	0.32	0.35
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	11	0.5	0.518	0.8	0.3	0.022	0.147	0.32	0.4	0.6	0.78
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	11	0.08	0.085	0.13	0.05	0.001	0.026	0.052	0.06	0.1	0.128
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	10	19.5	18.2	29.	8.	50.4	7.099	8.1	10.5	24.25	28.6
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	10	24.5	23.6	38.	12.	85.378	9.24	12.1	14.5	30.75	37.8
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	330.	2221.192	16000.	18.	19238225.531	4386.14	20.	91.	1625.	8060.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	52	2.519	2.613	4.204	1.255	0.74	0.86	1.301	1.948	3.209	3.894
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	410.318								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	11	0.05	0.06	0.1	0.03	0.	0.022	0.032	0.04	0.08	0.096

** - Less 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: RICH0059

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	51	0	0.00	30	0	0.00	5	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	52	0	0.00	31	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	52	0	0.00	31	0	0.00	5	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	32	0.62	32	21	0.66	5	3	0.60	15	8	0.53			

& - 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 1994 - Station RICH0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	9	26.2	25.078	30.4	17.8	20.859	4.567	17.8	20.3	28.6	30.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	9	7.5	7.711	9.1	6.3	0.834	0.913	6.3	7.05	8.55	9.1
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.53	7.623	8.02	7.34	0.059	0.243	7.34	7.455	7.855	8.02
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.53	7.571	8.02	7.34	0.062	0.25	7.34	7.455	7.855	8.02
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	9	0.03	0.027	0.046	0.01	0.	0.012	0.01	0.015	0.035	0.046
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	8	280.	2865.	16000.	20.	31456457.143	5608.606	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	8	2.44	2.576	4.204	1.301	1.059	1.029	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		376.523									

** - Less 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 RICH0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	8	23.5	23.275	30.8	15.	31.905	5.648	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	8	8.15	8.225	10.2	6.5	1.239	1.113	**	**	**	**
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.525	7.509	7.78	7.16	0.052	0.229	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.517	7.455	7.78	7.16	0.056	0.236	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	8	0.03	0.035	0.069	0.017	0.	0.019	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	9	220.	1051.667	3500.	45.	1536525.	1239.566	45.	150.	2050.	3500.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	9	2.342	2.649	3.544	1.653	0.437	0.661	1.653	2.172	3.305	3.544
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		445.221									

** - 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

Annual Analysis for 1996 - Station RICH0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	12	22.45	22.758	28.	15.8	15.314	3.913	16.31	20.2	26.85	27.88
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	12	8.05	8.25	9.4	7.	0.674	0.821	7.09	7.525	9.075	9.4
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.6	7.688	8.88	7.05	0.225	0.474	7.137	7.408	7.78	8.685
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.593	7.527	8.88	7.05	0.253	0.503	7.137	7.408	7.78	8.685
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	12	0.026	0.03	0.089	0.001	0.001	0.023	0.003	0.017	0.039	0.076
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	12	1025.	4840.417	16000.	20.	47323492.992	6879.207	27.5	205.	13350.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	12	3.01	3.004	4.204	1.301	0.951	0.975	1.407	2.296	4.086	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1009.93									

** - Less 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 RICH0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	11	26.5	25.036	29.7	16.6	19.429	4.408	17.52	21.6	29.1	29.62
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	10	6.9	7.17	8.8	6.2	0.698	0.835	6.22	6.625	7.65	8.76
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	11	7.57	7.585	8.21	7.12	0.107	0.327	7.136	7.38	7.71	8.176
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	11	7.57	7.488	8.21	7.12	0.118	0.343	7.136	7.38	7.71	8.176
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	11	0.027	0.033	0.076	0.006	0.	0.021	0.007	0.019	0.042	0.073
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	11	330.	1480.091	9200.	45.	7193487.291	2682.068	49.6	78.	1700.	7840.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		07/14/94-10/26/98	11	2.519	2.616	3.964	1.653	0.569	0.754	1.689	1.892	3.23	3.847
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		412.927									

** - Less 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 1998 - Station RICH0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	12	26.95	25.742	29.5	17.2	15.928	3.991	18.13	22.45	28.9	29.38
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	8.45	8.217	9.3	7.	0.711	0.843	7.03	7.275	9.	9.24
00400	PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.915	7.924	8.5	7.59	0.087	0.295	7.59	7.643	8.092	8.446
00400	CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.905	7.844	8.5	7.59	0.094	0.307	7.59	7.643	8.092	8.446
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	12	0.012	0.014	0.026	0.003	0.	0.008	0.004	0.008	0.023	0.026
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	150.	729.25	5400.	18.	2315136.932	1521.557	18.6	26.25	707.5	4170.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/14/94-10/26/98	12	2.172	2.218	3.732	1.255	0.63	0.794	1.269	1.389	2.839	3.547
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		165.091									

** - Less 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: RICH0060

NPS Station ID: RICH0060 LAT/LON: 37.431115/ -77.428615 Agency: 21VASWCB Date Created: / /
Location: BUOY 163 FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS102.76 /VA2-02-X0138/VA2-4X0138
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 13.820 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080207000500.00 RF3 Mile Point: 2.49 Distance from RF3: 0.04 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0060

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/01/75-09/27/83	34	21.75	19.682	30.	4.	70.986	8.425	6.75	9.875	27.275	29.25
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/75-07/28/75	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-10/12/83	9##	0.215	0.347	1.	0.17	0.094	0.307	0.17	0.178	0.483	1.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-09/27/83	15	233.	245.933	385.	148.	6056.924	77.826	154.6	172.	317.	359.8
00300	OXYGEN, DISSOLVED MG/L	05/01/75-09/27/83	35	7.8	8.049	12.9	4.1	3.344	1.829	5.96	6.9	9.	11.08
00310	BOD, 5 DAY, 20 DEG C MG/L	07/28/75-06/28/83	13	1.	1.692	4.	1.	0.897	0.947	1.	1.	2.	3.6
00340	COD, .25N K2CR207 MG/L	05/19/80-06/28/83	12	11.5	13.417	33.	5.	67.538	8.218	5.3	6.25	18.5	29.7
00400	PH (STANDARD UNITS)	05/01/75-09/27/83	35	7.6	7.74	9.	6.9	0.241	0.491	7.1	7.5	8.	8.58
00400	CONVERTED PH (STANDARD UNITS)	05/01/75-09/27/83	35	7.6	7.529	9.	6.9	0.287	0.536	7.1	7.5	8.	8.58
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/01/75-09/27/83	35	0.025	0.03	0.126	0.001	0.001	0.028	0.003	0.01	0.032	0.079
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/83-09/27/83	3	67.	69.667	81.	61.	105.333	10.263	**	**	**	**
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00480	SALINITY - PARTS PER THOUSAND	11/18/82-06/28/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	05/19/80-06/28/83	12	131.	150.583	248.	103.	2325.72	48.226	105.4	112.5	189.25	240.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/19/80-06/28/83	12	32.5	32.	42.	22.	35.455	5.954	22.3	28.5	36.75	41.1
00510	RESIDUE, TOTAL FIXED (MG/L)	05/19/80-06/28/83	12	99.	118.583	206.	73.	1897.72	43.563	75.1	89.75	155.75	199.4
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/27/80-09/27/83	4	192.	192.	246.	138.	2394.667	48.935	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/01/75-09/27/83	33	9.	11.288	49.	2.	92.235	9.604	2.2	5.	16.	22.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/01/75-09/27/83	33	2.5	3.848	14.	0.	11.179	3.344	0.	2.	6.	8.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/01/75-06/28/83	30	5.5	7.933	41.	0.	63.651	7.978	0.	4.	12.	14.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/01/75-09/27/83	35	0.2	0.366	3.5	0.05	0.329	0.574	0.05	0.1	0.4	0.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	35	0.01	0.015	0.1	0.	0.	0.017	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	35	0.35	0.387	1.3	0.025	0.075	0.275	0.086	0.15	0.48	0.8
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	3	1.	1.033	1.2	0.9	0.023	0.153	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/01/75-09/27/83	35	0.5	0.513	1.2	0.05	0.097	0.311	0.2	0.3	0.8	0.98
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-09/27/83	3	0.4	0.7	1.4	0.3	0.37	0.608	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-09/27/83	15	0.2	0.247	0.8	0.05	0.037	0.191	0.05	0.1	0.3	0.62
00667	PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-09/27/83	3	0.4	0.467	0.7	0.3	0.043	0.208	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-09/27/83	15	0.16	0.196	0.6	0.05	0.018	0.135	0.062	0.11	0.26	0.42
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/19/80-09/27/83	15	5.	5.4	9.	3.	3.114	1.765	3.	4.	7.	8.4
00940	CHLORIDE,TOTAL IN WATER MG/L	05/01/75-04/24/79	18	9.	10.556	20.	3.	23.085	4.805	4.8	7.75	13.25	20.
01002	ARSENIC, TOTAL (UG/L AS AS)	05/04/76-10/28/82	3##	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/04/76-10/28/82	3##	5.	3.5	5.	0.5	6.75	2.598	**	**	**	**

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Parameter Inventory for Station: RICH0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01034 CHROMIUM, TOTAL (UG/L AS CR)	06/04/75-10/28/82	7##	5.	3.071	5.	0.5	5.786	2.405	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	06/04/75-10/28/82	7##	5.	6.429	10.	5.	5.952	2.44	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	06/04/75-10/28/82	7	3.	4.	8.	1.	7.333	2.708	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	06/04/75-05/22/78	3##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	10.	18.75	50.	5.	439.583	20.966	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	06/04/75-10/28/82	7##	5.	8.571	20.	5.	30.952	5.563	**	**	**	**
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	930.	4120.	11000.	430.	35563300.	5963.497	**	**	**	**
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	2.968	3.214	4.041	2.633	0.541	0.735	**	**	**	**
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	1638.506								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	34	100.	627.147	6300.	43.	1614230.069	1270.524	50.	50.	500.	2250.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	34	2.	2.269	3.799	1.633	0.389	0.623	1.699	1.699	2.699	3.343
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	185.58								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	4	3.	6.4	17.9	1.7	59.26	7.698	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	4	1.6	2.65	6.5	0.9	6.703	2.589	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-09/27/83	4	0.05	0.075	0.2	0.	0.009	0.096	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/01/75-04/24/79	20	0.1	0.097	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/01/75-04/24/79	20	0.055	0.085	0.28	0.03	0.004	0.061	0.04	0.05	0.113	0.177
71900 MERCURY, TOTAL (UG/L AS HG)	06/04/75-10/28/82	7##	0.15	0.193	0.25	0.15	0.003	0.053	**	**	**	**

** - Less 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: RICH0060

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a 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.	35	0	0.00	14	0	0.00	7	0	0.00	14	0	0.00			
00400 PH	Fresh Chronic	9.	35	1	0.03	14	0	0.00	7	0	0.00	14	1	0.07			
	Other-Lo Lim.	6.5	35	0	0.00	14	0	0.00	7	0	0.00	14	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	35	0	0.00	14	0	0.00	7	0	0.00	14	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	35	0	0.00	14	0	0.00	7	0	0.00	14	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	3	0	0.00									
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	18	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00			
	Drinking Water	250.	18	0	0.00	7	0	0.00	2	0	0.00	9	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00				1	0	0.00	2	0	0.00			
	Drinking Water	50.	3	0	0.00				1	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						
01034 CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00				2	0	0.00	5	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	1300.	7	0	0.00				2	0	0.00	5	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	15.	7	0	0.00				2	0	0.00	5	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			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
	Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	5000.	7	0	0.00				2	0	0.00	5	0	0.00			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	3	1	0.33	3	1	0.33									
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	34	14	0.41	14	7	0.50	6	1	0.17	14	6	0.43			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	4	2	0.50	3	2	0.67				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	2.	7	0	0.00				2	0	0.00	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

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/01/75-09/27/83	14	27.1	23.564	30.	4.	61.756	7.859	6.5	21.125	28.475	29.75
00300 OXYGEN, DISSOLVED MG/L	05/01/75-09/27/83	14	7.05	7.079	9.1	5.6	0.943	0.971	5.75	6.225	7.8	8.55
00400 PH (STANDARD UNITS)	05/01/75-09/27/83	14	7.95	7.829	8.5	7.1	0.15	0.387	7.3	7.5	8.05	8.4
00400 CONVERTED PH (STANDARD UNITS)	05/01/75-09/27/83	14	7.947	7.672	8.5	7.1	0.176	0.42	7.3	7.5	8.05	8.4
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/01/75-09/27/83	14	0.011	0.021	0.079	0.003	0.	0.02	0.004	0.009	0.032	0.056
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/01/75-09/27/83	12	9.5	11.708	28.	2.5	63.748	7.984	3.25	5.25	17.	26.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/01/75-09/27/83	12	4.	4.292	14.	0.	15.112	3.887	0.	1.25	6.	11.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/01/75-06/28/83	9	6.	9.	18.	2.	28.75	5.362	2.	5.	13.5	18.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.3	0.321	0.7	0.1	0.043	0.208	0.1	0.1	0.525	0.65
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.01	0.018	0.1	0.	0.001	0.025	0.	0.005	0.02	0.065
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.4	0.502	1.3	0.15	0.095	0.309	0.21	0.308	0.793	1.05
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/01/75-09/27/83	14	0.5	0.593	1.2	0.2	0.121	0.347	0.2	0.3	0.95	1.15
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	14	175.	940.929	6300.	43.	3128838.225	1768.852	46.5	100.	900.	4800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	14	2.239	2.441	3.799	1.633	0.444	0.666	1.666	2.	2.947	3.659
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	275.894								

** - Less 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: 10/15 to 3/15 - Station RICH0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/01/75-09/27/83	7	9.5	10.471	18.2	5.6	17.466	4.179	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/01/75-09/27/83	7	11.	10.371	12.9	7.5	4.062	2.016	**	**	**	**
00400 PH (STANDARD UNITS)	05/01/75-09/27/83	7	7.5	7.457	7.7	6.9	0.073	0.27	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/01/75-09/27/83	7	7.5	7.367	7.7	6.9	0.082	0.287	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/01/75-09/27/83	7	0.032	0.043	0.126	0.02	0.001	0.037	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/01/75-09/27/83	7	6.	13.571	49.	2.	276.619	16.632	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/01/75-09/27/83	7	2.	4.143	8.	2.	7.476	2.734	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/01/75-06/28/83	7	4.	9.429	41.	0.	209.952	14.49	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/01/75-09/27/83	7	0.5	0.786	3.5	0.1	1.461	1.209	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	7	0.02	0.021	0.04	0.005	0.	0.012	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	7	0.45	0.431	0.8	0.09	0.064	0.253	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/01/75-09/27/83	7	0.7	0.557	0.8	0.2	0.076	0.276	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	6##	50.	125.	500.	50.	33750.	183.712	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	6##	1.699	1.866	2.699	1.699	0.167	0.408	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	73.39								

** - Less 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: 3/16 to 6/30 - Station RICH0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/01/75-09/27/83	13	22.	20.462	30.	6.	51.848	7.201	6.8	17.3	25.6	29.6
00300 OXYGEN, DISSOLVED MG/L	05/01/75-09/27/83	14	8.2	7.857	9.4	4.1	1.969	1.403	5.35	6.975	8.925	9.35
00400 PH (STANDARD UNITS)	05/01/75-09/27/83	14	7.55	7.793	9.	7.	0.393	0.627	7.05	7.375	8.25	8.85
00400 CONVERTED PH (STANDARD UNITS)	05/01/75-09/27/83	14	7.547	7.506	9.	7.	0.481	0.694	7.05	7.375	8.25	8.85
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/01/75-09/27/83	14	0.028	0.031	0.1	0.001	0.001	0.03	0.001	0.006	0.042	0.09
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/01/75-09/27/83	14	8.	9.786	20.	2.	40.027	6.327	2.5	4.	15.	20.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/01/75-09/27/83	14	2.	3.321	10.	0.	10.754	3.279	0.	0.375	6.	9.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/01/75-06/28/83	14	5.	6.5	14.	0.	23.192	4.816	0.	3.25	12.	13.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.2	0.2	0.4	0.05	0.016	0.127	0.05	0.05	0.3	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.01	0.01	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.025
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/01/75-09/27/83	14	0.155	0.25	0.6	0.025	0.037	0.192	0.038	0.087	0.435	0.555
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/01/75-09/27/83	14	0.3	0.411	0.9	0.05	0.078	0.279	0.075	0.2	0.575	0.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	14	100.	528.571	2700.	50.	722967.033	850.275	50.	50.	625.	2250.

** - Less 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: 3/16 to 6/30 - Station RICH0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/01/75-09/27/83	14	2.	2.269	3.431	1.699	0.372	0.61	1.699	1.699	2.659	3.343
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	185.775								

** - Less 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: RICH0061

NPS Station ID: RICH0061 LAT/LON: 37.432781/ -77.325838 Agency: 21VASWCB Date Created: 05/19/90
Location: RT. 5 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM003.60
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206142600.51 RF3 Mile Point: 0.53 Distance from RF3: 0.21 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: FOURMILE, VA

Parameter Inventory for Station: RICH0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/90-11/19/98	44	13.7	13.991	25.5	0.9	44.739	6.689	5.25	8.85	19.6	23.45
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/19/90-01/02/92	6	12.	10.733	14.1	6.	12.567	3.545	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/12/94-11/19/98	21	10.6	14.648	65.8	3.	174.776	13.22	4.92	8.05	17.7	25.4
00080	COLOR (PLATINUM-COBALT UNITS)	04/24/91-10/26/92	6	136.5	180.333	494.	67.	25545.467	159.829	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/30/92-11/19/98	23	65.	67.435	99.	42.	181.893	13.487	51.	60.	79.	86.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/90-11/19/98	35	58.	59.743	85.	39.	120.255	10.966	48.2	53.	68.	78.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	01/17/90-11/19/98	41	9.2	9.039	12.7	4.3	3.977	1.994	6.34	7.45	10.7	11.5
00300	OXYGEN, DISSOLVED MG/L	07/19/90-07/17/91	5	7.8	8.32	10.8	6.9	2.597	1.612	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	07/19/90-11/19/98	34	1.05	1.515	4.	0.5	0.554	0.744	1.	1.	2.	2.5
00340	COD, .25N K2CR2O7 MG/L	07/19/90-11/19/98	36	20.	21.583	57.	2.5	125.95	11.223	7.	15.25	27.	37.3
00400	PH (STANDARD UNITS)	01/17/90-11/19/98	44	5.57	5.77	7.91	4.26	0.616	0.785	4.825	5.245	6.318	6.785
00400	CONVERTED PH (STANDARD UNITS)	01/17/90-11/19/98	44	5.57	5.261	7.91	4.26	0.881	0.939	4.825	5.245	6.317	6.785
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/17/90-11/19/98	44	2.692	5.489	54.954	0.012	92.334	9.609	0.181	0.486	5.69	14.963
00403	PH, LAB, STANDARD UNITS SU	07/19/90-11/19/98	35	6.	5.963	6.6	5.2	0.154	0.393	5.4	5.7	6.3	6.5
00403	CONVERTED PH, LAB, STANDARD UNITS	07/19/90-11/19/98	35	6.	5.789	6.6	5.2	0.185	0.43	5.4	5.7	6.3	6.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/19/90-11/19/98	35	1.	1.624	6.31	0.251	2.381	1.543	0.316	0.501	1.995	3.981
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/90-11/19/98	34	4.	4.441	28.	1.	21.224	4.607	1.5	2.	5.	7.
00500	RESIDUE, TOTAL (MG/L)	07/19/90-11/19/98	35	65.	67.629	130.	42.	277.417	16.656	49.	57.	73.	89.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/19/90-11/19/98	35	26.	27.914	72.	10.	138.787	11.781	15.4	21.	33.	39.4
00510	RESIDUE, TOTAL FIXED (MG/L)	07/19/90-11/19/98	35	39.	39.714	60.	28.	65.092	8.068	29.	33.	44.	52.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/19/90-11/19/98	35	7.	8.886	38.	3.	49.163	7.012	4.	4.	10.	19.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/19/90-11/19/98	35	3.	3.014	10.	0.5	3.978	1.994	1.3	1.5	4.	5.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/19/90-11/19/98	35	4.	5.843	30.	1.	31.453	5.608	1.5	3.	8.	13.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/19/90-11/19/98	36##	0.02	0.039	0.18	0.02	0.001	0.034	0.02	0.02	0.048	0.093
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/19/90-11/19/98	36##	0.005	0.008	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.013
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/19/90-11/19/98	36	0.29	0.339	1.55	0.04	0.061	0.248	0.164	0.2	0.425	0.54
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/19/90-11/19/98	36	0.5	0.494	1.6	0.2	0.059	0.243	0.3	0.325	0.575	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/90-11/19/98	36	0.04	0.045	0.1	0.01	0.001	0.025	0.01	0.03	0.058	0.093
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/19/90-07/17/91	5	0.02	0.016	0.02	0.01	0.	0.005	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/19/90-06/24/96	23	6.5	7.504	25.7	2.8	22.97	4.793	3.96	4.9	7.7	13.74
00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	09/12/97-09/12/97	1	36.3	36.3	36.3	36.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/19/90-11/19/98	36	14.	15.208	35.	0.5	54.02	7.35	7.4	12.	17.	28.
00927	MAGNESIUM, TOTAL (MG/L AS MG)	07/15/92-01/21/93	2	1220.	1220.	1270.	1170.	5000.	70.711	**	**	**	**

** - Less 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: RICH0061

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940 CHLORIDE,TOTAL IN WATER MG/L	07/19/90-11/19/98	34	9.	9.221	15.	2.5	6.139	2.478	6.	7.	11.	12.
00945 SULFATE, TOTAL (MG/L AS SO4)	07/19/90-11/19/98	34	6.	5.309	11.	1.	7.606	2.758	2.	2.5	7.	8.5
00951 FLUORIDE, TOTAL (MG/L AS F)	07/19/90-04/19/93	9##	0.05	0.059	0.13	0.05	0.001	0.027	0.05	0.05	0.05	0.13
00955 SILICA, DISSOLVED (MG/L AS SI02)	07/19/90-10/26/92	9	8.8	9.433	12.	6.6	3.695	1.922	6.6	8.05	11.6	12.
01002 ARSENIC, TOTAL (UG/L AS AS)	01/17/91-04/19/93	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	07/15/92-01/21/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	01/17/91-04/19/93	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	01/17/91-04/19/93	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01042 COPPER, TOTAL (UG/L AS CU)	01/17/91-04/19/93	10##	5.	6.1	16.	5.	12.1	3.479	5.	5.	5.	14.9
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	01/17/91-04/19/93	10	1775.	2444.	10000.	524.	7901872.222	2811.027	537.2	758.	2891.5	9289.6
01051 LEAD, TOTAL (UG/L AS PB)	01/17/91-04/19/93	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/27/92-09/12/97	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	09/12/97-09/12/97	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	01/17/91-04/19/93	10	56.35	70.19	165.2	40.	1345.59	36.682	40.8	48.075	81.3	157.5
01059 THALLIUM, TOTAL (UG/L AS TL)	07/15/92-01/21/93	2##	10.	10.	10.	10.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	01/17/91-04/19/93	10##	5.	6.	15.	5.	10.	3.162	5.	5.	5.	14.
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01078 SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	01/17/91-04/19/93	10	17.	16.3	34.	5.	69.344	8.327	5.	10.25	19.5	32.7
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/27/92-09/12/97	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01098 ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	09/12/97-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	09/12/97-09/12/97	1	838.	838.	838.	838.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	01/17/91-04/19/93	10##	10.	9.	10.	5.	4.444	2.108	5.	8.75	10.	10.
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/27/92-09/12/97	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170 IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	09/12/97-09/12/97	1	813.	813.	813.	813.	0.	0.	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-11/19/98	21	170.	1634.286	9200.	9.	10237150.314	3199.555	9.	42.5	1200.	9200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-11/19/98	21	2.23	2.363	3.964	0.954	0.926	0.962	0.954	1.628	3.078	3.964
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	230.422								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/19/90-04/05/94	15	100.	146.667	700.	50.	28738.095	169.523	50.	50.	200.	460.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/19/90-04/05/94	15	2.	2.008	2.845	1.699	0.119	0.345	1.699	1.699	2.301	2.624
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	101.829								
32240 TANNIN AND LIGNIN (MG/L)	01/02/92-04/19/93	4	1.3	1.675	3.3	0.8	1.229	1.109	**	**	**	**
34480 THALLIUM DRY WGTBOTMG/KG	07/27/92-09/12/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/27/92-09/12/97	1##	35.	35.	35.	35.	0.	0.	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/27/92-09/12/97	1##	30.	30.	30.	30.	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-09/12/97	1##	55.	55.	55.	55.	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/27/92-09/12/97	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
46570 HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	04/24/91-04/19/93	8	9.	9.25	12.	7.	3.357	1.832	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/24/91-11/19/98	32	0.02	0.021	0.05	0.005	0.	0.012	0.007	0.01	0.03	0.04
71900 MERCURY, TOTAL (UG/L AS HG)	01/17/91-04/19/93	10##	0.15	0.15	0.15	0.15	0.	0.	0.15	0.15	0.15	0.15
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/27/92-09/12/97	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/27/92-09/12/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/27/92-09/12/97	1##	70.	70.	70.	70.	0.	0.	**	**	**	**
82007 PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	09/12/97-09/12/97	1	95.58	95.58	95.58	95.58	0.	0.	**	**	**	**
82008 SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	09/12/97-09/12/97	1	4.42	4.42	4.42	4.42	0.	0.	**	**	**	**
82009 SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	09/12/97-09/12/97	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82032 CALCIUM - TOTAL UG/L (AS CA)	07/15/92-01/21/93	2	2195.	2195.	2590.	1800.	312050.	558.614	**	**	**	**
82078 TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	04/02/92-04/05/94	8	7.7	9.45	21.	5.7	26.491	5.147	**	**	**	**

** - Less 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: RICH0061

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	21	1	0.05	7	0	0.00	6	1	0.17	8	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	41	0	0.00	11	0	0.00	14	0	0.00	16	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00			
00400 PH	Fresh Chronic	9.	44	0	0.00	13	0	0.00	15	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	44	37	0.84	13	9	0.69	15	13	0.87	16	15	0.94			
00403 PH, LAB	Fresh Chronic	9.	35	0	0.00	12	0	0.00	11	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	35	34	0.97	12	11	0.92	11	11	1.00	12	12	1.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	36	0	0.00	12	0	0.00	12	0	0.00	12	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	36	0	0.00	12	0	0.00	12	0	0.00	12	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	34	0	0.00	12	0	0.00	11	0	0.00	11	0	0.00			
	Drinking Water	250.	34	0	0.00	12	0	0.00	11	0	0.00	11	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	34	0	0.00	12	0	0.00	11	0	0.00	11	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	50.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00	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.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	1300.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	15.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	0&	0	0.00												
01067 NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	100.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	5000.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	50.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	21	10	0.48	7	4	0.57	6	3	0.50	8	3	0.38			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	15	4	0.27	5	1	0.20	6	2	0.33	4	1	0.25			
71900 MERCURY, TOTAL	Fresh Acute	2.4	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	2.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	8	0	0.00	3	0	0.00	2	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

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		01/17/90-11/19/98	13	22.2	20.6	25.5	13.7	13.505	3.675	14.82	17.45	23.45	25.38
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/19/90-11/19/98	12	56.5	60.417	78.	51.	94.629	9.728	51.	53.	67.	78.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-11/19/98	11	6.8	7.	9.4	4.3	2.39	1.546	4.48	5.9	8.4	9.3
00310 BOD, 5 DAY, 20 DEG C	MG/L	07/19/90-11/19/98	12	1.	1.525	3.	1.	0.617	0.785	1.	1.	2.	3.
00340 COD, .25N K2CR2O7	MG/L	07/19/90-11/19/98	12	20.	22.375	57.	2.5	249.324	15.79	3.85	8.75	31.5	52.2
00400 PH (STANDARD UNITS)		01/17/90-11/19/98	13	6.22	6.251	7.91	5.26	0.426	0.653	5.356	5.81	6.57	7.382
00400 CONVERTED PH (STANDARD UNITS)		01/17/90-11/19/98	13	6.22	5.92	7.91	5.26	0.545	0.738	5.356	5.81	6.57	7.382
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		01/17/90-11/19/98	13	0.603	1.202	5.495	0.012	2.421	1.556	0.11	0.269	1.608	4.562
00403 PH, LAB, STANDARD UNITS	SU	07/19/90-11/19/98	12	6.3	6.267	6.6	6.	0.039	0.197	6.	6.1	6.45	6.57
00403 CONVERTED PH, LAB, STANDARD UNITS		07/19/90-11/19/98	12	6.3	6.227	6.6	6.	0.04	0.201	6.	6.1	6.45	6.57
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/19/90-11/19/98	12	0.501	0.592	1.	0.251	0.065	0.255	0.271	0.362	0.794	1.
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	12	5.	5.	9.	2.	2.909	1.706	2.6	4.	6.	8.1
00500 RESIDUE, TOTAL (MG/L)		07/19/90-11/19/98	12	64.5	69.167	130.	44.	461.606	21.485	47.3	57.5	72.25	115.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)		07/19/90-11/19/98	12	25.	27.083	72.	10.	257.902	16.059	10.3	18.	30.75	61.2
00510 RESIDUE, TOTAL FIXED (MG/L)		07/19/90-11/19/98	12	40.5	42.083	58.	33.	41.538	6.445	34.5	38.	45.75	54.7
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	6.	7.167	18.	3.	19.97	4.469	3.	4.	9.5	16.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	2.5	2.875	10.	0.5	6.006	2.451	0.8	1.5	3.	8.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	3.5	4.25	10.	1.	9.75	3.122	1.15	1.5	7.5	9.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.02	0.044	0.18	0.02	0.002	0.046	0.02	0.02	0.058	0.144
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.005	0.008	0.03	0.005	0.	0.007	0.005	0.005	0.005	0.024
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12	0.27	0.318	0.65	0.04	0.035	0.187	0.073	0.173	0.49	0.617
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		07/19/90-11/19/98	12	0.5	0.583	1.6	0.3	0.116	0.341	0.3	0.425	0.6	1.33
00665 PHOSPHORUS, TOTAL (MG/L AS P)		07/19/90-11/19/98	12	0.04	0.049	0.1	0.03	0.	0.022	0.03	0.04	0.05	0.097
00900 HARDNESS, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	12	15.	14.875	34.	0.5	82.824	9.101	1.85	8.25	20.	31.3
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/19/90-11/19/98	12	10.5	9.75	12.	6.	3.295	1.815	6.3	9.	11.	11.7
00945 SULFATE, TOTAL (MG/L AS SO4)		07/19/90-11/19/98	12	2.5	3.958	8.	1.	6.066	2.463	1.3	2.	6.75	7.7
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/24/91-11/19/98	10	0.02	0.021	0.03	0.005	0.	0.008	0.006	0.018	0.03	0.03

** - Less 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: 10/15 to 3/15 - Station RICH0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		01/17/90-11/19/98	15	8.3	8.2	17.4	0.9	21.5	4.637	1.2	4.3	11.8	15.18
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/19/90-11/19/98	11	59.	61.545	85.	39.	182.673	13.516	41.	53.	73.	83.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-11/19/98	14	10.4	10.25	12.7	7.3	2.29	1.513	7.65	9.275	11.2	12.5
00310 BOD, 5 DAY, 20 DEG C	MG/L	07/19/90-11/19/98	10	1.8	1.71	4.	0.5	0.952	0.976	0.55	1.	2.	3.8
00340 COD, .25N K2CR2O7	MG/L	07/19/90-11/19/98	11	19.	20.045	38.	2.5	114.223	10.688	3.4	16.	31.	37.
00400 PH (STANDARD UNITS)		01/17/90-11/19/98	15	5.55	5.747	7.41	4.57	0.731	0.855	4.72	5.07	6.45	7.374
00400 CONVERTED PH (STANDARD UNITS)		01/17/90-11/19/98	15	5.55	5.26	7.41	4.57	0.986	0.993	4.72	5.07	6.45	7.374
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		01/17/90-11/19/98	15	2.818	5.499	26.915	0.039	53.429	7.309	0.042	0.355	8.511	19.848
00403 PH, LAB, STANDARD UNITS	SU	07/19/90-11/19/98	11	5.8	5.827	6.5	5.2	0.186	0.431	5.22	5.4	6.2	6.48
00403 CONVERTED PH, LAB, STANDARD UNITS		07/19/90-11/19/98	11	5.8	5.651	6.5	5.2	0.22	0.47	5.22	5.4	6.2	6.48
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/19/90-11/19/98	11	1.585	2.235	6.31	0.316	4.039	2.01	0.333	0.631	3.981	6.05
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	11	4.	5.727	28.	2.	58.018	7.617	2.	2.	5.	24.
00500 RESIDUE, TOTAL (MG/L)		07/19/90-11/19/98	11	64.	66.273	87.	54.	94.418	9.717	54.8	59.	70.	85.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)		07/19/90-11/19/98	11	26.	28.091	38.	19.	43.491	6.595	19.4	21.	35.	37.6
00510 RESIDUE, TOTAL FIXED (MG/L)		07/19/90-11/19/98	11	38.	38.182	52.	28.	46.564	6.824	28.6	32.	42.	50.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/19/90-11/19/98	11	6.	10.	38.	4.	106.	10.296	4.	5.	8.	34.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/19/90-11/19/98	11	3.	3.182	8.	1.	4.314	2.077	1.1	1.5	5.	7.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		07/19/90-11/19/98	11	3.	6.682	30.	1.5	73.314	8.562	1.6	3.	5.	27.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.03	0.037	0.1	0.02	0.001	0.023	0.02	0.02	0.048	0.085
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.005	0.007	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.017
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12	0.245	0.28	0.54	0.1	0.016	0.127	0.121	0.185	0.393	0.507
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		07/19/90-11/19/98	12	0.4	0.408	0.7	0.2	0.023	0.151	0.2	0.3	0.5	0.67
00665 PHOSPHORUS, TOTAL (MG/L AS P)		07/19/90-11/19/98	12	0.045	0.043	0.1	0.01	0.001	0.028	0.01	0.02	0.058	0.094
00900 HARDNESS, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	11	14.	15.273	35.	10.	45.418	6.739	10.4	12.	15.	31.2

** - 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: 10/15 to 3/15 - Station RICH0061

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER	MG/L	07/19/90-11/19/98	11	9.	8.955	13.	2.5	9.423	3.07	3.2	7.	12.	12.8
00945	SULFATE, TOTAL (MG/L AS SO4)		07/19/90-11/19/98	11	7.	6.773	11.	2.	10.768	3.281	2.	2.5	9.	11.
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/24/91-11/19/98	10	0.015	0.019	0.04	0.005	0.	0.012	0.006	0.01	0.03	0.039

** - Less 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: 3/16 to 6/30 - Station RICH0061

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		01/17/90-11/19/98	16	13.	14.05	24.4	6.7	25.988	5.098	8.52	10.	17.95	23.42
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/19/90-11/19/98	12	57.5	57.417	81.	45.	101.356	10.068	45.6	49.5	60.25	77.7
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-11/19/98	16	9.45	9.381	11.6	6.3	2.484	1.576	6.65	8.25	10.525	11.53
00310	BOD, 5 DAY, 20 DEG C	MG/L	07/19/90-11/19/98	12	1.05	1.342	2.	1.	0.199	0.446	1.	1.	1.925	2.
00340	COD, .25N K2CR2O7	MG/L	07/19/90-11/19/98	13	21.	22.154	37.	13.	40.474	6.362	13.8	18.5	26.5	33.8
00400	PH (STANDARD UNITS)		01/17/90-11/19/98	16	5.39	5.399	6.98	4.26	0.396	0.63	4.533	5.055	5.713	6.35
00400	CONVERTED PH (STANDARD UNITS)		01/17/90-11/19/98	16	5.39	5.048	6.98	4.26	0.528	0.727	4.533	5.055	5.712	6.35
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		01/17/90-11/19/98	16	4.074	8.962	54.954	0.105	184.096	13.568	0.614	1.976	8.812	32.157
00403	PH, LAB, STANDARD UNITS	SU	07/19/90-11/19/98	12	5.75	5.783	6.3	5.4	0.114	0.338	5.4	5.425	6.125	6.3
00403	CONVERTED PH, LAB, STANDARD UNITS		07/19/90-11/19/98	12	5.747	5.679	6.3	5.4	0.126	0.355	5.4	5.425	6.125	6.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/19/90-11/19/98	12	1.79	2.097	3.981	0.501	1.843	1.358	0.501	0.788	3.776	3.981
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	11	2.	2.545	6.	1.	2.673	1.635	1.	1.	3.	5.8
00500	RESIDUE, TOTAL (MG/L)		07/19/90-11/19/98	12	68.	67.333	95.	42.	305.515	17.479	44.1	50.75	82.25	94.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)		07/19/90-11/19/98	12	28.	28.583	54.	13.	130.265	11.413	14.2	19.25	36.75	49.8
00510	RESIDUE, TOTAL FIXED (MG/L)		07/19/90-11/19/98	12	39.	38.75	60.	29.	107.841	10.385	29.	29.	43.5	58.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	8.	9.583	20.	4.	30.629	5.534	4.	5.	13.25	19.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	3.	3.	6.	1.	2.318	1.523	1.15	1.625	4.	5.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		07/19/90-11/19/98	12	5.	6.667	15.	3.	16.606	4.075	3.	3.25	9.5	14.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.02	0.038	0.12	0.02	0.001	0.033	0.02	0.02	0.04	0.111
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12##	0.005	0.008	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		07/19/90-11/19/98	12	0.32	0.418	1.55	0.2	0.133	0.364	0.206	0.255	0.415	1.22
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		07/19/90-11/19/98	12	0.5	0.492	0.9	0.3	0.032	0.178	0.3	0.325	0.575	0.84
00665	PHOSPHORUS, TOTAL (MG/L AS P)		07/19/90-11/19/98	12	0.035	0.042	0.1	0.01	0.001	0.026	0.01	0.023	0.06	0.088
00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/19/90-11/19/98	13	13.	15.462	28.	6.	43.603	6.603	7.6	11.	18.5	28.
00940	CHLORIDE,TOTAL IN WATER	MG/L	07/19/90-11/19/98	11	9.	8.909	15.	6.	6.691	2.587	6.2	7.	9.	14.4
00945	SULFATE, TOTAL (MG/L AS SO4)		07/19/90-11/19/98	11	6.	5.318	7.	2.	3.114	1.765	2.1	4.	7.	7.
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/24/91-11/19/98	12	0.02	0.023	0.05	0.005	0.	0.015	0.007	0.01	0.038	0.047

** - Less 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: RICH0062

NPS Station ID: RICH0062 LAT/LON: 37.433337/ -77.433337 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION J81 - JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL6040
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 13.930 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004508.68 RF3 Mile Point: 10.75 Distance from RF3: 0.03 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0062

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0063

NPS Station ID: RICH0063 LAT/LON: 37.436670/ -77.216670 Agency: 21VASWCB Date Created: 05/06/95
Location: TURKEY ISLAND CREEK, WARRINER ROAD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-TIC009.23
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: TURKEY ISLAND CREEK SECTION: 07 TOPO MAP #: 0141 TOPO MAP NAME: ROXBURY, VA

Parameter Inventory for Station: RICH0063

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/09/94-12/09/94	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/09/94-12/09/94	1	79.	79.	79.	79.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-12/09/94	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)		12/09/94-12/09/94	1	6.22	6.22	6.22	6.22	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)		12/09/94-12/09/94	1	6.22	6.22	6.22	6.22	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/09/94-12/09/94	1	0.603	0.603	0.603	0.603	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: RICH0063

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0064

NPS Station ID: RICH0064 LAT/LON: 37.436948/ -77.427782 Agency: 21VASWCB Date Created: 12/07/84
Location: BUOY 165-AT FALLING CREEK-(CHESTERFIELD COUNTY) FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS103.15
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH-ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206045 RF1 Mile Point: 14.270 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004103.91 RF3 Mile Point: 4.81 Distance from RF3: 0.28 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	53	24.9	24.138	30.8	14.7	20.469	4.524	16.34	21.	28.1	29.32
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	11	4.9	5.436	8.8	3.5	2.767	1.663	3.6	4.	6.4	8.54
00078 TRANSPARENCY, SECCHI DISC (METERS)	07/28/83-10/12/83	6##	0.193	0.193	0.23	0.17	0.001	0.023	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/20/83-10/26/98	49	253.	260.612	502.	111.	8072.117	89.845	158.	186.5	322.	394.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	11	260.	259.182	422.	134.	5841.364	76.429	139.	218.	292.	399.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	50	8.	8.152	10.4	6.7	0.635	0.797	7.12	7.675	8.625	9.48
00300 OXYGEN, DISSOLVED MG/L	09/20/83-10/03/83	2	7.4	7.4	7.9	6.9	0.5	0.707	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	07/14/94-06/01/95	11	1.1	0.927	1.7	0.5	0.192	0.438	0.5	0.5	1.3	1.62
00400 PH (STANDARD UNITS)	09/20/83-10/26/98	53	7.75	7.759	8.48	7.05	0.097	0.312	7.34	7.535	7.985	8.2
00400 CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	53	7.75	7.653	8.48	7.05	0.109	0.33	7.34	7.535	7.985	8.2
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	53	0.018	0.022	0.089	0.003	0.	0.017	0.006	0.01	0.029	0.046
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	10	7.45	7.36	7.7	6.8	0.125	0.353	6.8	7.025	7.7	7.7
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	10	7.447	7.22	7.7	6.8	0.147	0.383	6.8	7.025	7.7	7.7
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	10	0.036	0.06	0.158	0.02	0.003	0.055	0.02	0.02	0.099	0.158
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/83-06/01/95	12	56.5	55.	74.	33.	160.909	12.685	33.3	46.75	62.25	73.1
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/20/83-10/03/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	10	164.5	150.1	268.	47.	3928.767	62.68	50.3	94.25	179.	260.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	10	29.	33.9	78.	15.	372.544	19.301	15.2	18.5	45.	74.7
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	10	122.5	116.2	190.	28.	2334.4	48.316	31.5	74.25	149.5	186.1
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	09/20/83-10/03/83	2	162.	162.	202.	122.	3200.	56.569	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/20/83-06/01/95	14	6.	6.607	10.	2.5	7.315	2.705	3.25	4.	10.	10.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/83-06/01/95	14##	1.5	1.714	3.	1.	0.297	0.545	1.	1.5	2.	2.75
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	5.	4.773	8.	1.5	5.268	2.295	1.6	3.	7.	8.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/20/83-06/01/95	14	0.24	0.285	0.8	0.12	0.037	0.192	0.125	0.15	0.308	0.7
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	09/20/83-06/01/95	13	0.02	0.019	0.04	0.	0.	0.015	0.	0.008	0.035	0.04
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	09/20/83-06/01/95	13	0.24	0.271	0.7	0.04	0.044	0.211	0.048	0.12	0.315	0.7
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/20/83-10/03/83	2	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/20/83-06/01/95	13	0.5	0.6	1.2	0.4	0.063	0.252	0.4	0.4	0.7	1.12
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/20/83-10/03/83	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	09/20/83-06/01/95	13	0.09	0.132	0.4	0.05	0.015	0.121	0.054	0.065	0.125	0.4
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	09/20/83-10/03/83	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/20/83-10/03/83	2	0.4	0.4	0.4	0.4	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

Parameter Inventory for Station: RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/83-07/14/94	3	7.	7.7	13.1	3.	25.87	5.086	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	10	24.5	27.4	54.	8.	177.822	13.335	8.6	20.	36.75	52.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	10	31.	28.7	42.	13.	93.567	9.673	13.3	19.	37.25	41.6
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-10/03/83	2	2765.	2765.	4600.	930.	6734450.	2595.082	**	**	**	**
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	09/20/83-10/03/83	2	3.316	3.316	3.663	2.968	0.241	0.491	**	**	**	**
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	2068.333								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	52	490.	2546.192	16000.	9.	22634136.276	4757.535	27.5	147.5	1700.	13960.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	52	2.69	2.712	4.204	0.954	0.739	0.86	1.407	2.167	3.23	4.132
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	515.596								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/20/83-10/03/83	2	467.	467.	930.	4.	428738.	654.781	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/20/83-10/03/83	2	1.785	1.785	2.968	0.602	2.8	1.673	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	60.992								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/30/83-10/03/83	3	13.2	11.8	21.1	1.1	101.47	10.073	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/30/83-10/03/83	3	7.9	5.6	8.3	0.6	18.79	4.335	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	09/20/83-10/03/83	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	11	0.05	0.061	0.1	0.04	0.001	0.023	0.04	0.04	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

EPA Water Quality Criteria Analysis for Station: RICH0064

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00400 PH	Fresh Chronic	9.	53	0	0.00	33	0	0.00	5	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	53	0	0.00	33	0	0.00	5	0	0.00	15	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	13	0	0.00	9	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	13	0	0.00	9	0	0.00	1	0	0.00	3	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00									
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	1	0.50	2	1	0.50									
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	52	36	0.69	32	21	0.66	5	3	0.60	15	12	0.80			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	1	0.50	2	1	0.50									
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	2	2	1.00	2	2	1.00									

& - 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 1983 - Station RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	2	22.5	22.5	25.5	19.5	18.	4.243	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/83-10/26/98	2	7.8	7.8	8.	7.6	0.08	0.283	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	2	7.755	7.755	8.	7.6	0.084	0.29	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	2	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**

** - 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

Annual Analysis for 1994 - Station RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	9	26.6	25.222	30.8	17.9	20.082	4.481	17.9	20.9	28.75	30.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	9	7.9	7.911	8.8	6.7	0.496	0.704	6.7	7.35	8.6	8.8
00400 PH (STANDARD UNITS)	09/20/83-10/26/98	9	7.74	7.776	8.12	7.53	0.041	0.202	7.53	7.595	7.965	8.12
00400 CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	9	7.74	7.737	8.12	7.53	0.043	0.207	7.53	7.595	7.965	8.12
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	9	0.018	0.018	0.03	0.008	0.	0.008	0.008	0.011	0.026	0.03
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	700.	4801.889	16000.	9.	48794754.111	6985.324	9.	94.	12600.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	2.845	2.836	4.204	0.954	1.273	1.128	0.954	1.967	4.084	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		684.962									

** - Less 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 RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	8	24.25	23.475	30.8	14.7	32.182	5.673	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	8	7.9	8.288	10.4	7.5	1.05	1.025	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/83-10/26/98	8	7.525	7.584	8.27	7.21	0.127	0.357	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	8	7.51	7.482	8.27	7.21	0.139	0.373	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	8	0.031	0.033	0.062	0.005	0.	0.02	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	8	410.	3005.	16000.	140.	30721628.571	5542.709	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	8	2.604	2.87	4.204	2.146	0.567	0.753	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		740.876									

** - Less 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 RICH0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	12	21.85	22.3	27.7	15.6	16.565	4.07	15.81	19.85	26.6	27.67
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	8.25	8.45	9.9	7.6	0.488	0.699	7.63	8.	8.9	9.78
00400 PH (STANDARD UNITS)	09/20/83-10/26/98	12	7.7	7.705	8.48	7.05	0.139	0.373	7.146	7.408	7.928	8.351
00400 CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	12	7.697	7.57	8.48	7.05	0.159	0.399	7.146	7.407	7.928	8.351
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	12	0.02	0.027	0.089	0.003	0.001	0.023	0.005	0.012	0.04	0.075
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	595.	3230.667	16000.	20.	35926667.152	5993.886	34.4	180.	1700.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	2.768	2.817	4.204	1.301	0.749	0.865	1.46	2.215	3.23	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		656.005									

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Annual Analysis for 1997 - Station RICH0064

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	10	24.6	24.58	29.6	16.	20.38	4.514	16.5	21.75	29.2	29.56
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	9	7.3	7.678	9.5	6.9	0.727	0.853	6.9	7.05	8.15	9.5
00400	PH (STANDARD UNITS)	09/20/83-10/26/98	10	7.665	7.644	8.11	7.27	0.055	0.234	7.283	7.483	7.768	8.078
00400	CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	10	7.664	7.59	8.11	7.27	0.058	0.241	7.283	7.482	7.768	8.078
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	10	0.022	0.026	0.054	0.008	0.	0.013	0.009	0.017	0.033	0.052
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	11	1100.	901.727	2200.	9.	491214.818	700.867	11.2	270.	1300.	2100.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	11	3.041	2.629	3.342	0.954	0.631	0.794	1.024	2.431	3.114	3.32
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		425.133									

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Annual Analysis for 1998 - Station RICH0064

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/83-10/26/98	12	26.7	25.508	29.5	16.	19.123	4.373	17.2	22.05	29.	29.47
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	8.25	8.3	9.6	7.4	0.416	0.645	7.49	7.725	8.775	9.42
00400	PH (STANDARD UNITS)	09/20/83-10/26/98	12	8.02	8.007	8.42	7.7	0.053	0.231	7.721	7.783	8.208	8.363
00400	CONVERTED PH (STANDARD UNITS)	09/20/83-10/26/98	12	8.02	7.955	8.42	7.7	0.056	0.237	7.721	7.782	8.208	8.363
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/83-10/26/98	12	0.01	0.011	0.02	0.004	0.	0.005	0.004	0.006	0.017	0.019
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	195.	1371.5	5400.	20.	4492789.727	2119.62	27.5	53.25	2900.	5400.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	2.286	2.487	3.732	1.301	0.712	0.844	1.407	1.713	3.418	3.732
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		306.93									

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Station Inventory for Station: RICH0065

NPS Station ID: RICH0065 LAT/LON: 37.439893/ -77.439060 Agency: 21VASWCB Date Created: / /
Location: RT. 1 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FAC000.85 /VA2-07-X0079/VA2-4X0079
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206047 RF1 Mile Point: 0.840 Distance from RF1: 7.50 On/Off RF1: OFF
RF3 Index: 02080207101800.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: FALLING CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	274	16.	15.961	31.	0.7	67.039	8.188	4.4	8.725	23.3	26.6
00070 TURBIDITY, (JACKSON CANDLE UNITS)	04/28/71-01/02/92	25	6.8	14.308	150.	2.	832.954	28.861	2.6	4.15	12.95	22.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/07/98	30	6.95	11.563	51.	1.1	160.803	12.681	1.91	4.025	11.9	38.26
00080 COLOR (PLATINUM-COBALT UNITS)	04/24/91-01/21/93	7	64.	75.286	101.	47.	565.238	23.775	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	128	87.5	98.648	839.	13.	7171.757	84.686	67.9	77.	98.	113.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/80-12/07/98	55	93.	95.164	214.	58.	572.658	23.93	74.	83.	103.	118.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	01/17/90-12/07/98	45	9.5	9.789	13.8	6.6	4.115	2.028	7.18	8.1	11.55	12.9
00300 OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	228	9.05	9.457	15.4	5.1	3.917	1.979	7.29	8.	10.8	12.2
00310p BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	164	1.	1.752	9.	0.5	1.262	1.124	1.	1.	2.	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	158	15.	15.873	32.	2.	26.914	5.188	10.	12.	19.	23.1
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	274	7.	7.018	9.02	4.45	0.261	0.511	6.5	6.7	7.3	7.52
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	274	7.	6.531	9.02	4.45	0.498	0.706	6.5	6.7	7.3	7.52
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	274	0.1	0.294	35.481	0.001	4.63	2.152	0.03	0.05	0.2	0.316
00403 PH, LAB, STANDARD UNITS SU	10/24/68-12/07/98	73	6.7	6.708	7.4	5.8	0.094	0.306	6.3	6.5	6.9	7.
00403 CONVERTED PH, LAB, STANDARD UNITS	10/24/68-12/07/98	73	6.7	6.599	7.4	5.8	0.106	0.325	6.3	6.5	6.9	7.
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/68-12/07/98	73	0.2	0.252	1.585	0.04	0.048	0.219	0.1	0.126	0.316	0.501
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	10/24/68-12/07/98	73	18.	17.973	33.	6.	34.444	5.869	10.	13.	22.5	25.
00500 RESIDUE, TOTAL (MG/L)	10/24/68-12/07/98	73	81.	89.959	229.	38.	1181.179	34.368	65.4	73.	91.	129.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-12/07/98	73	28.	28.178	88.	5.	180.343	13.429	15.	20.	31.	38.6
00510 RESIDUE, TOTAL FIXED (MG/L)	04/28/69-12/07/98	71	54.	60.38	157.	33.	630.982	25.119	41.2	48.	61.	96.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	166	5.	10.744	163.	0.5	351.854	18.758	2.5	2.5	11.25	22.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	168	2.5	3.711	27.	0.	13.609	3.689	1.	2.	5.	6.1
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	166	3.	7.798	136.	0.	243.6	15.608	1.5	2.375	7.	17.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	226##	0.05	0.12	10.	0.005	0.445	0.667	0.02	0.05	0.07	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	226##	0.005	0.01	0.29	0.005	0.	0.021	0.005	0.005	0.01	0.02
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	211	0.22	0.242	1.2	0.005	0.018	0.134	0.1	0.15	0.32	0.4
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	223	0.4	0.501	11.79	0.05	0.634	0.796	0.2	0.3	0.5	0.7
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-08/07/80	15	0.16	0.19	0.44	0.025	0.012	0.109	0.058	0.12	0.24	0.386
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	149	0.05	0.069	0.4	0.01	0.002	0.043	0.04	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	110	0.02	0.028	0.36	0.005	0.002	0.042	0.006	0.01	0.03	0.05
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	131	6.	6.654	18.	1.	6.126	2.475	4.	5.	7.4	10.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	63	26.	27.73	52.	16.	61.232	7.825	20.	22.	30.	41.2
00927 MAGNESIUM, TOTAL (MG/L AS MG)	07/15/92-01/21/93	2	1675.	1675.	1740.	1610.	8450.	91.924	**	**	**	**

** - Less 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: RICH0065

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER	MG/L	10/24/88-12/07/98	61	8.	9.754	48.	2.5	43.147	6.569	6.	7.	10.	15.
00945	SULFATE, TOTAL (MG/L AS SO4)		11/29/88-12/07/98	60	7.	7.65	12.	4.	3.791	1.947	5.	6.25	9.	10.
00951	FLUORIDE, TOTAL (MG/L AS F)		11/29/88-04/19/93	27##	0.1	0.094	0.25	0.05	0.003	0.051	0.05	0.05	0.13	0.146
00955	SILICA, DISSOLVED (MG/L AS SIO2)		04/19/89-01/21/93	24	10.7	10.508	12.8	7.8	1.008	1.004	9.25	9.85	11.2	11.35
01002	ARSENIC, TOTAL (UG/L AS AS)		03/15/71-04/19/93	21##	2.5	3.286	5.	0.5	3.214	1.793	0.6	1.75	5.	5.
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)		10/25/79-07/27/92	2##	3.093	3.093	5.8	0.385	14.661	3.829	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)		07/15/92-01/21/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)		11/23/70-04/19/93	23##	5.	4.413	5.	0.5	2.401	1.55	0.5	5.	5.	5.
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		10/25/79-07/27/92	2##	0.125	0.125	0.15	0.1	0.001	0.035	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		10/25/79-07/27/92	2	2.275	2.275	3.2	1.35	1.711	1.308	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-04/19/93	32##	5.	5.797	10.	0.5	4.836	2.199	5.	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)		03/24/70-04/19/93	31##	5.	7.355	40.	5.	47.237	6.873	5.	5.	5.	12.4
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)		10/25/79-07/27/92	2	1.385	1.385	2.	0.77	0.756	0.87	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)		06/29/70-04/19/93	13	894.	1024.385	2600.	470.	281140.256	530.227	522.	740.	1181.	2074.
01051	LEAD, TOTAL (UG/L AS PB)		06/29/70-04/19/93	30##	5.	7.05	20.	0.5	20.351	4.511	5.	5.	10.	13.9
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)		10/25/79-07/27/92	2##	1.34	1.34	1.93	0.75	0.696	0.834	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)		03/24/70-04/19/93	13	80.	131.546	707.9	46.4	31085.358	176.31	47.48	59.	119.95	487.66
01059	THALLIUM, TOTAL (UG/L AS TL)		07/15/92-01/21/93	2##	10.	10.	10.	10.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)		01/29/73-11/17/77	7##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)		05/18/82-04/19/93	12##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		10/25/79-07/27/92	2##	0.85	0.85	0.95	0.75	0.02	0.141	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)		03/24/70-04/19/93	32	10.	12.094	30.	5.	73.765	8.589	5.	5.	20.	29.1
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)		10/25/79-07/27/92	2	9.605	9.605	11.1	8.11	4.47	2.114	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)		01/17/91-04/19/93	10##	10.	9.	10.	5.	4.444	2.108	5.	8.75	10.	10.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)		06/28/68-10/27/70	15	2300.	2706.	11000.	230.	9251925.714	3041.698	230.	430.	4300.	8900.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150		06/28/68-10/27/70	15	3.362	3.17	4.041	2.362	0.275	0.525	2.362	2.633	3.633	3.942
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506				GEOMETRIC MEAN =	1479.942								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		10/04/94-12/07/98	29	230.	1084.172	16000.	9.	9325063.291	3053.697	45.	73.	565.	2200.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		10/04/94-12/07/98	29	2.362	2.382	4.204	0.954	0.488	0.699	1.653	1.862	2.748	3.342
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				GEOMETRIC MEAN =	241.118								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	217	100.	508.986	8000.	50.	1468726.745	1211.91	50.	50.	350.	1320.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	217	2.	2.183	3.903	1.699	0.339	0.582	1.699	1.699	2.54	3.12
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	152.352								
32240	TANNIN AND LIGNIN (MG/L)		01/02/92-04/19/93	5	0.9	0.96	1.3	0.6	0.108	0.329	**	**	**	**
34259	DELTA BENZENE HEXACHLORIDE	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671	PCB - 1016	TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442	DICAMBA (BANVEL)	WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451	DICHLORPROP	WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745	2,4-DB	WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)		10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)		10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)		10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)		10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)		05/06/81-07/27/92	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP		03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP		03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L		03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L		10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)		04/28/71-03/28/85	4	0.01	0.018	0.05	0.	0.001	0.024	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)		10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)		03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	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: RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	03/15/71-09/11/80	3	0.	0.047	0.14	0.	0.007	0.081	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/08/75-05/18/82	2	0.14	0.14	0.28	0.	0.039	0.198	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
46570 HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	04/24/91-04/19/93	8	21.	21.875	27.	19.	6.411	2.532	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	74##	0.05	0.122	4.7	0.025	0.292	0.54	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	116	0.02	0.065	4.199	0.005	0.151	0.388	0.005	0.01	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/19/93	31##	0.25	0.273	1.9	0.15	0.096	0.31	0.15	0.15	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-07/27/92	2##	0.063	0.063	0.1	0.025	0.003	0.053	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82032 CALCIUM - TOTAL UG/L (AS CA)	07/15/92-01/21/93	2	5700.	5700.	5890.	5510.	72200.	268.701	**	**	**	**
82078 TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	04/02/92-04/05/94	9	9.8	11.6	24.	2.3	67.205	8.198	2.3	4.1	19.35	24.

** - Less 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: RICH0065

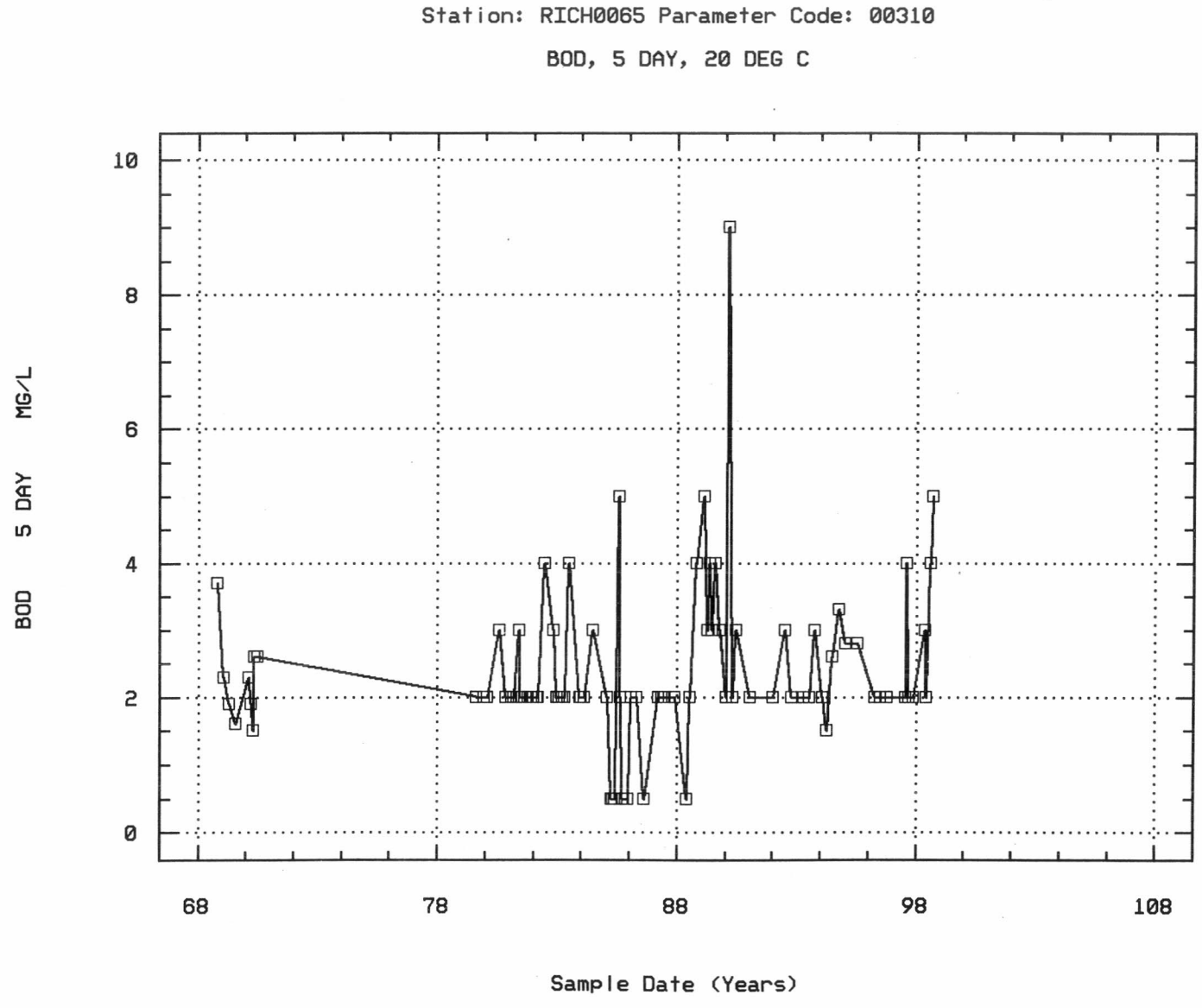
Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	25	1	0.04	4	0	0.00	10	1	0.10	11	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	30	1	0.03	13	0	0.00	10	1	0.10	7	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	45	0	0.00	17	0	0.00	17	0	0.00	11	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	228	0	0.00	66	0	0.00	90	0	0.00	72	0	0.00			
00400 PH	Fresh Chronic	9.	274	2	0.01	83	0	0.00	106	2	0.02	85	0	0.00			
	Other-Lo Lim.	6.5	273&	33	0.12	83	6	0.07	106	17	0.16	84	10	0.12			
00403 PH, LAB	Fresh Chronic	9.	73	0	0.00	21	0	0.00	28	0	0.00	24	0	0.00			
	Other-Lo Lim.	6.5	73	19	0.26	21	4	0.19	28	9	0.32	24	6	0.25			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	226	0	0.00	64	0	0.00	91	0	0.00	71	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	211	0	0.00	61	0	0.00	87	0	0.00	63	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	15	0	0.00	3	0	0.00	4	0	0.00	8	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	61	0	0.00	18	0	0.00	25	0	0.00	18	0	0.00			
	Drinking Water	250.	61	0	0.00	18	0	0.00	25	0	0.00	18	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	60	0	0.00	18	0	0.00	24	0	0.00	18	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	27	0	0.00	4	0	0.00	13	0	0.00	10	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	21	0	0.00	4	0	0.00	7	0	0.00	10	0	0.00			
	Drinking Water	50.	21	0	0.00	4	0	0.00	7	0	0.00	10	0	0.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	4.	0&	0	0.00												
01027 CADMIUM, TOTAL	Fresh Acute	3.9	3&	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	5.	3&	0	0.00	1	0	0.00				2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	32	0	0.00	5	0	0.00	12	0	0.00	15	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	31	2	0.06	5	0	0.00	12	1	0.08	14	1	0.07			
	Drinking Water	1300.	31	0	0.00	5	0	0.00	12	0	0.00	14	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	30	0	0.00	5	0	0.00	13	0	0.00	12	0	0.00			
	Drinking Water	15.	30	2	0.07	5	0	0.00	13	2	0.15	12	0	0.00			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	0&	0	0.00												
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	100.	7	0	0.00	1	0	0.00	2	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

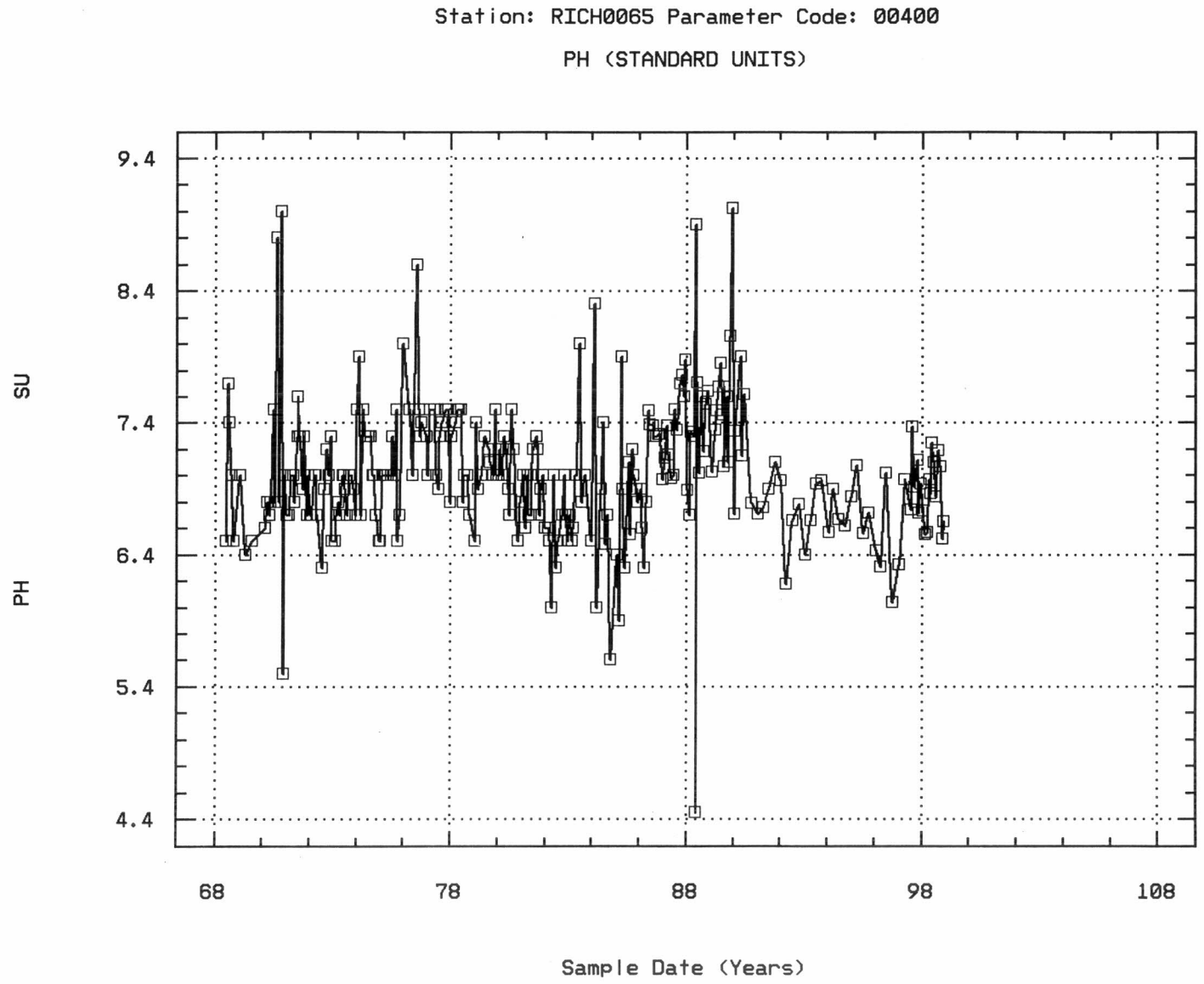
EPA Water Quality Criteria Analysis for Station: RICH0065

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
01067	NICKEL, TOTAL	Fresh Acute	1400.	12	0	0.00	2	0	0.00	5	0	0.00	5	0	0.00			
		Drinking Water	100.	12	0	0.00	2	0	0.00	5	0	0.00	5	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	32	0	0.00	5	0	0.00	12	0	0.00	15	0	0.00			
		Drinking Water	5000.	32	0	0.00	5	0	0.00	12	0	0.00	15	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	50.	10	0	0.00	2	0	0.00	5	0	0.00	3	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	15	8	0.53	7	6	0.86	3	1	0.33	5	1	0.20			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	29	16	0.55	12	6	0.50	10	7	0.70	7	3	0.43			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	217	89	0.41	59	27	0.46	91	34	0.37	67	28	0.42			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
		Drinking Water	3.	1	0	0.00							1	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00							2	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	31	0	0.00	6	0	0.00	13	0	0.00	12	0	0.00			
		Drinking Water	2.	31	0	0.00	6	0	0.00	13	0	0.00	12	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	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


Station: RICH0065 Parameter Code: 00310
BOD, 5 DAY, 20 DEG C
BOD 5 DAY MG/L
10
8
6
4
2
0
68
78
88
98
108
Sample Date (Years)

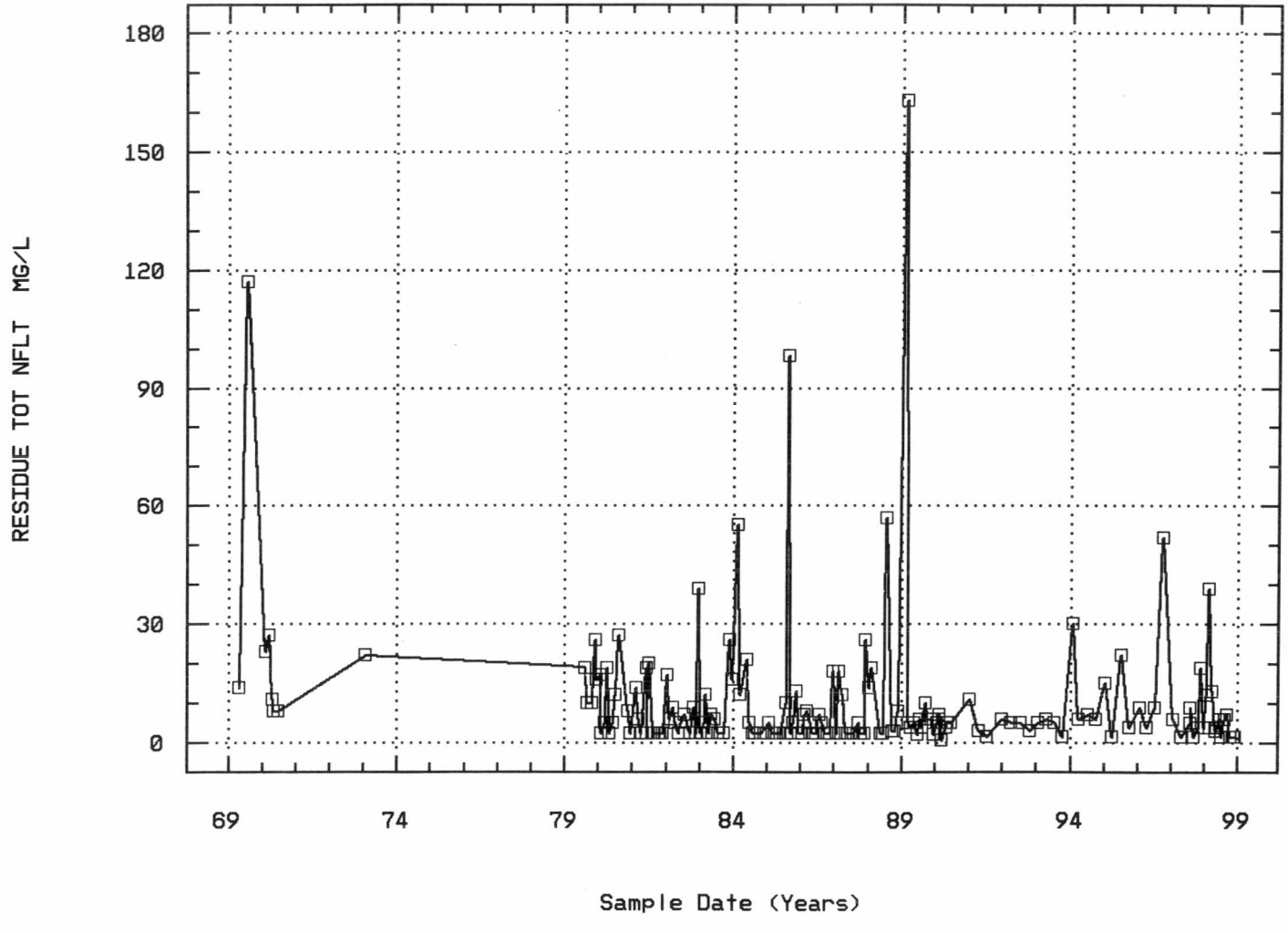
RT. 1 BRIDGE


Station: RICH0065 Parameter Code: 00400
PH (STANDARD UNITS)
PH
SU
9.4
8.4
7.4
6.4
5.4
4.4
68
78
88
98
108
Sample Date (Years)

RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00530

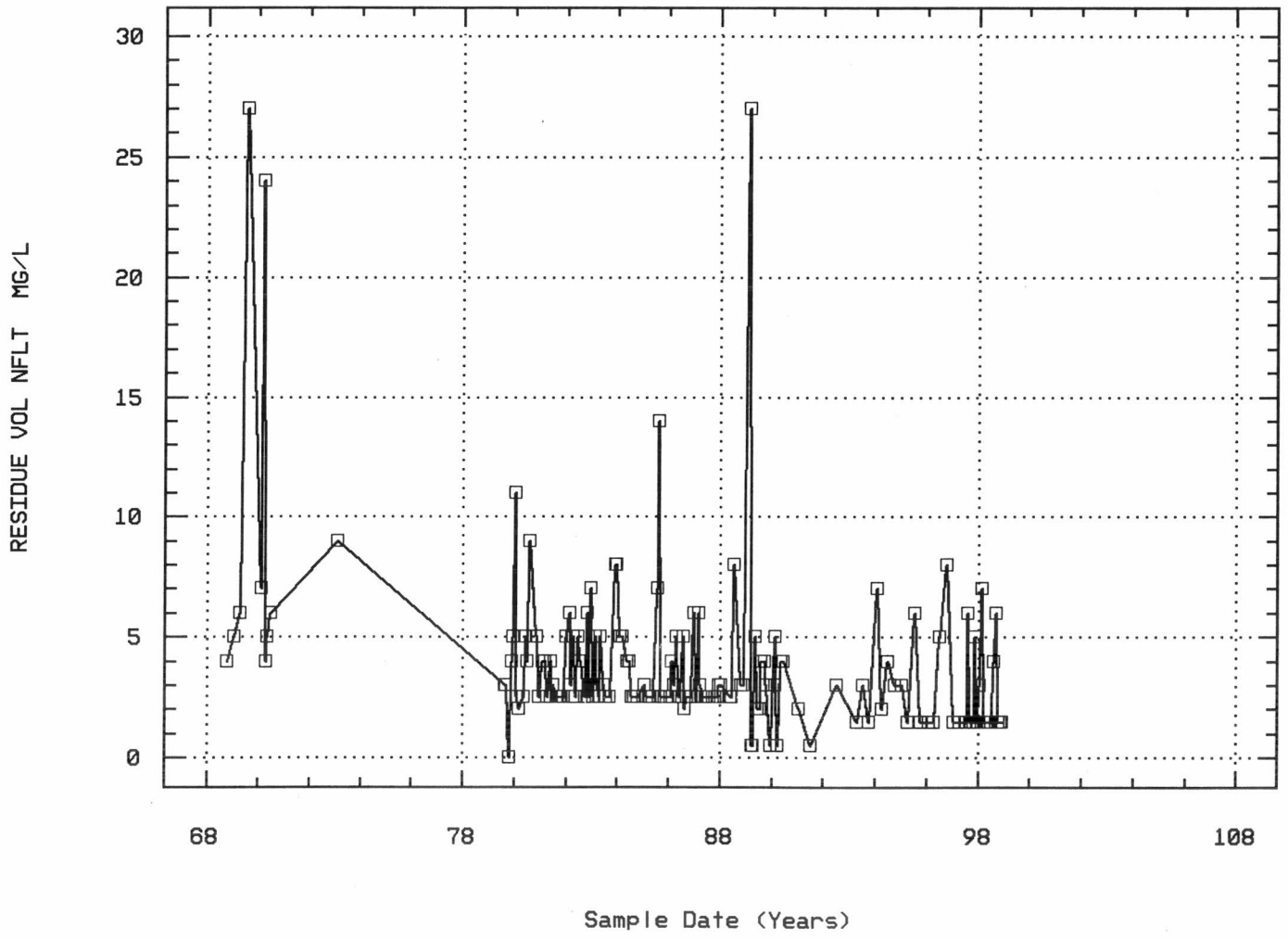
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00535

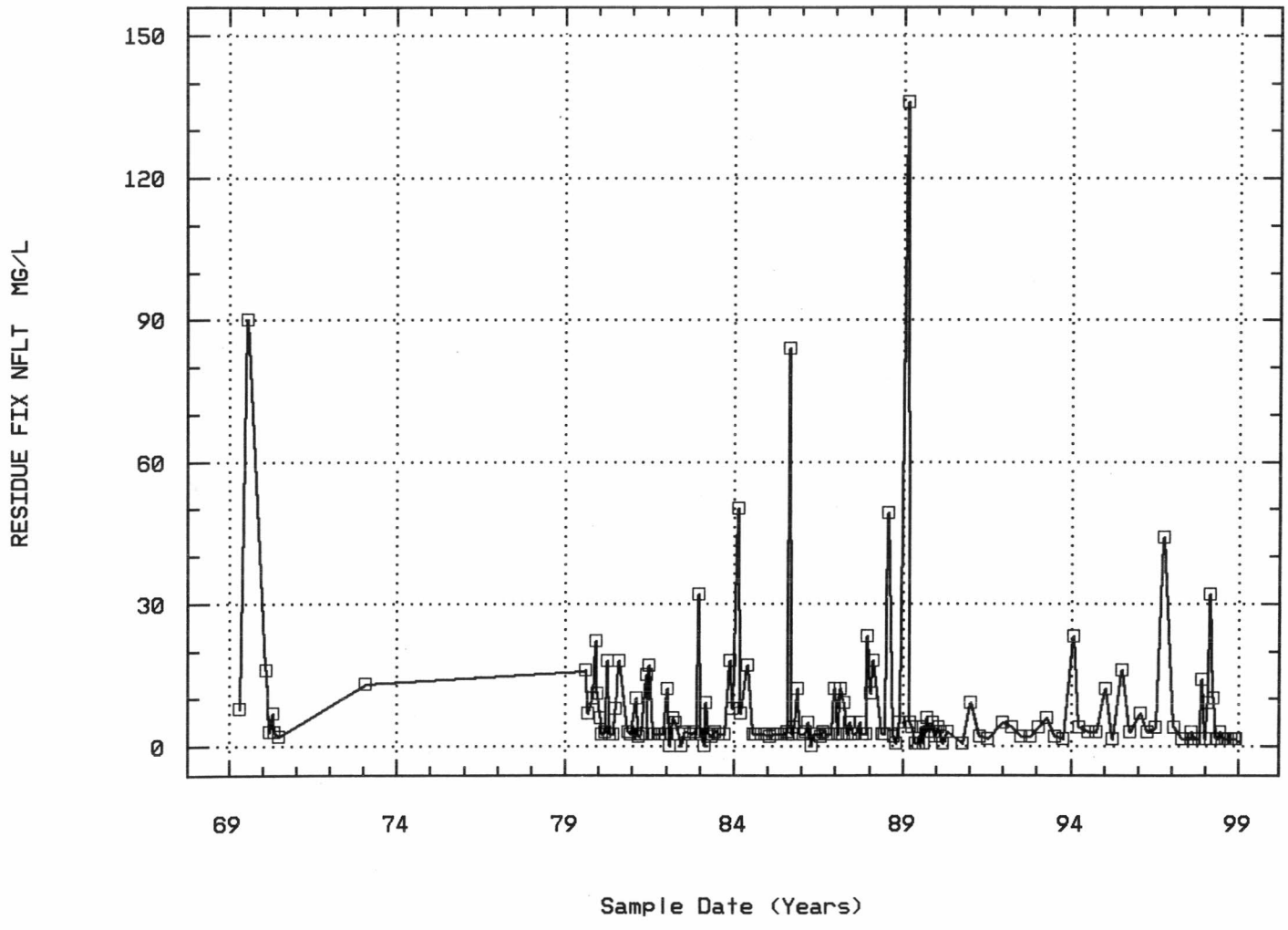
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00540

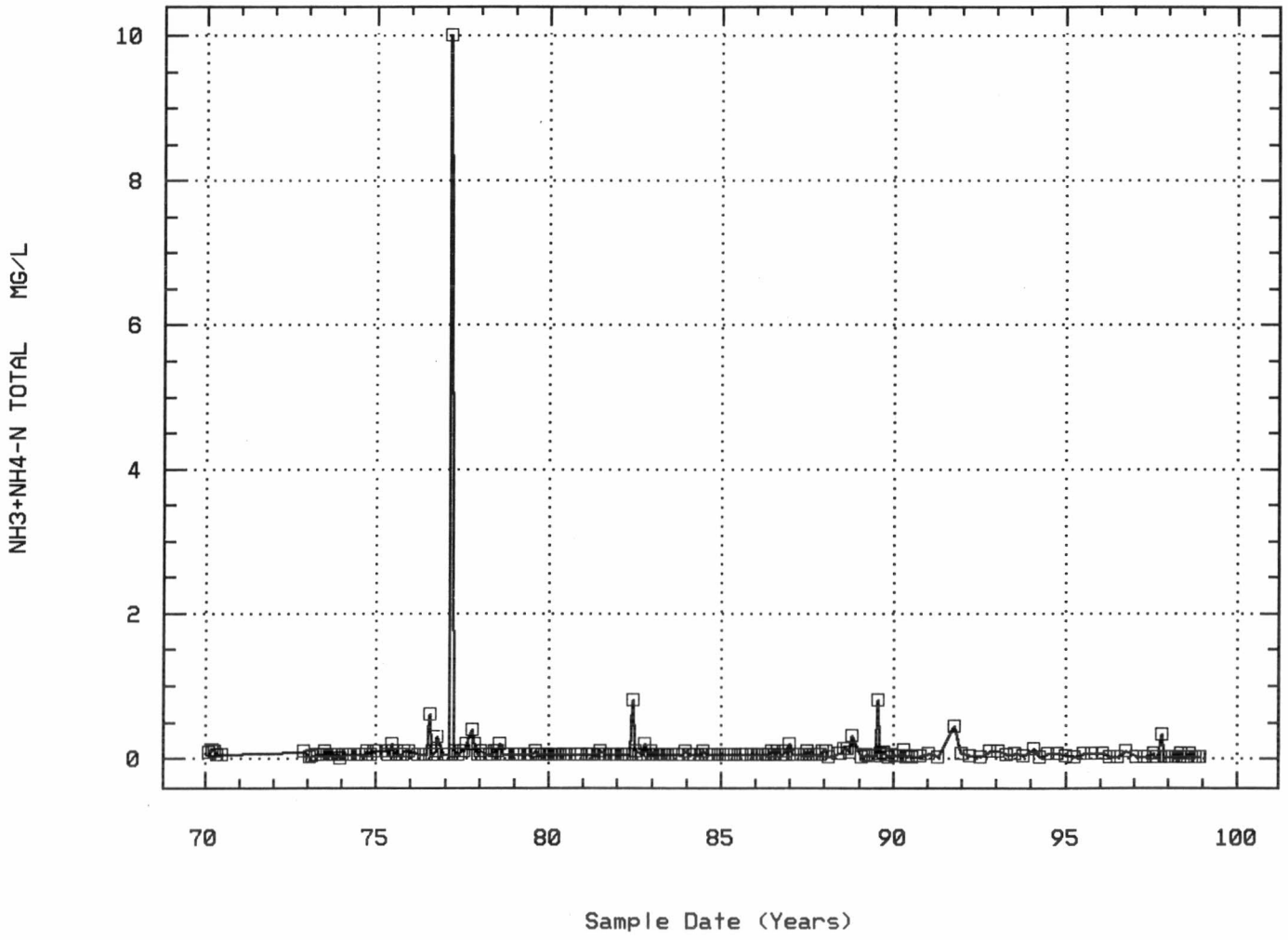
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00610

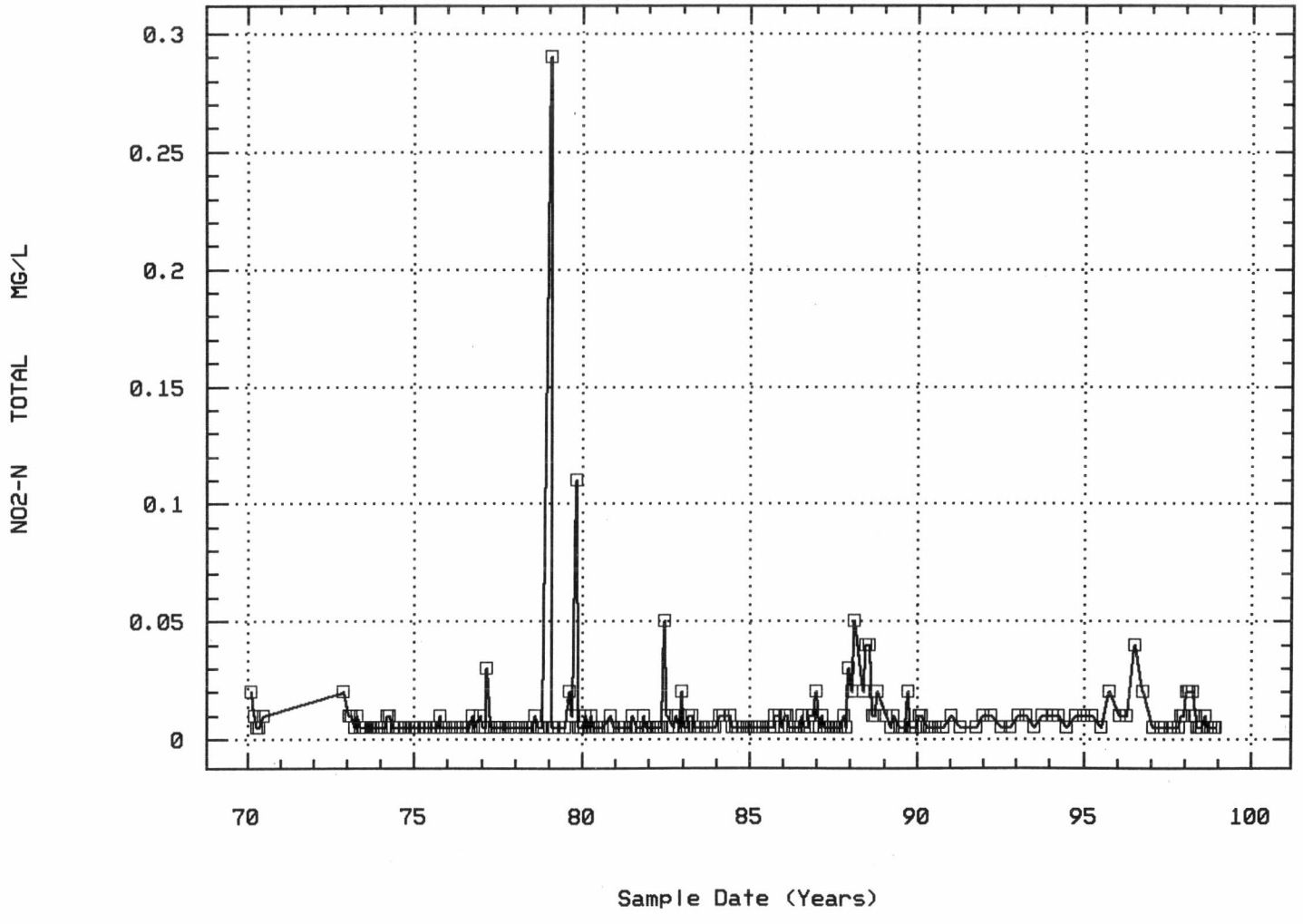
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00615

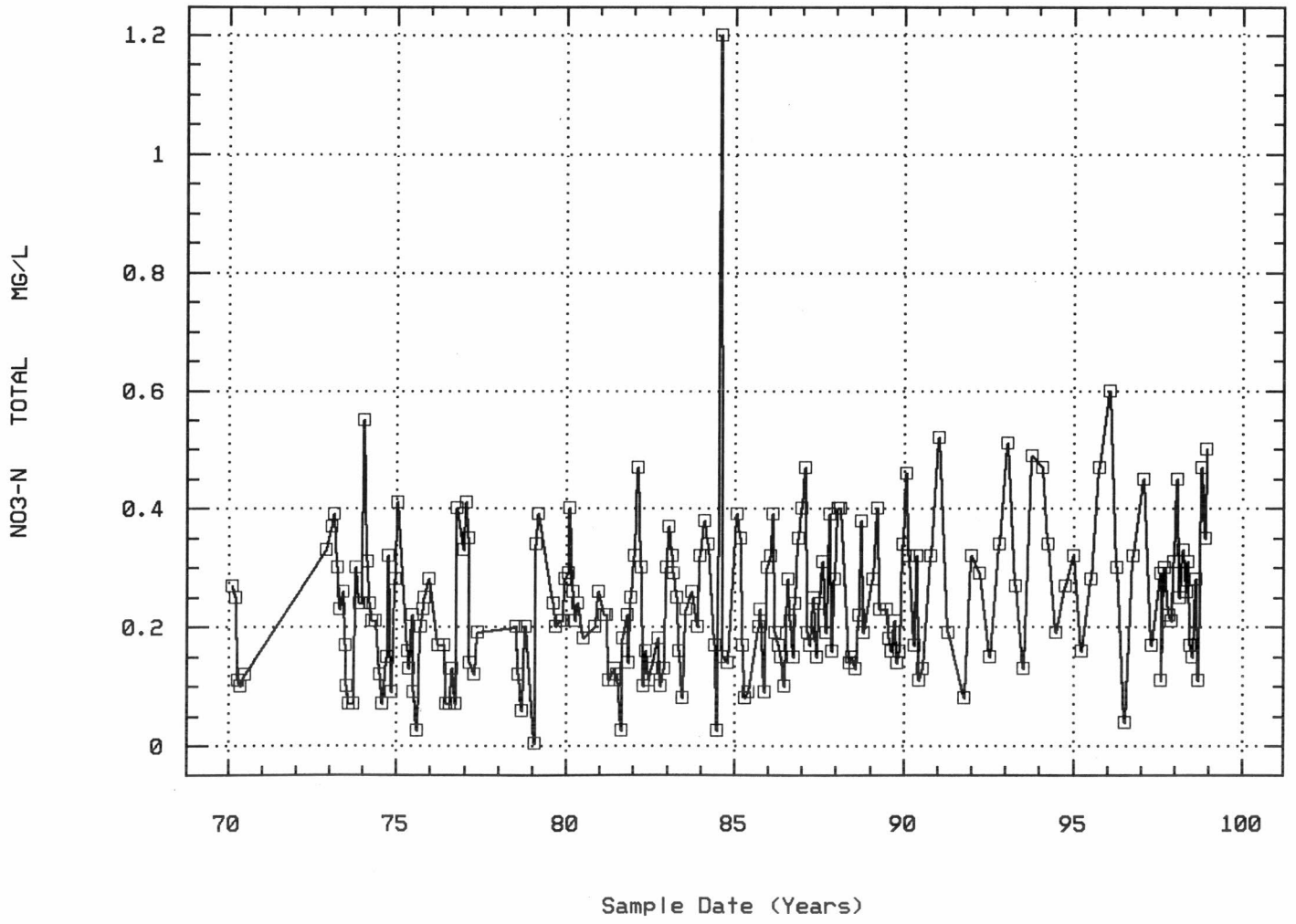
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00620

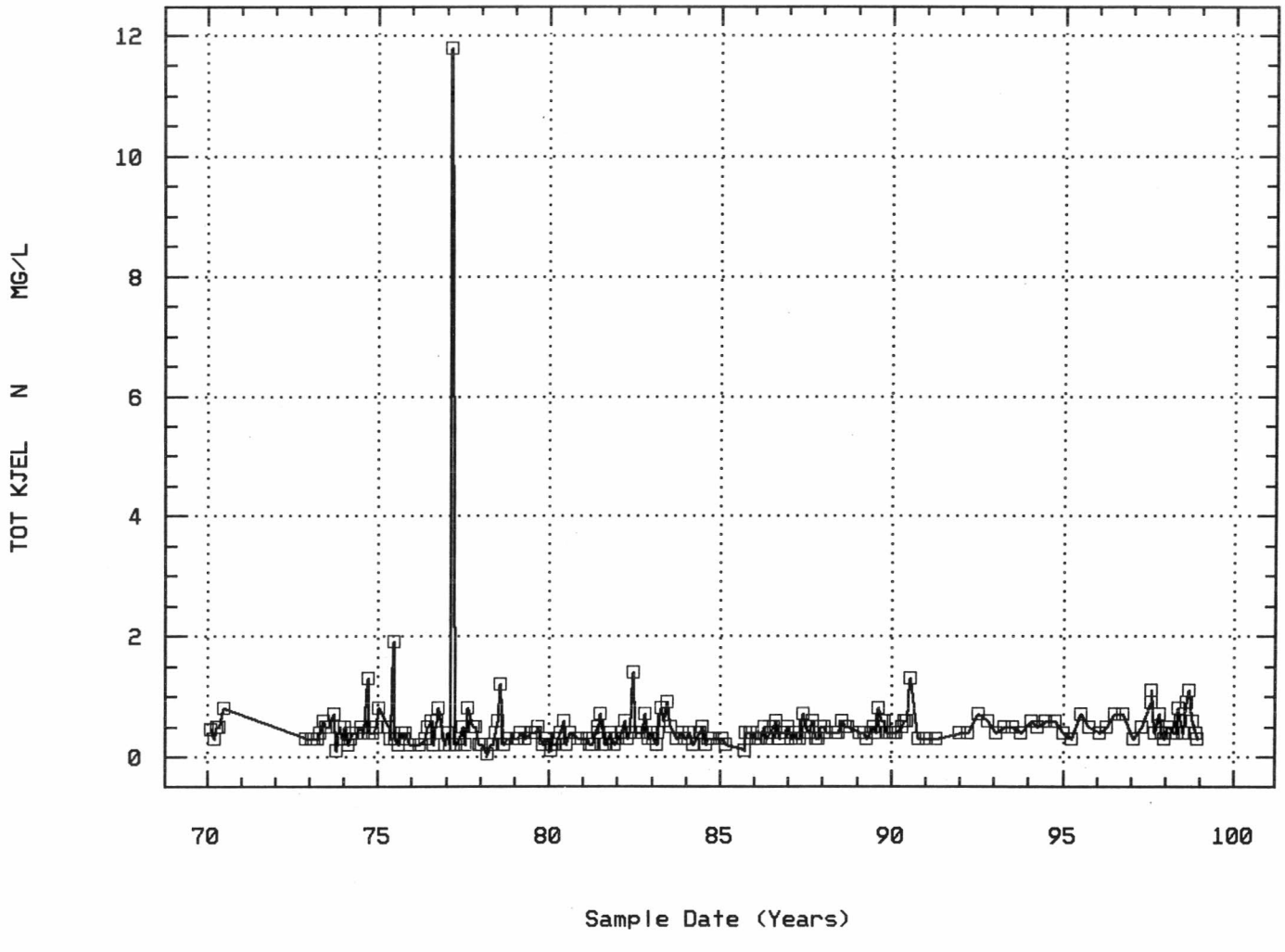
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00625

NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 1 BRIDGE

Annual Analysis for 1968 - Station RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	5	26.1	25.32	30.	18.9	19.172	4.379	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	5	7.2	7.18	8.	6.2	0.442	0.665	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	5	7.	7.02	7.7	6.5	0.287	0.536	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	5	7.	6.8	7.7	6.5	0.347	0.589	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	5	0.1	0.158	0.316	0.02	0.022	0.147	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	1	4.	4.	4.	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 box-and-whisker plot

Annual Analysis for 1969 - Station RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	3	20.	17.233	25.	6.7	89.463	9.459	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	3	8.4	9.067	11.4	7.4	4.333	2.082	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	3	1.9	1.933	2.3	1.6	0.123	0.351	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	3	6.5	6.633	7.	6.4	0.103	0.321	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	3	6.5	6.566	7.	6.4	0.11	0.332	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	3	0.316	0.271	0.398	0.1	0.024	0.154	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-12/07/98	2	65.5	65.5	117.	14.	5304.5	72.832	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	3	6.	12.667	27.	5.	154.333	12.423	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-12/07/98	2	49.	49.	90.	8.	3362.	57.983	**	**	**	**

** - Less 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 RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	11	15.6	14.591	23.9	4.4	58.663	7.659	4.4	5.6	22.2	23.78
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	11	9.	9.509	12.	7.6	2.323	1.524	7.64	8.2	10.4	12.
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	5	2.3	2.18	2.6	1.5	0.227	0.476	**	**	**	**
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	11	6.8	7.118	9.	5.5	1.	1.	5.72	6.7	7.5	8.96
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	11	6.8	6.4	9.	5.5	1.567	1.252	5.72	6.7	7.5	8.96
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	11	0.158	0.398	3.162	0.001	0.847	0.92	0.001	0.032	0.2	2.58
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-12/07/98	5	11.	15.4	27.	8.	80.3	8.961	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	5	6.	9.2	24.	4.	69.7	8.349	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-12/07/98	5	3.	6.2	16.	2.	33.7	5.805	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-12/07/98	5	0.09	0.082	0.12	0.05	0.001	0.031	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	5	0.01	0.01	0.02	0.005	0.	0.006	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	5	0.12	0.17	0.27	0.1	0.007	0.083	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-12/07/98	5	0.5	0.51	0.8	0.3	0.033	0.182	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	2	2550.	2550.	2700.	2400.	45000.	212.132	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	2	3.406	3.406	3.431	3.38	0.001	0.036	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		2545.584									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-08/07/80	5	0.05	0.045	0.05	0.025	0.	0.011	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/07/98	5	0.02	0.024	0.04	0.01	0.	0.011	**	**	**	**

** - 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

Annual Analysis for 1971 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	12	17.8	15.842	27.8	2.2	93.634	9.676	2.53	5.6	25.575	27.62
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	12	8.6	9.042	11.5	7.2	1.868	1.367	7.44	8.05	10.45	11.35
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.	7.025	7.6	6.7	0.086	0.293	6.7	6.725	7.3	7.51
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.	6.946	7.6	6.7	0.092	0.304	6.7	6.725	7.3	7.51
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.1	0.113	0.2	0.025	0.004	0.064	0.033	0.05	0.189	0.2
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	100.	1195.455	8000.	50.	5912227.273	2431.507	50.	50.	1300.	7000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	2.	2.342	3.903	1.699	0.653	0.808	1.699	1.699	3.114	3.818
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		220.023									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	12.2	13.582	28.9	1.1	68.306	8.265	2.1	8.9	22.2	27.78
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	10	10.1	9.37	11.8	6.4	3.76	1.939	6.44	7.625	10.95	11.76
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.9	6.845	7.3	6.3	0.089	0.298	6.34	6.7	7.	7.28
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.9	6.75	7.3	6.3	0.099	0.314	6.34	6.7	7.	7.28
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	11	0.126	0.178	0.501	0.05	0.018	0.132	0.053	0.1	0.2	0.464
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	100.	390.909	2100.	50.	365909.091	604.904	50.	50.	400.	1820.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	2.	2.24	3.322	1.699	0.314	0.561	1.699	1.699	2.602	3.227
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		173.942									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	1	0.09	0.09	0.09	0.09	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 1973 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	15.6	15.618	27.8	2.2	83.29	9.126	2.64	5.6	24.4	27.36
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	12	8.9	9.517	13.6	7.2	4.578	2.14	7.2	7.65	10.8	13.42
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	6.85	6.825	7.	6.5	0.027	0.166	6.56	6.7	7.	7.
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	6.847	6.795	7.	6.5	0.028	0.169	6.56	6.7	7.	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.142	0.16	0.316	0.1	0.004	0.066	0.1	0.1	0.2	0.281
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	12##	0.05	0.046	0.1	0.005	0.001	0.023	0.007	0.043	0.05	0.085
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.009	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	12	0.24	0.228	0.39	0.07	0.012	0.108	0.07	0.118	0.3	0.384
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	12	0.45	0.458	1.	0.1	0.055	0.235	0.16	0.3	0.575	0.91
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	12##	75.	333.333	1800.	50.	304696.97	551.994	50.	50.	350.	1590.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	12##	1.849	2.116	3.255	1.699	0.318	0.564	1.699	1.699	2.527	3.191
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		130.657									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	12##	0.05	0.063	0.2	0.05	0.002	0.043	0.05	0.05	0.05	0.155
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	12##	0.05	0.062	0.2	0.01	0.002	0.048	0.016	0.05	0.05	0.17

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	13.3	14.864	26.1	6.7	65.875	8.116	6.7	6.7	25.	26.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	11	8.8	9.327	12.8	5.4	6.274	2.505	5.64	6.8	11.4	12.64
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	11	7.3	7.155	7.9	6.5	0.175	0.418	6.54	6.7	7.5	7.82
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	11	7.3	6.984	7.9	6.5	0.207	0.455	6.54	6.7	7.5	7.82
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	11	0.05	0.104	0.316	0.013	0.009	0.095	0.016	0.032	0.2	0.293
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11	0.21	0.232	0.55	0.07	0.018	0.136	0.074	0.12	0.31	0.504
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	11	0.4	0.482	1.299	0.2	0.081	0.285	0.22	0.4	0.5	1.139
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	50.	181.818	600.	50.	40136.364	200.341	50.	50.	300.	580.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	1.699	2.041	2.778	1.699	0.194	0.44	1.699	1.699	2.477	2.762
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		109.857									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	11##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	11##	0.05	0.05	0.05	0.05	0.	0.	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 1975 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	13	17.8	16.285	25.	6.1	37.916	6.158	7.22	10.85	21.65	24.76
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	13	10.	9.662	12.	7.6	1.936	1.391	7.68	8.4	10.3	12.
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	13	7.	7.015	8.	6.5	0.168	0.41	6.5	6.7	7.15	7.8
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	13	7.	6.878	8.	6.5	0.189	0.434	6.5	6.7	7.15	7.8
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	13	0.1	0.133	0.316	0.01	0.01	0.098	0.019	0.075	0.2	0.316
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	10	0.1	0.09	0.2	0.05	0.002	0.046	0.05	0.05	0.1	0.19
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10	0.21	0.2	0.41	0.025	0.012	0.107	0.032	0.12	0.258	0.397
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	10	0.35	0.53	1.899	0.2	0.262	0.512	0.2	0.275	0.575	1.789
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	100.	972.727	6000.	50.	3627181.818	1904.516	50.	50.	400.	5440.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	2.	2.342	3.778	1.699	0.546	0.739	1.699	1.699	2.602	3.724
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		219.713									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	10##	0.04	0.032	0.05	0.005	0.	0.02	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

Annual Analysis for 1976 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	8	21.95	20.	27.2	3.9	60.366	7.77	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	8	9.15	9.225	11.4	7.7	1.208	1.099	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	8	7.45	7.513	8.6	7.	0.221	0.47	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	8	7.447	7.375	8.6	7.	0.243	0.493	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	8	0.036	0.042	0.1	0.003	0.001	0.028	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	8##	0.05	0.156	0.6	0.05	0.04	0.199	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.15	0.176	0.4	0.07	0.016	0.125	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	8	0.4	0.425	0.8	0.2	0.054	0.231	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7	100.	135.714	400.	50.	16428.571	128.174	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7	2.	2.	2.602	1.699	0.121	0.348	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		100.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	8##	0.008	0.021	0.1	0.005	0.001	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 1977 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	16.	12.9	28.	1.1	99.764	9.988	1.14	2.	21.	27.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	10	9.8	9.62	13.3	5.2	6.237	2.497	5.46	7.875	11.35	13.27
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	10	7.35	7.24	7.5	6.8	0.08	0.284	6.81	6.975	7.5	7.5
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	10	7.347	7.154	7.5	6.8	0.089	0.298	6.81	6.975	7.5	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	10	0.045	0.07	0.158	0.032	0.002	0.047	0.032	0.032	0.106	0.155
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	11	0.1	1.027	10.	0.05	8.867	2.978	0.05	0.05	0.2	8.08
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.005	0.007	0.03	0.005	0.	0.008	0.005	0.005	0.005	0.025
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	5	0.19	0.242	0.41	0.12	0.017	0.13	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	11	0.4	1.417	11.79	0.2	11.871	3.445	0.2	0.2	0.5	9.592
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	100.	340.	2300.	50.	481555.556	693.942	50.	50.	225.	2100.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	2.	2.124	3.362	1.699	0.275	0.524	1.699	1.699	2.345	3.273
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		132.947									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	11##	0.05	0.495	4.7	0.05	1.947	1.395	0.05	0.05	0.1	3.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	11##	0.005	0.389	4.199	0.005	1.597	1.264	0.005	0.005	0.01	3.365

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Annual Analysis for 1978 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	9	15.5	15.189	27.	0.7	84.459	9.19	0.7	7.	24.	27.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	9	8.6	9.089	15.4	6.6	7.689	2.773	6.6	7.25	10.15	15.4
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	9	7.3	7.189	7.5	6.7	0.101	0.318	6.7	6.9	7.5	7.5
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	9	7.3	7.083	7.5	6.7	0.114	0.337	6.7	6.9	7.5	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	9	0.05	0.083	0.2	0.032	0.004	0.062	0.032	0.032	0.129	0.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	9##	0.05	0.083	0.2	0.05	0.003	0.05	0.05	0.05	0.1	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.16	0.145	0.2	0.06	0.005	0.068	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	9	0.2	0.372	1.2	0.05	0.121	0.347	0.05	0.2	0.5	1.2
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	100.	511.111	3400.	50.	1204861.111	1097.662	50.	50.	400.	3400.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	2.	2.156	3.531	1.699	0.398	0.631	1.699	1.699	2.54	3.531
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		143.312									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	9	0.01	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.03

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Annual Analysis for 1979 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	10	14.5	14.5	25.	2.	61.667	7.853	2.2	8.5	22.625	24.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	5	69.	66.	74.	55.	66.5	8.155	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	10	9.15	10.02	14.	8.	4.253	2.062	8.03	8.45	12.1	13.84
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	5	1.	1.4	2.	1.	0.3	0.548	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	5	18.	20.6	32.	15.	43.8	6.618	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	10	7.05	7.09	7.5	6.5	0.081	0.285	6.54	6.975	7.325	7.49
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	10	7.047	6.997	7.5	6.5	0.091	0.301	6.54	6.975	7.325	7.49
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	10	0.09	0.101	0.316	0.032	0.007	0.082	0.032	0.048	0.106	0.297
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	5	16.	16.2	26.	10.	45.2	6.723	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	5	3.	3.	5.	0.	3.5	1.871	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	5	11.	13.2	22.	7.	34.7	5.891	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.005	0.046	0.29	0.005	0.008	0.092	0.005	0.005	0.043	0.272
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.225	0.234	0.39	0.005	0.013	0.115	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	10	0.3	0.34	0.5	0.2	0.007	0.084	0.21	0.3	0.4	0.49

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Annual Analysis for 1979 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	5##	0.05	0.07	0.1	0.05	0.001	0.027	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	5	0.03	0.03	0.05	0.01	0.	0.02	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	5	10.	11.2	14.	8.	7.2	2.683	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	300.	1316.667	8000.	50.	6736875.	2595.549	50.	50.	1400.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	2.477	2.5	3.903	1.699	0.591	0.769	1.699	1.699	3.06	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		316.291									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	5	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

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Annual Analysis for 1980 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	14.5	15.136	31.	3.	80.355	8.964	3.7	7.	21.	30.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	8	89.	86.25	112.	59.	311.357	17.645	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	11	10.	9.373	12.	6.2	3.55	1.884	6.34	7.9	11.	11.84
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	10	1.	1.4	3.	1.	0.489	0.699	1.	1.	2.	2.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	10	13.5	14.2	20.	10.	14.622	3.824	10.	10.75	19.	19.9
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	11	7.	7.027	7.5	6.5	0.084	0.29	6.54	6.8	7.2	7.46
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	11	7.	6.937	7.5	6.5	0.093	0.305	6.54	6.8	7.2	7.46
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	11	0.1	0.116	0.316	0.032	0.007	0.083	0.035	0.063	0.158	0.293
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	10	6.5	10.05	27.	2.5	71.747	8.47	2.5	2.5	17.5	26.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	10	3.25	4.45	11.	1.	10.414	3.227	1.1	2.375	6.	10.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	10	3.	6.6	18.	2.5	39.489	6.284	2.5	2.5	10.5	18.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.25	0.255	0.4	0.18	0.005	0.069	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	10	0.3	0.3	0.6	0.1	0.02	0.141	0.11	0.2	0.4	0.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	8##	0.05	0.075	0.2	0.05	0.003	0.053	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	8	0.02	0.02	0.06	0.005	0.	0.018	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	10	9.5	9.6	13.	7.	4.711	2.171	7.	7.75	12.	12.9
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	200.	430.	2200.	50.	434555.556	659.208	50.	50.	475.	2050.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	2.239	2.266	3.342	1.699	0.347	0.589	1.699	1.699	2.663	3.293
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		184.699									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	2##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	2##	0.013	0.013	0.02	0.005	0.	0.011	**	**	**	**

** - 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

Annual Analysis for 1981 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	12	17.75	17.083	28.	2.5	74.356	8.623	3.25	9.5	25.5	27.55
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	107.	100.727	121.	73.	302.218	17.384	73.6	83.	113.	121.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	12	8.25	8.617	12.9	5.8	3.712	1.927	6.31	7.525	8.85	12.57
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	11	2.	1.727	3.	1.	0.418	0.647	1.	1.	2.	2.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	14.	13.545	18.	6.	12.673	3.56	6.6	11.	16.	17.8
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.	6.942	7.3	6.6	0.052	0.227	6.63	6.7	7.15	7.27
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.	6.888	7.3	6.6	0.055	0.234	6.63	6.7	7.15	7.27
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.1	0.129	0.251	0.05	0.004	0.066	0.054	0.072	0.2	0.236
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	11##	2.5	6.955	20.	2.5	50.473	7.104	2.5	2.5	14.	19.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	11##	2.5	2.955	4.	2.5	0.473	0.688	2.5	2.5	4.	4.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	11##	2.5	5.591	17.	2.	31.791	5.638	2.1	2.5	10.	16.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11	0.14	0.157	0.25	0.025	0.005	0.067	0.042	0.11	0.22	0.244
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	11	0.3	0.327	0.7	0.2	0.026	0.162	0.2	0.2	0.4	0.66
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	11	0.01	0.014	0.04	0.005	0.	0.01	0.005	0.01	0.02	0.036
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	11	7.	8.364	18.	3.	16.655	4.081	3.2	6.	11.	16.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	50.	113.636	400.	50.	14545.455	120.605	50.	50.	100.	380.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	1.699	1.907	2.602	1.699	0.113	0.336	1.699	1.699	2.	2.577
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	80.639										

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	10	14.5	15.25	29.	2.	76.903	8.769	2.35	7.	22.75	28.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	94.	143.182	644.	86.	27615.564	166.179	86.2	89.	98.	535.8
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	10	9.45	8.68	12.	5.1	5.12	2.263	5.15	6.5	10.25	11.84
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	11	2.	1.818	4.	1.	0.964	0.982	1.	1.	2.	3.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	16.	17.091	30.	11.	32.491	5.7	11.2	13.	20.	28.8
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.6	6.582	7.	6.	0.082	0.286	6.06	6.5	6.7	7.
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.6	6.491	7.	6.	0.091	0.301	6.06	6.5	6.7	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	11	0.251	0.323	1.	0.1	0.063	0.251	0.1	0.2	0.316	0.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	11	6.	9.5	39.	2.5	113.3	10.644	2.5	2.5	9.	34.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	11	5.	4.409	7.	2.5	2.591	1.61	2.5	2.5	6.	6.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	11	3.	6.227	32.	0.	83.918	9.161	0.	2.5	6.	28.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.05	0.141	0.8	0.05	0.05	0.223	0.05	0.05	0.1	0.68
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11##	0.005	0.011	0.05	0.005	0.	0.014	0.005	0.005	0.01	0.044
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	11	0.16	0.209	0.47	0.1	0.015	0.121	0.1	0.11	0.3	0.44
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	11	0.4	0.509	1.4	0.3	0.103	0.321	0.3	0.3	0.6	1.26
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.095	0.4	0.05	0.011	0.104	0.05	0.05	0.1	0.34
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	11	0.01	0.05	0.36	0.005	0.011	0.104	0.006	0.01	0.03	0.302
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	11	5.	6.	11.	4.	5.6	2.366	4.	4.	8.	10.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	50.	972.727	8000.	50.	5610681.818	2368.688	50.	50.	700.	6680.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	1.699	2.217	3.903	1.699	0.576	0.759	1.699	1.699	2.845	3.752
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	164.891										

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Annual Analysis for 1983 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	10	12.5	14.71	30.	2.	80.974	8.999	2.4	7.5	22.25	29.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	10	78.5	82.	99.	75.	55.778	7.468	75.1	76.75	87.25	97.9
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	10	10.6	10.58	13.3	7.	3.6	1.897	7.18	8.95	12.075	13.2
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	9	2.	1.889	4.	1.	0.861	0.928	1.	1.	2.	4.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	10	14.	15.1	22.	10.	12.1	3.479	10.2	12.75	18.	21.6
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	9	6.8	6.9	8.	6.5	0.213	0.461	6.5	6.55	7.	8.
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	9	6.8	6.763	8.	6.5	0.233	0.483	6.5	6.55	7.	8.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	9	0.158	0.172	0.316	0.01	0.011	0.106	0.01	0.1	0.284	0.316
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	10	5.5	8.2	26.	2.5	59.844	7.736	2.5	2.5	13.	25.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	10	3.	4.2	8.	2.5	4.956	2.226	2.5	2.5	5.75	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	10	2.5	5.	18.	0.	28.556	5.344	0.2	2.375	8.25	17.1
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10	0.255	0.248	0.37	0.08	0.007	0.085	0.088	0.19	0.32	0.365
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	10	0.4	0.47	0.9	0.2	0.053	0.231	0.21	0.3	0.65	0.89
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	10	0.02	0.024	0.04	0.01	0.	0.011	0.01	0.018	0.033	0.04
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	10	6.5	6.9	9.	4.	3.211	1.792	4.1	5.75	9.	9.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	100.	535.	4000.	50.	1496138.889	1223.168	50.	50.	325.	3640.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	10	2.	2.208	3.602	1.699	0.343	0.586	1.699	1.699	2.508	3.502
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		161.405									

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Annual Analysis for 1984 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	7	20.5	19.071	26.	9.	46.786	6.84	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	7	75.	81.429	108.	63.	274.952	16.582	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	7	8.6	9.243	11.1	7.7	1.72	1.311	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	7	1.	1.429	3.	1.	0.619	0.787	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	7	11.	10.714	16.	5.	11.238	3.352	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	7	6.7	6.769	8.3	5.6	0.801	0.895	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	7	6.7	6.22	8.3	5.6	1.151	1.073	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	7	0.2	0.602	2.512	0.005	0.823	0.907	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	7	5.	14.357	55.	2.5	368.476	19.196	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	7	4.	3.643	5.	2.5	1.31	1.144	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	7	2.5	11.786	50.	1.	314.238	17.727	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	7##	0.05	0.057	0.1	0.05	0.	0.019	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	7##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	7	0.17	0.344	1.2	0.025	0.158	0.397	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	7	0.3	0.329	0.5	0.2	0.012	0.111	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	7	0.1	0.1	0.2	0.05	0.003	0.05	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	7	0.03	0.052	0.19	0.005	0.004	0.066	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	7	6.	5.857	9.	4.	2.476	1.574	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7##	50.	857.143	4900.	50.	3234523.81	1798.478	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7##	1.699	2.233	3.69	1.699	0.607	0.779	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		171.069									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	11	16.	16.036	27.	3.5	54.215	7.363	4.1	11.	22.	26.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	88.	82.727	108.	46.	279.218	16.71	50.2	75.	91.	106.
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	11	9.4	9.891	14.1	7.8	3.975	1.994	7.84	8.1	11.2	13.64
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	11##	0.5	1.273	5.	0.5	1.868	1.367	0.5	0.5	2.	4.4
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	13.	15.455	25.	8.	31.873	5.646	8.6	11.	22.	24.6
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.9	6.814	7.9	5.9	0.28	0.529	5.98	6.4	7.1	7.76
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	11	6.9	6.549	7.9	5.9	0.357	0.597	5.98	6.4	7.1	7.76
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	11	0.126	0.282	1.259	0.013	0.127	0.357	0.023	0.079	0.398	1.107
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	11##	2.5	13.273	98.	2.5	802.268	28.324	2.5	2.5	10.	81.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	11##	2.5	3.727	14.	1.	14.068	3.751	1.	2.5	3.	12.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	11##	2.5	10.909	84.	2.	595.741	24.408	2.1	2.5	4.	69.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.008	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	9	0.2	0.211	0.39	0.08	0.013	0.116	0.08	0.09	0.325	0.39

** - Less 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 RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-12/07/98	6	0.35	0.3	0.4	0.1	0.016	0.126	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	6##	0.05	0.058	0.1	0.05	0.	0.02	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-04/24/91	9	0.02	0.02	0.05	0.005	0.	0.015	0.005	0.008	0.03	0.05
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-07/11/96	11	6.	6.	11.	1.	7.6	2.757	1.4	4.	7.	10.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	11	100.	259.091	1500.	50.	179409.091	423.567	50.	50.	300.	1260.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	11	2.	2.112	3.176	1.699	0.234	0.483	1.699	1.699	2.477	3.036
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		129.291									

** - Less 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 RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	12	13.5	15.675	28.	5.5	69.862	8.358	5.65	6.75	23.725	27.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	12	86.5	148.25	839.	71.	47369.295	217.645	73.1	81.	93.5	615.8
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	12	9.8	9.617	12.6	5.8	3.978	1.994	6.28	8.125	11.175	12.48
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	12	1.	1.125	2.	0.5	0.188	0.433	0.65	1.	1.	2.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	12	12.5	12.917	21.	2.	26.811	5.178	4.1	10.	16.	20.7
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	12	7.3	7.087	7.49	6.3	0.138	0.371	6.39	6.825	7.363	7.46
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	12	7.3	6.916	7.49	6.3	0.17	0.413	6.39	6.825	7.363	7.46
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	12	0.05	0.121	0.501	0.032	0.019	0.136	0.035	0.044	0.15	0.426
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-12/07/98	12##	3.75	5.417	18.	2.5	20.129	4.487	2.5	2.5	7.	15.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	12##	2.5	3.333	6.	2.	1.742	1.32	2.15	2.5	4.75	5.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-12/07/98	12##	2.5	3.333	12.	0.	8.652	2.941	0.6	2.5	3.	9.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-12/07/98	12##	0.05	0.075	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.17
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	12##	0.008	0.008	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.017
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	12	0.225	0.246	0.4	0.1	0.01	0.101	0.115	0.155	0.343	0.397
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-12/07/98	12	0.4	0.4	0.6	0.3	0.011	0.104	0.3	0.3	0.5	0.57
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	12##	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-04/24/91	12	0.015	0.031	0.1	0.01	0.001	0.032	0.01	0.01	0.038	0.097
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-07/11/96	12	6.5	6.417	7.	5.	0.447	0.669	5.3	6.	7.	7.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	11##	50.	86.364	200.	50.	3545.455	59.544	50.	50.	100.	200.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	11##	1.699	1.863	2.301	1.699	0.061	0.247	1.699	1.699	2.	2.301
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		72.974									

** - Less 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 RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	11	15.5	16.536	28.	4.6	75.379	8.682	5.18	7.5	26.	27.96
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	11	86.	94.455	191.	72.	1106.873	33.27	72.6	78.	93.	173.8
00300p OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	9	9.8	10.122	12.7	7.9	2.997	1.731	7.9	8.5	11.65	12.7
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	10	1.5	1.5	2.	1.	0.278	0.527	1.	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	11	16.	16.091	23.	7.	20.691	4.549	8.	13.	19.	22.8
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	11	7.38	7.404	7.88	6.98	0.097	0.311	6.984	7.13	7.7	7.856
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	11	7.38	7.308	7.88	6.98	0.107	0.327	6.984	7.13	7.7	7.856
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	11	0.042	0.049	0.105	0.013	0.001	0.033	0.014	0.02	0.074	0.104
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-12/07/98	11##	2.5	7.136	26.	2.5	65.255	8.078	2.5	2.5	12.	24.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	11##	2.5	2.909	6.	2.5	1.091	1.044	2.5	2.5	3.	5.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-12/07/98	11##	2.5	6.273	23.	2.5	40.868	6.393	2.5	2.5	9.	20.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-12/07/98	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	11##	0.005	0.008	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.026
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	11	0.24	0.255	0.47	0.15	0.01	0.102	0.152	0.17	0.31	0.454
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-12/07/98	11	0.4	0.418	0.7	0.3	0.02	0.14	0.3	0.3	0.5	0.68

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11	0.1	0.077	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	11	0.02	0.023	0.08	0.005	0.	0.021	0.006	0.01	0.02	0.072
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	7	6.	6.429	8.	5.	0.952	0.976	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	100.	166.667	700.	50.	46250.	215.058	50.	50.	200.	700.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	9	2.	2.013	2.845	1.699	0.163	0.404	1.699	1.699	2.239	2.845
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		103.068									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	12	19.25	16.217	25.3	4.	75.767	8.704	4.3	6.925	24.	25.21
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	8	90.5	90.	127.	57.	360.571	18.989	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	12	9.25	9.933	13.1	7.4	5.102	2.259	7.4	8.1	12.5	13.07
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	8	1.	1.438	4.	0.5	1.246	1.116	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	8	15.5	16.625	25.	10.	26.839	5.181	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.315	7.188	8.9	4.45	1.053	1.026	5.125	6.922	7.63	8.543
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.315	5.521	8.9	4.45	4.086	2.021	5.125	6.922	7.63	8.543
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.048	3.014	35.481	0.001	104.546	10.225	0.007	0.023	0.12	24.897
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	8	5.5	13.625	57.	2.5	345.054	18.576	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	8	2.75	3.	8.	1.	4.786	2.188	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	8	3.75	11.313	49.	0.5	266.281	16.318	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.09	0.115	0.32	0.02	0.008	0.091	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.02	0.026	0.05	0.01	0.	0.015	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.205	0.251	0.4	0.13	0.015	0.121	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	8	0.5	0.538	1.	0.4	0.04	0.2	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	8	0.075	0.082	0.2	0.01	0.003	0.058	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	7	0.02	0.041	0.14	0.01	0.002	0.048	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	6	4.85	5.3	7.9	4.2	1.836	1.355	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	50.	236.364	1500.	50.	190545.455	436.515	50.	50.	300.	1280.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11##	1.699	1.986	3.176	1.699	0.27	0.519	1.699	1.699	2.477	3.061
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		96.849									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	12	18.2	17.275	27.	1.8	64.6	8.037	3.81	10.275	24.45	26.82
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	8	80.5	72.625	89.	13.	607.696	24.651	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	12	9.3	9.942	14.6	7.3	6.039	2.457	7.36	7.9	12.075	14.21
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	11	3.	2.455	5.	1.	2.273	1.508	1.	1.	4.	4.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	20.	18.455	28.	10.	34.273	5.854	10.4	13.	22.	27.6
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.545	7.614	9.02	7.03	0.295	0.543	7.042	7.163	7.805	8.732
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	7.542	7.415	9.02	7.03	0.338	0.582	7.042	7.162	7.805	8.732
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.029	0.038	0.093	0.001	0.001	0.031	0.003	0.016	0.071	0.091
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	11	5.	19.364	163.	2.	2274.255	47.689	2.	4.	6.	132.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	11	2.	4.5	27.	0.5	58.2	7.629	0.5	0.5	4.	22.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	11	4.	15.136	136.	0.5	1610.755	40.134	0.5	0.5	5.	110.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	10	0.05	0.121	0.8	0.02	0.057	0.239	0.02	0.035	0.065	0.728
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	10	0.22	0.233	0.4	0.14	0.007	0.084	0.142	0.16	0.295	0.394
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	10	0.4	0.48	0.8	0.3	0.022	0.148	0.31	0.4	0.6	0.78
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	10	0.1	0.085	0.1	0.05	0.001	0.024	0.05	0.05	0.1	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

Annual Analysis for 1989 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	10	0.025	0.024	0.04	0.01	0.	0.01	0.01	0.018	0.03	0.039
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	11	5.7	5.664	8.5	3.2	2.171	1.473	3.26	5.2	6.5	8.14
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	200.	572.727	2800.	50.	643681.818	802.298	50.	100.	600.	2460.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	11	2.301	2.451	3.447	1.699	0.297	0.545	1.699	2.	2.778	3.366
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		282.764									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	6	13.6	13.817	24.2	1.9	83.938	9.162	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	5	8.5	8.96	12.1	7.3	3.438	1.854	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	7	2.	2.714	9.	1.	8.238	2.87	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	8	15.5	15.875	24.	10.	23.554	4.853	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	6	7.245	7.252	7.9	6.71	0.216	0.465	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	6	7.235	7.07	7.9	6.71	0.256	0.506	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	6	0.058	0.085	0.195	0.013	0.006	0.076	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	8	5.	4.188	7.	0.5	5.281	2.298	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	8	2.	2.438	5.	0.5	3.103	1.761	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	8	1.5	1.875	4.	0.5	1.768	1.33	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	7	0.04	0.046	0.12	0.02	0.001	0.034	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	7##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	7	0.32	0.261	0.46	0.11	0.016	0.128	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	7	0.5	0.586	1.3	0.3	0.111	0.334	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	7##	0.05	0.071	0.1	0.05	0.001	0.027	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	7	0.01	0.013	0.02	0.005	0.	0.007	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	8	5.75	5.45	6.6	4.	1.131	1.064	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7	100.	271.429	1200.	50.	171547.619	414.183	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	7	2.	2.154	3.079	1.699	0.227	0.476	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		142.616									

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	5	17.2	19.32	27.6	7.4	72.512	8.515	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	3	9.4	9.867	12.9	7.3	8.003	2.829	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	3	1.	1.333	2.	1.	0.333	0.577	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	3	24.	22.667	25.	19.	10.333	3.215	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	5	6.9	6.874	7.1	6.71	0.023	0.152	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	5	6.9	6.854	7.1	6.71	0.024	0.154	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	5	0.126	0.14	0.195	0.079	0.002	0.045	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	3	3.	5.167	11.	1.5	26.083	5.107	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	3	1.	1.167	2.	0.5	0.583	0.764	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	3	2.	4.167	9.	1.5	17.583	4.193	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	3	0.06	0.173	0.44	0.02	0.054	0.232	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	3##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	3	0.19	0.263	0.52	0.08	0.052	0.229	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	3	0.3	0.533	1.	0.3	0.163	0.404	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	3##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	2	0.025	0.025	0.04	0.01	0.	0.021	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	3	4.5	4.733	6.1	3.6	1.603	1.266	**	**	**	**

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4##	275.	425.	1100.	50.	247500.	497.494	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4##	2.199	2.285	3.041	1.699	0.477	0.69	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		192.564									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**

** - Less 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 RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	4	12.55	15.35	29.4	6.9	95.203	9.757	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	4	2.	2.	3.	1.	0.667	0.816	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	14.	13.	18.	6.	28.	5.292	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.72	6.645	6.96	6.18	0.111	0.334	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.716	6.539	6.96	6.18	0.126	0.355	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	4	0.192	0.289	0.661	0.11	0.063	0.252	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	5.	4.75	6.	3.	1.583	1.258	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	4	1.	1.5	3.	1.	1.	1.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	3.	3.25	5.	2.	2.25	1.5	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.05	0.055	0.1	0.02	0.001	0.034	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.305	0.275	0.34	0.15	0.007	0.086	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	4	0.5	0.525	0.7	0.4	0.022	0.15	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.075	0.07	0.1	0.03	0.001	0.036	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	4	4.7	4.575	5.5	3.4	0.862	0.929	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4##	50.	137.5	400.	50.	30625.	175.	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4##	1.699	1.925	2.602	1.699	0.204	0.452	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		84.09									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	4	0.015	0.014	0.02	0.005	0.	0.008	**	**	**	**

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Annual Analysis for 1993 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	4	16.7	16.575	27.	5.9	75.029	8.662	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	4	2.	2.	3.	1.	0.667	0.816	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	19.	19.75	24.	17.	9.583	3.096	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.8	6.74	6.96	6.4	0.07	0.265	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.778	6.677	6.96	6.4	0.075	0.275	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	4	0.167	0.21	0.398	0.11	0.018	0.135	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	5.	4.375	6.	1.5	3.896	1.974	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	4##	1.5	1.75	3.	1.	0.75	0.866	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	3.	3.375	6.	1.5	4.229	2.056	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.06	0.065	0.1	0.04	0.001	0.026	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.01	0.009	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.38	0.35	0.51	0.13	0.033	0.183	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	4	0.45	0.45	0.5	0.4	0.003	0.058	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.04	0.045	0.07	0.03	0.	0.017	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	4	5.95	6.225	7.4	5.6	0.643	0.802	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4	450.	937.5	2800.	50.	1578958.333	1256.566	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	4	2.651	2.612	3.447	1.699	0.513	0.716	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		409.062									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	4	0.025	0.023	0.03	0.01	0.	0.01	**	**	**	**

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Annual Analysis for 1994 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	4	16.55	15.775	26.7	3.3	92.196	9.602	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	4	2.3	2.35	3.3	1.5	0.603	0.777	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	17.	16.5	21.	11.	17.	4.123	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.645	6.69	6.9	6.57	0.021	0.146	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.644	6.673	6.9	6.57	0.022	0.147	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	4	0.227	0.212	0.269	0.126	0.004	0.062	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	6.5	12.25	30.	6.	140.25	11.843	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	4	3.5	4.	7.	2.	4.667	2.16	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	3.5	8.25	23.	3.	96.917	9.845	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.07	0.073	0.13	0.02	0.002	0.045	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.01	0.009	0.01	0.005	0.	0.003	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.305	0.318	0.47	0.19	0.014	0.119	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	4	0.6	0.575	0.6	0.5	0.002	0.05	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.045	0.053	0.09	0.03	0.001	0.026	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	4	5.65	5.75	6.8	4.9	0.63	0.794	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	3	300.	233.333	300.	100.	13333.333	115.47	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	3	2.477	2.318	2.477	2.	0.076	0.275	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		208.008									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	4	0.01	0.016	0.04	0.005	0.	0.016	**	**	**	**

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Annual Analysis for 1995 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	4	15.4	14.725	25.	3.1	86.542	9.303	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	2	95.	95.	108.	82.	338.	18.385	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	4	1.9	1.9	2.8	1.	1.08	1.039	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	15.5	16.	21.	12.	14.	3.742	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.78	6.8	7.08	6.56	0.048	0.219	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.776	6.761	7.08	6.56	0.05	0.224	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	4	0.168	0.173	0.275	0.083	0.007	0.081	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	9.5	10.625	22.	1.5	91.896	9.586	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	4##	2.25	3.	6.	1.5	4.5	2.121	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	7.5	8.125	16.	1.5	49.063	7.004	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.05	0.048	0.07	0.02	0.	0.022	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.01	0.011	0.02	0.005	0.	0.006	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.3	0.308	0.47	0.16	0.016	0.128	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	4	0.45	0.475	0.7	0.3	0.029	0.171	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.045	0.043	0.06	0.02	0.	0.021	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	4	6.05	6.025	6.9	5.1	0.543	0.737	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	4	0.025	0.028	0.05	0.01	0.	0.017	**	**	**	**

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Annual Analysis for 1996 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	4	13.85	14.45	25.8	4.3	81.523	9.029	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	4	113.5	110.5	149.	66.	1208.333	34.761	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	4	2.	1.75	2.	1.	0.25	0.5	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	22.5	22.25	24.	20.	4.25	2.062	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.37	6.45	7.02	6.04	0.171	0.414	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	4	6.366	6.33	7.02	6.04	0.19	0.436	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	4	0.431	0.467	0.912	0.095	0.115	0.339	**	**	**	**

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Annual Analysis for 1996 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	9.	18.5	52.	4.	504.333	22.457	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	4##	3.25	4.	8.	1.5	9.833	3.136	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	4	5.5	14.5	44.	3.	389.667	19.74	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	4##	0.045	0.053	0.1	0.02	0.002	0.039	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.015	0.02	0.04	0.01	0.	0.014	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	4	0.31	0.315	0.6	0.04	0.052	0.229	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	4	0.6	0.575	0.7	0.4	0.022	0.15	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.04	0.065	0.15	0.03	0.003	0.057	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	3	6.5	7.167	10.3	4.7	8.173	2.859	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	4	0.03	0.043	0.09	0.02	0.001	0.033	**	**	**	**

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Annual Analysis for 1997 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	8	14.3	15.213	28.2	3.7	84.836	9.211	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	7	94.	93.	120.	50.	469.333	21.664	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	8	1.5	1.75	4.	1.	1.071	1.035	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	8	13.5	15.875	27.	7.	50.982	7.14	**	**	**	**
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	8	6.925	6.886	7.37	6.32	0.096	0.309	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	8	6.925	6.784	7.37	6.32	0.107	0.328	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	8	0.119	0.164	0.479	0.043	0.019	0.136	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	8	4.5	6.25	19.	1.5	32.429	5.695	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	8##	1.5	2.5	6.	1.5	3.5	1.871	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	8##	1.5	3.563	14.	1.5	18.674	4.321	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	8##	0.02	0.064	0.33	0.02	0.012	0.108	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	8	0.255	0.258	0.45	0.11	0.011	0.104	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	8	0.45	0.575	1.1	0.3	0.088	0.296	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	8	0.035	0.039	0.05	0.03	0.	0.01	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	8	0.03	0.025	0.03	0.01	0.	0.008	**	**	**	**

** - Less 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

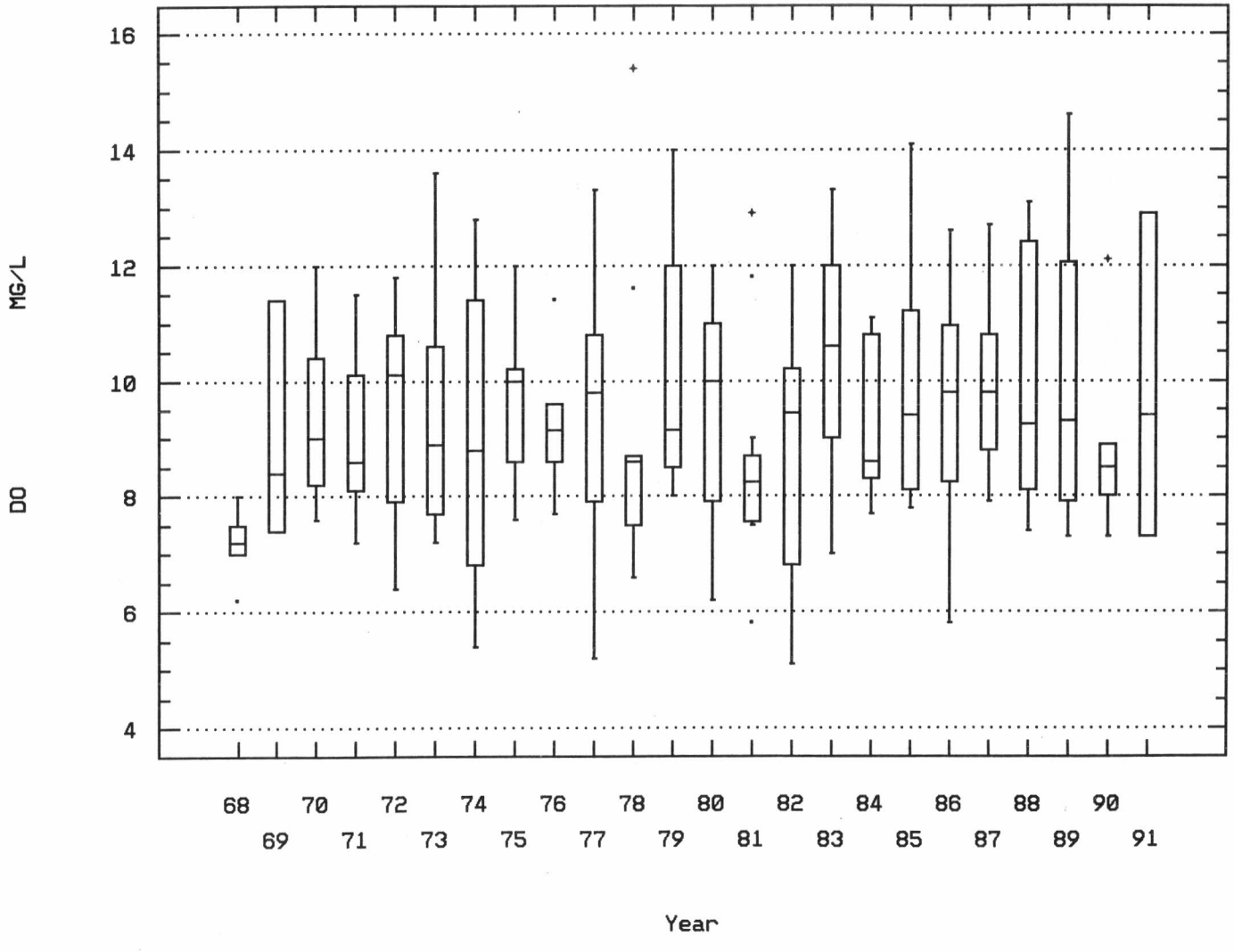
Annual Analysis for 1998 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	12	17.75	16.9	26.8	6.2	51.4	7.169	6.98	9.5	22.925	26.65
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	12	92.5	92.667	132.	62.	490.606	22.15	63.5	73.25	112.75	127.2
00310 BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	12##	1.	1.833	5.	1.	1.97	1.403	1.	1.	2.75	4.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	12	15.	15.833	23.	9.	17.242	4.152	9.3	13.5	19.25	22.4
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	12	6.85	6.858	7.25	6.52	0.067	0.258	6.529	6.59	7.092	7.232
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	12	6.85	6.792	7.25	6.52	0.071	0.267	6.529	6.59	7.092	7.232
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	12	0.141	0.162	0.302	0.056	0.008	0.089	0.059	0.081	0.258	0.296
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	12	5.	8.	39.	1.5	111.	10.536	1.5	1.5	10.75	31.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	12##	1.5	2.667	7.	1.5	3.879	1.969	1.5	1.5	3.75	6.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	12##	1.5	5.5	32.	1.5	79.	8.888	1.5	1.5	7.5	25.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	12##	0.02	0.028	0.07	0.02	0.	0.018	0.02	0.02	0.02	0.067
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	12##	0.005	0.01	0.02	0.005	0.	0.007	0.005	0.005	0.018	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	12	0.295	0.303	0.5	0.11	0.016	0.126	0.122	0.19	0.425	0.491
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	12	0.5	0.575	1.1	0.3	0.058	0.242	0.33	0.4	0.75	1.04
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	12	0.05	0.047	0.08	0.02	0.	0.018	0.02	0.033	0.06	0.074
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	12	0.025	0.032	0.08	0.005	0.	0.021	0.01	0.02	0.045	0.074

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Station: RICH0065 Parameter Code: 00300

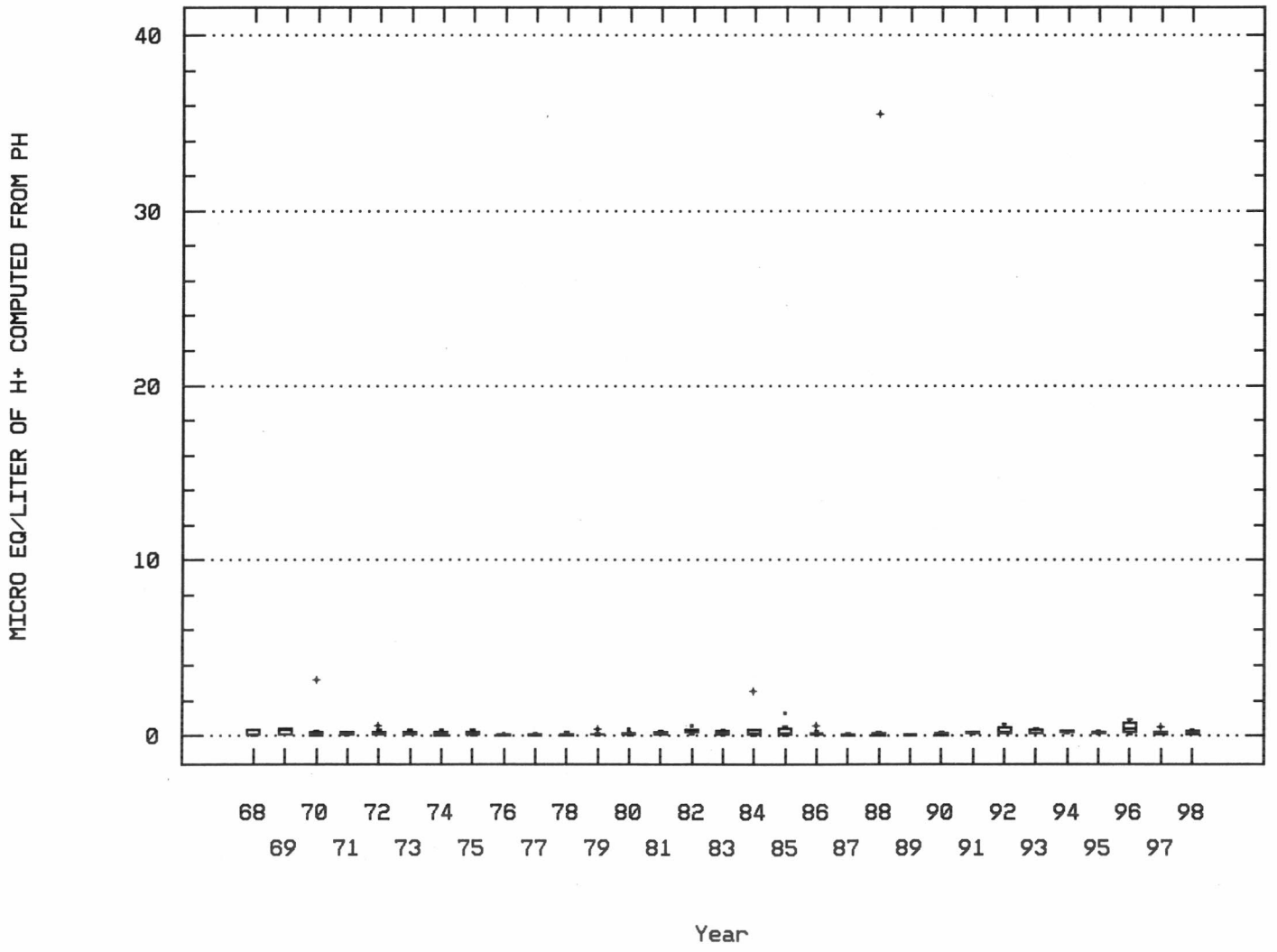
OXYGEN, DISSOLVED



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00400

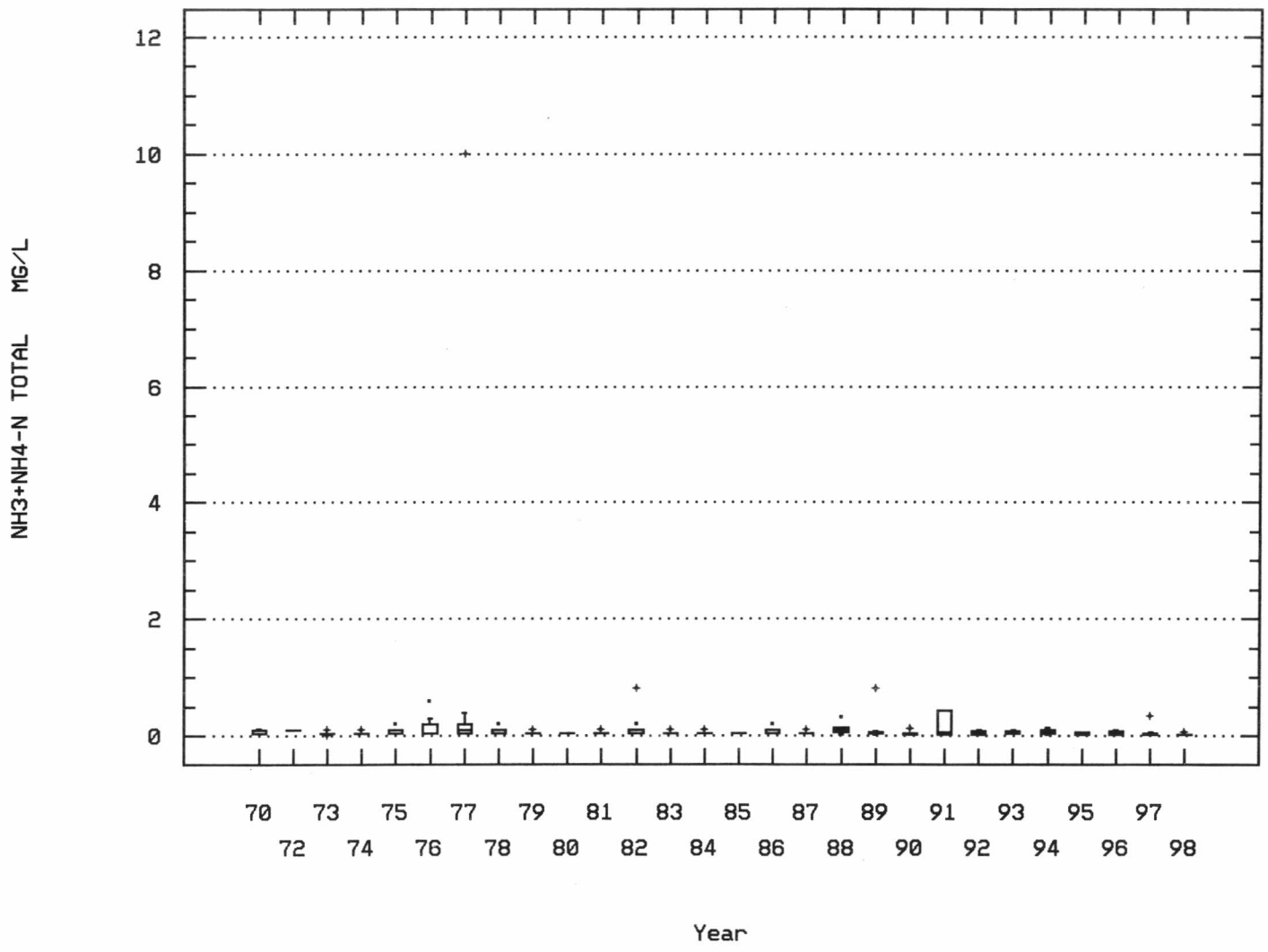
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00610

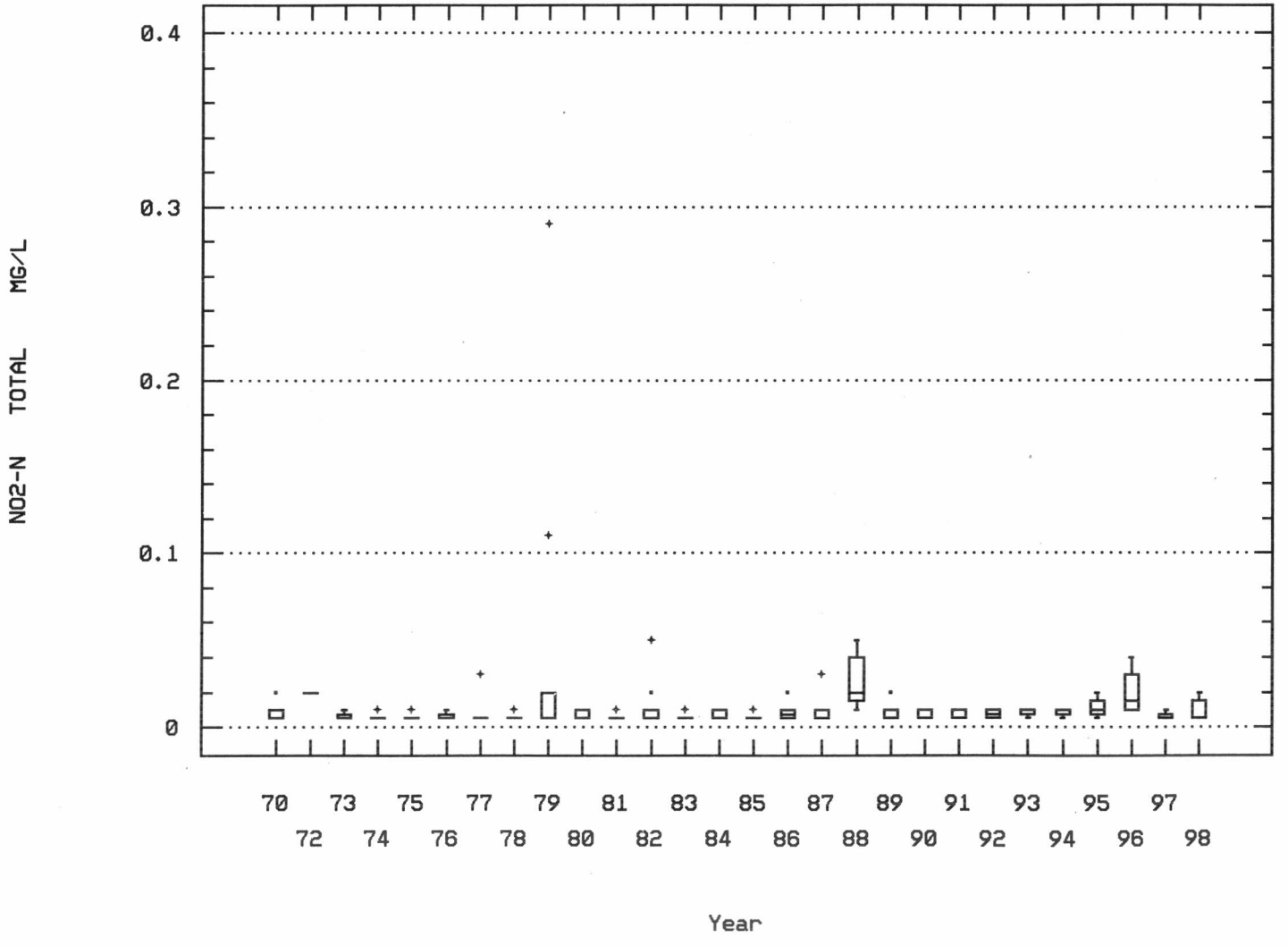
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00615

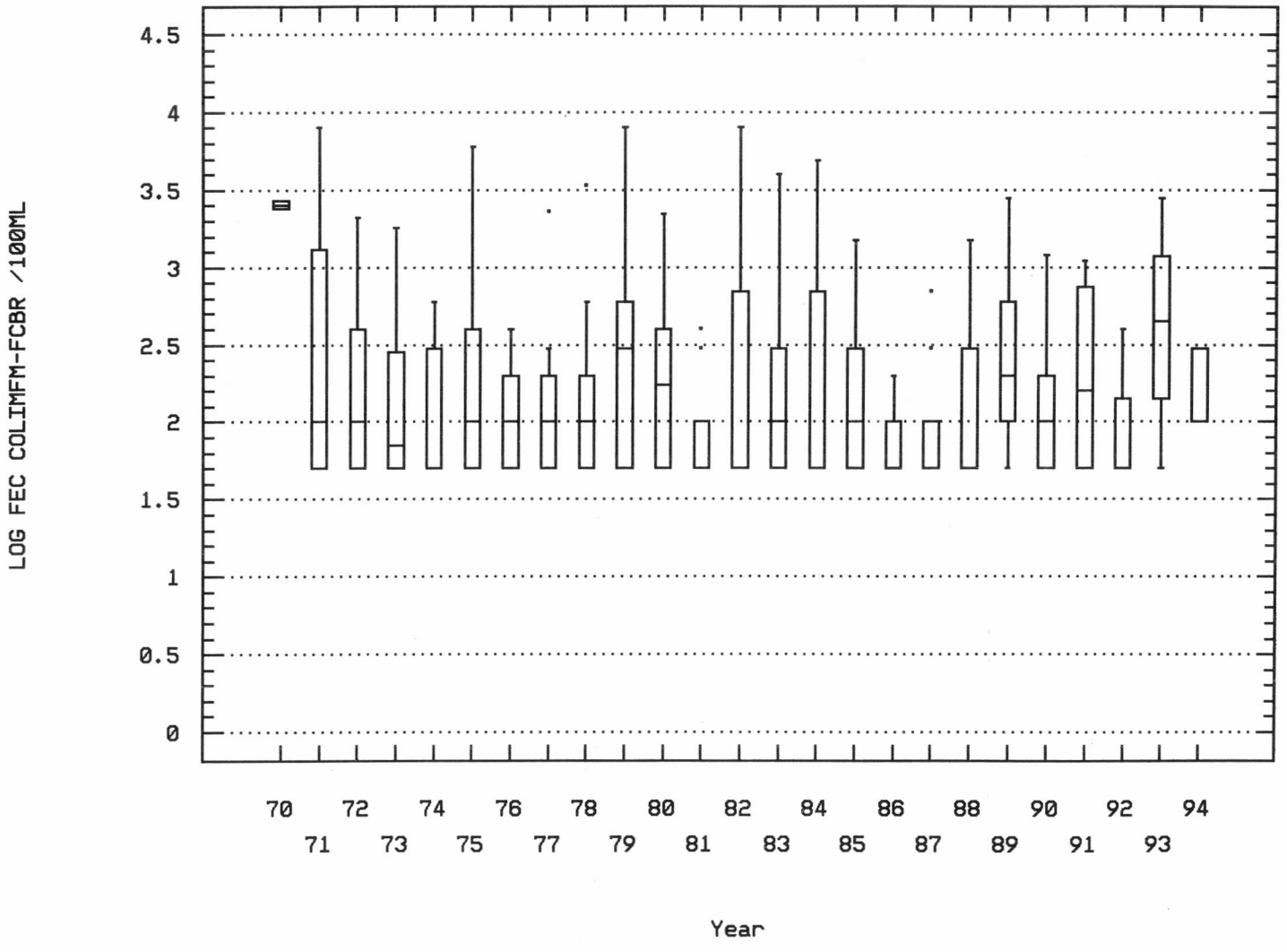
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 31616

LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



RT. 1 BRIDGE

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	83	24.6	23.742	31.	2.5	19.53	4.419	17.92	21.8	26.8	28.12
00070 TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-01/02/92	4	7.35	10.6	22.	5.7	58.847	7.671	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	37	83.	99.027	644.	46.	8825.36	93.943	56.6	72.	101.	112.6
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/11/80-12/07/98	19	93.	90.789	115.	64.	206.842	14.382	69.	77.	103.	109.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-12/07/98	17	7.9	7.947	10.	6.6	0.876	0.936	6.6	7.15	8.45	9.6
00300 OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	66	7.95	7.9	10.6	5.2	1.169	1.081	6.48	7.375	8.525	9.26
00310p BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	45	1.	1.84	5.	0.5	1.397	1.182	1.	1.	2.3	4.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	45	16.	16.978	32.	5.	32.022	5.659	10.	12.	21.	24.
00400p PH (STANDARD UNITS)		06/28/68-12/07/98	83	7.07	7.097	8.8	6.04	0.181	0.425	6.584	6.8	7.3	7.56
00400p CONVERTED PH (STANDARD UNITS)		06/28/68-12/07/98	83	7.07	6.923	8.8	6.04	0.211	0.46	6.584	6.8	7.3	7.56
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/68-12/07/98	83	0.085	0.119	0.912	0.002	0.016	0.126	0.028	0.05	0.158	0.261
00403p PH, LAB, STANDARD UNITS	SU	10/24/68-12/07/98	21	6.8	6.762	7.4	5.8	0.119	0.346	6.32	6.6	7.	7.16
00403p CONVERTED PH, LAB, STANDARD UNITS		10/24/68-12/07/98	21	6.8	6.598	7.4	5.8	0.148	0.384	6.32	6.6	7.	7.16
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/24/68-12/07/98	21	0.158	0.252	1.585	0.04	0.106	0.326	0.07	0.1	0.251	0.481
00410p ALKALINITY, TOTAL (MG/L AS CACO3)		10/24/68-12/07/98	21	22.	20.429	28.	10.	24.457	4.945	13.2	16.5	24.	27.4
00500p RESIDUE, TOTAL (MG/L)		10/24/68-12/07/98	21	82.	87.81	229.	38.	1361.062	36.893	58.	74.5	88.5	124.2
00505p RESIDUE, TOTAL VOLATILE (MG/L)		10/24/68-12/07/98	21	29.	29.524	88.	5.	252.962	15.905	13.6	22.	30.5	43.8
00510p RESIDUE, TOTAL FIXED (MG/L)		04/28/69-12/07/98	21	54.	58.286	141.	33.	589.014	24.27	36.	42.	67.5	94.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/28/69-12/07/98	46	5.	12.913	117.	1.5	549.57	23.443	1.5	2.5	10.	34.5
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/24/68-12/07/98	46	2.75	4.098	27.	0.5	18.162	4.262	1.5	2.375	4.25	8.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/28/69-12/07/98	46	2.5	9.587	90.	0.5	372.848	19.309	1.5	2.	5.25	25.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-12/07/98	64##	0.05	0.09	0.8	0.02	0.015	0.121	0.02	0.05	0.1	0.135
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	64##	0.005	0.008	0.04	0.005	0.	0.007	0.005	0.005	0.01	0.015
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-12/07/98	61	0.18	0.211	1.2	0.025	0.028	0.167	0.07	0.12	0.265	0.368
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-12/07/98	64	0.5	0.544	1.3	0.1	0.075	0.275	0.2	0.4	0.7	0.95
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	43	0.05	0.072	0.2	0.01	0.002	0.042	0.03	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-04/24/91	26	0.02	0.033	0.19	0.005	0.002	0.043	0.005	0.01	0.04	0.098
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-07/11/96	36	6.3	7.067	14.	4.	6.717	2.592	4.41	5.35	7.675	11.3
00900 HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	19	25.	27.105	42.	18.	44.655	6.682	20.	24.	30.	40.
00940 CHLORIDE,TOTAL IN WATER	MG/L	10/24/88-12/07/98	18	7.5	7.833	12.	5.	4.382	2.093	5.	6.	9.25	11.1
00945 SULFATE, TOTAL (MG/L AS SO4)		11/29/88-12/07/98	18	6.	6.167	10.	4.	1.912	1.383	4.9	5.	7.	7.3
01002 ARSENIC, TOTAL (UG/L AS AS)		03/15/71-04/19/93	4##	3.75	3.25	5.	0.5	4.75	2.179	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)		11/23/70-04/19/93	5##	5.	4.1	5.	0.5	4.05	2.012	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-04/19/93	5##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)		03/24/70-04/19/93	5##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		06/29/70-04/19/93	5##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		03/24/70-04/19/93	5##	5.	15.	30.	5.	187.5	13.693	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	59	100.	372.881	3400.	50.	393562.244	627.345	50.	50.	400.	1100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-07/06/94	59	2.	2.215	3.531	1.699	0.268	0.517	1.699	1.699	2.602	3.041
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	163.875								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-08/07/80	21##	0.05	0.062	0.2	0.05	0.001	0.035	0.05	0.05	0.05	0.1
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/07/98	37	0.02	0.025	0.1	0.005	0.001	0.023	0.005	0.008	0.04	0.05
71900 MERCURY, TOTAL (UG/L AS HG)		09/21/70-04/19/93	6##	0.25	0.492	1.9	0.15	0.478	0.692	**	**	**	**

** - 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

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/68-12/07/98	108	7.5	8.403	20.5	0.7	21.988	4.689	2.2	5.	11.65	15.06
00070 TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-01/02/92	10	11.	25.35	150.	5.3	1950.641	44.166	5.44	6.775	20.5	137.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	54	91.	94.778	191.	59.	517.497	22.749	70.5	79.	107.	121.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		06/11/80-12/07/98	20	96.	104.8	214.	58.	1153.116	33.958	74.5	86.25	119.25	155.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	01/17/90-12/07/98	17	12.1	11.576	13.8	9.1	2.518	1.587	9.26	9.65	12.9	13.4
00300 OXYGEN, DISSOLVED	MG/L	06/28/68-07/17/91	90	11.05	11.021	15.4	5.8	3.075	1.754	8.7	10.	12.125	13.09
00310p BOD, 5 DAY, 20 DEG C	MG/L	10/24/68-12/07/98	67	1.	1.74	9.	0.5	1.492	1.221	1.	1.	2.	2.84
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	66	15.	15.682	30.	6.	25.082	5.008	10.	12.	18.	24.

** - Less 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: 10/15 to 3/15 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	106	6.895	6.947	9.02	5.5	0.287	0.536	6.5	6.638	7.123	7.558
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	106	6.895	6.668	9.02	5.5	0.366	0.605	6.5	6.637	7.122	7.558
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	106	0.127	0.215	3.162	0.001	0.158	0.398	0.028	0.075	0.231	0.316
00403p PH, LAB, STANDARD UNITS SU	10/24/68-12/07/98	28	6.65	6.689	7.4	6.1	0.109	0.33	6.3	6.5	6.8	7.31
00403p CONVERTED PH, LAB, STANDARD UNITS	10/24/68-12/07/98	28	6.647	6.587	7.4	6.1	0.12	0.347	6.3	6.5	6.8	7.31
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/68-12/07/98	28	0.225	0.259	0.794	0.04	0.03	0.172	0.049	0.158	0.316	0.501
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	10/24/68-12/07/98	28	17.	17.679	33.	6.	44.967	6.706	8.9	12.25	22.75	26.3
00500p RESIDUE, TOTAL (MG/L)	10/24/68-12/07/98	28	82.	98.429	228.	65.	1532.18	39.143	69.	80.	106.25	151.3
00505p RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-12/07/98	28	27.5	29.107	77.	9.	214.173	14.635	14.7	21.	31.75	42.2
00510p RESIDUE, TOTAL FIXED (MG/L)	04/28/69-12/07/98	26	56.	66.077	157.	34.	809.514	28.452	42.8	51.75	63.	119.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	68	6.	12.721	163.	1.	451.54	21.249	2.5	2.5	16.	26.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	70	3.	3.807	27.	0.	12.814	3.58	1.	2.	5.	7.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	68	3.	9.544	136.	0.	321.214	17.922	1.5	2.5	11.75	22.1
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	91##	0.05	0.183	10.	0.005	1.088	1.043	0.02	0.05	0.09	0.124
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	91##	0.005	0.013	0.29	0.005	0.001	0.032	0.005	0.005	0.01	0.02
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	87	0.31	0.301	0.6	0.005	0.013	0.115	0.14	0.22	0.39	0.462
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	91	0.4	0.5	11.79	0.1	1.457	1.207	0.2	0.3	0.4	0.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	65##	0.05	0.064	0.2	0.02	0.001	0.03	0.04	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	50	0.02	0.025	0.09	0.005	0.	0.02	0.01	0.01	0.03	0.059
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	53	6.	6.494	18.	1.	7.117	2.668	3.76	5.	8.	10.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	24	27.5	28.792	44.	20.	48.259	6.947	21.5	22.5	33.	41.
00940 CHLORIDE,TOTAL IN WATER MG/L	10/24/88-12/07/98	25	9.	11.74	48.	2.5	88.898	9.429	6.	7.	11.5	24.2
00945 SULFATE, TOTAL (MG/L AS SO4)	11/29/88-12/07/98	24	9.	8.583	12.	4.	3.471	1.863	6.	7.25	10.	11.
01002 ARSENIC, TOTAL (UG/L AS AS)	03/15/71-04/19/93	7##	5.	4.286	5.	2.5	1.488	1.22	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/19/93	9##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/19/93	12##	5.	5.833	10.	5.	3.788	1.946	5.	5.	5.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/19/93	12##	5.	6.25	20.	5.	18.75	4.33	5.	5.	5.	15.5
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/19/93	13##	5.	7.308	20.	5.	31.731	5.633	5.	5.	5.	20.
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/19/93	12	11.	12.5	30.	5.	60.273	7.764	5.	5.	18.75	27.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	91##	50.	347.802	3200.	50.	420439.56	648.413	50.	50.	300.	1020.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	91##	1.699	2.118	3.505	1.699	0.292	0.54	1.699	1.699	2.477	3.002
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	131.268								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	26##	0.05	0.242	4.7	0.05	0.828	0.91	0.05	0.05	0.063	0.13
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	41	0.03	0.135	4.199	0.005	0.424	0.652	0.005	0.01	0.05	0.076
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/19/93	13##	0.25	0.212	0.25	0.15	0.003	0.051	0.15	0.15	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 box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/68-12/07/98	83	18.	18.014	28.	1.9	34.174	5.846	9.64	14.4	22.7	25.6
00070 TURBIDITY, (JACKSON CANDLE UNITS)	04/28/71-01/02/92	11	4.	5.618	14.2	2.	15.37	3.92	2.	3.	8.2	13.56
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	37	87.	103.919	839.	13.	15661.965	125.148	70.4	77.	92.	99.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/80-12/07/98	16	87.5	88.313	112.	59.	154.629	12.435	70.2	83.	95.75	105.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	01/17/90-12/07/98	11	9.7	9.873	12.3	7.9	1.466	1.211	8.02	9.3	10.7	12.02
00300 OXYGEN, DISSOLVED MG/L	06/28/68-07/17/91	72	8.8	8.931	12.2	5.1	1.964	1.401	7.23	8.	9.95	10.8
00310p BOD, 5 DAY, 20 DEG C MG/L	10/24/68-12/07/98	52	1.25	1.692	4.	0.5	0.889	0.943	1.	1.	2.	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	47	14.	15.085	26.	2.	23.906	4.889	9.8	12.	19.	22.
00400p PH (STANDARD UNITS)	06/28/68-12/07/98	85	7.	7.029	8.9	4.45	0.3	0.547	6.364	6.8	7.37	7.548
00400p CONVERTED PH (STANDARD UNITS)	06/28/68-12/07/98	85	7.	6.249	8.9	4.45	0.915	0.957	6.364	6.8	7.37	7.548
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/68-12/07/98	85	0.1	0.564	35.481	0.001	14.721	3.837	0.029	0.043	0.158	0.435
00403p PH, LAB, STANDARD UNITS SU	10/24/68-12/07/98	24	6.7	6.683	7.	6.2	0.057	0.239	6.3	6.525	6.9	7.
00403p CONVERTED PH, LAB, STANDARD UNITS	10/24/68-12/07/98	24	6.7	6.616	7.	6.2	0.062	0.249	6.3	6.525	6.9	7.
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/24/68-12/07/98	24	0.2	0.242	0.631	0.1	0.023	0.152	0.1	0.126	0.3	0.515
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	10/24/68-12/07/98	24	18.	16.167	25.	8.	24.754	4.975	9.5	12.	20.	22.5
00500p RESIDUE, TOTAL (MG/L)	10/24/68-12/07/98	24	76.	81.958	179.	63.	557.085	23.603	63.5	68.25	89.	99.5

** - 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

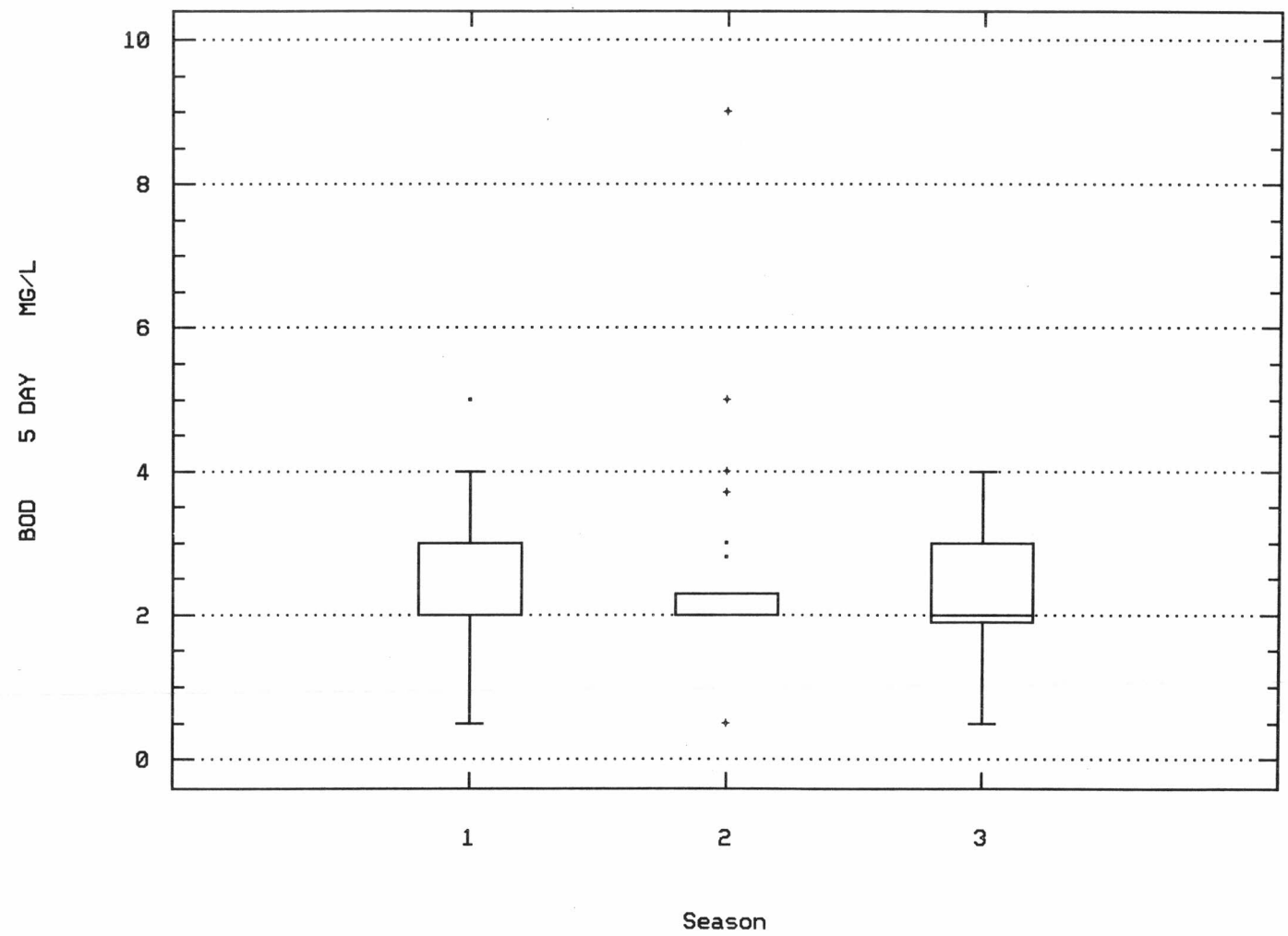
Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00505p RESIDUE, TOTAL VOLATILE (MG/L)	10/24/68-12/07/98	24	28.	25.917	50.	9.	85.123	9.226	14.5	17.5	30.75	37.5
00510p RESIDUE, TOTAL FIXED (MG/L)	04/28/69-12/07/98	24	52.	56.042	149.	35.	467.955	21.632	43.	45.75	56.5	72.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/28/69-12/07/98	52	5.	6.24	27.	0.5	30.103	5.487	2.5	2.5	7.75	13.7
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/24/68-12/07/98	52	2.5	3.24	24.	0.5	10.828	3.291	1.	1.5	4.	5.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/28/69-12/07/98	52	2.5	3.933	18.	0.	14.961	3.868	0.65	2.	5.	8.7
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-12/07/98	71##	0.05	0.066	0.8	0.02	0.009	0.093	0.02	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	71##	0.005	0.008	0.05	0.005	0.	0.007	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-12/07/98	63	0.17	0.19	0.4	0.025	0.006	0.079	0.1	0.13	0.25	0.306
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-12/07/98	68	0.4	0.462	1.899	0.05	0.071	0.266	0.2	0.3	0.5	0.71
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	41	0.05	0.074	0.4	0.03	0.003	0.058	0.042	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-04/24/91	34	0.01	0.029	0.36	0.005	0.004	0.061	0.005	0.01	0.03	0.035
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-07/11/96	42	6.05	6.502	13.	3.	4.458	2.111	4.09	5.	7.	9.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	20	24.	27.05	52.	16.	96.787	9.838	18.	21.	28.	44.
00940 CHLORIDE,TOTAL IN WATER MG/L	10/24/88-12/07/98	18	8.	8.917	19.	2.5	11.949	3.457	6.55	7.	9.	15.4
00945 SULFATE, TOTAL (MG/L AS SO4)	11/29/88-12/07/98	18	7.	7.889	12.	6.	2.928	1.711	6.	7.	9.	11.1
01002 ARSENIC, TOTAL (UG/L AS AS)	03/15/71-04/19/93	10##	2.5	2.6	5.	0.5	3.267	1.807	0.55	1.	5.	5.
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/19/93	9##	5.	4.	5.	0.5	3.938	1.984	0.5	2.75	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/19/93	15##	5.	5.7	10.	0.5	6.279	2.506	3.2	5.	5.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/19/93	14##	5.	9.143	40.	5.	86.44	9.297	5.	5.	10.	26.5
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/19/93	12##	5.	7.208	14.	0.5	16.612	4.076	1.55	5.	10.	13.7
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/19/93	15##	5.	10.8	27.	5.	57.457	7.58	5.	5.	20.	22.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	67	100.	847.761	8000.	50.	3718669.154	1928.385	50.	50.	400.	3200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-07/06/94	67	2.	2.243	3.903	1.699	0.465	0.682	1.699	1.699	2.602	3.502
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	174.917								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-08/07/80	27##	0.05	0.053	0.1	0.025	0.	0.014	0.05	0.05	0.05	0.06
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/07/98	38	0.02	0.028	0.1	0.005	0.	0.021	0.005	0.01	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/19/93	12##	0.25	0.229	0.5	0.15	0.01	0.099	0.15	0.15	0.25	0.425

** - Less 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: RICH0065 Parameter Code: 00310

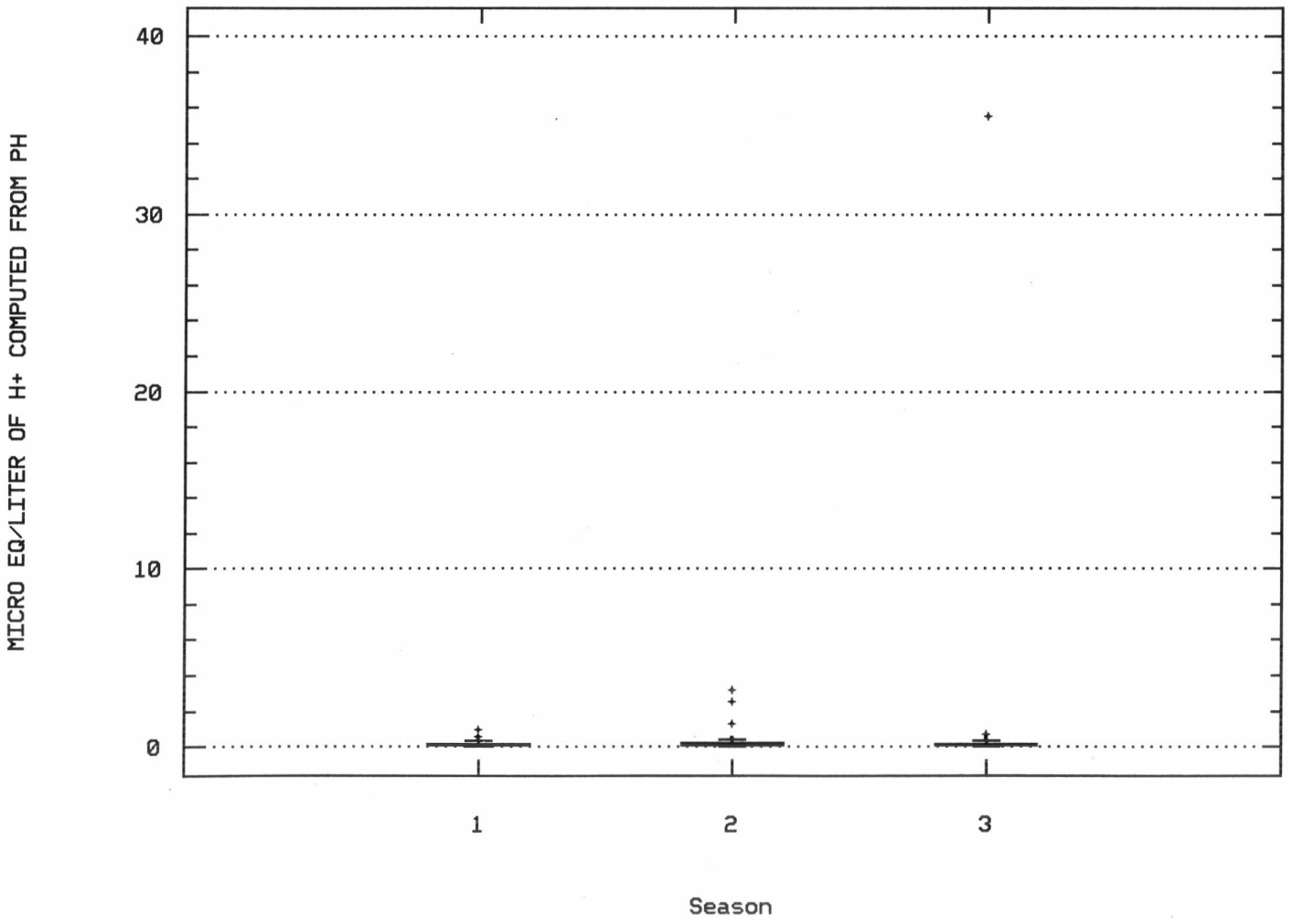
BOD, 5 DAY, 20 DEG C



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00400

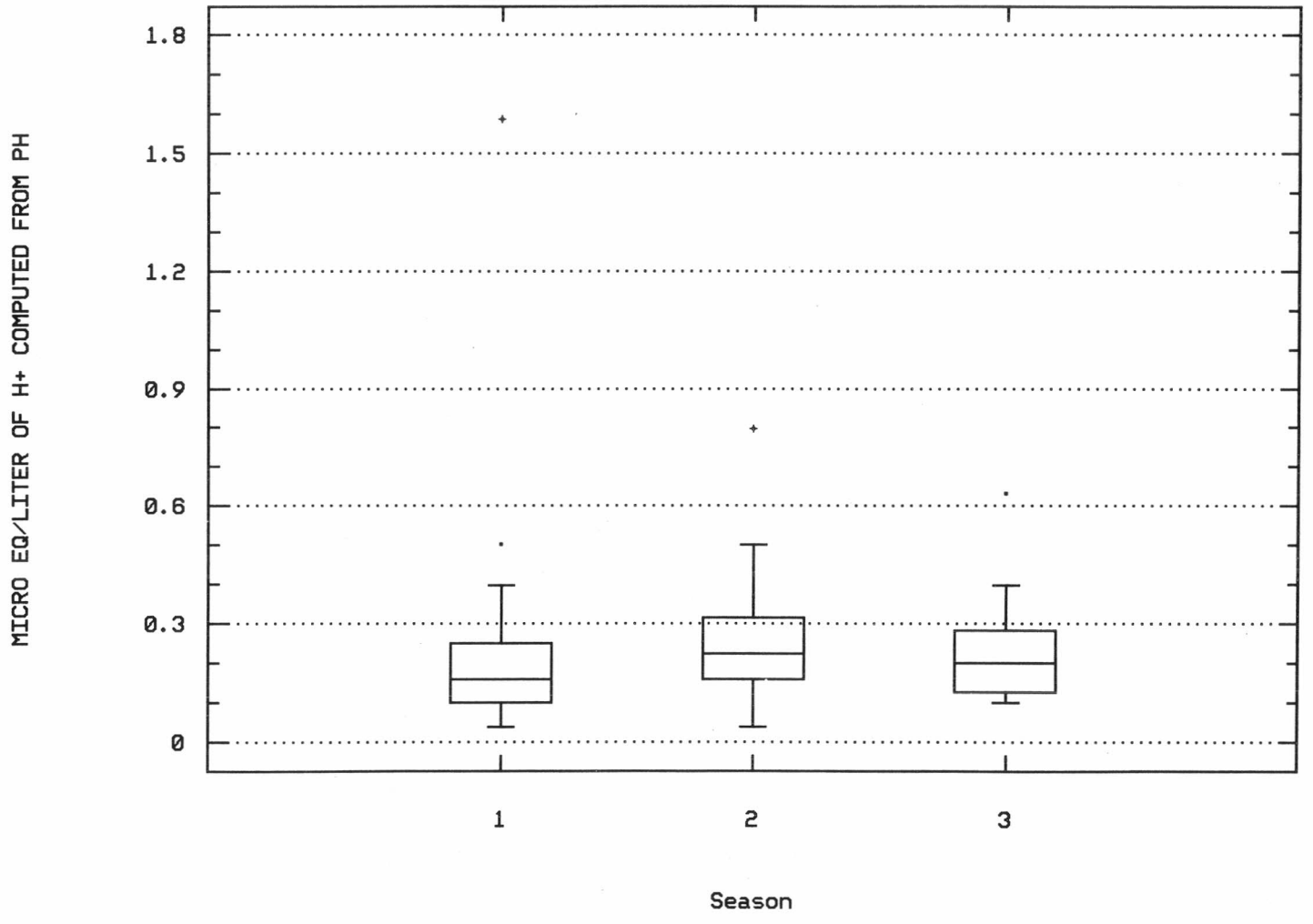
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00403

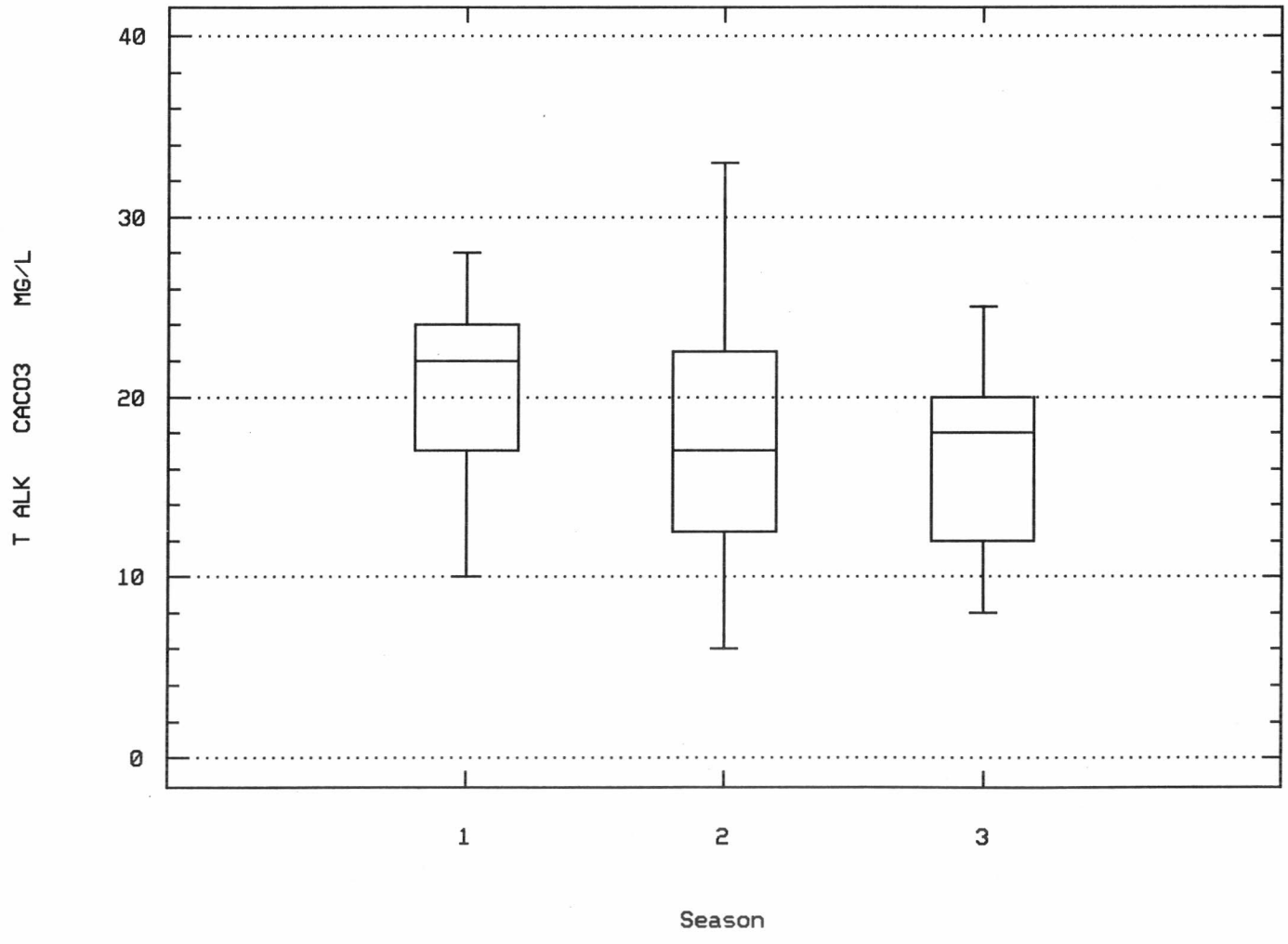
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00410

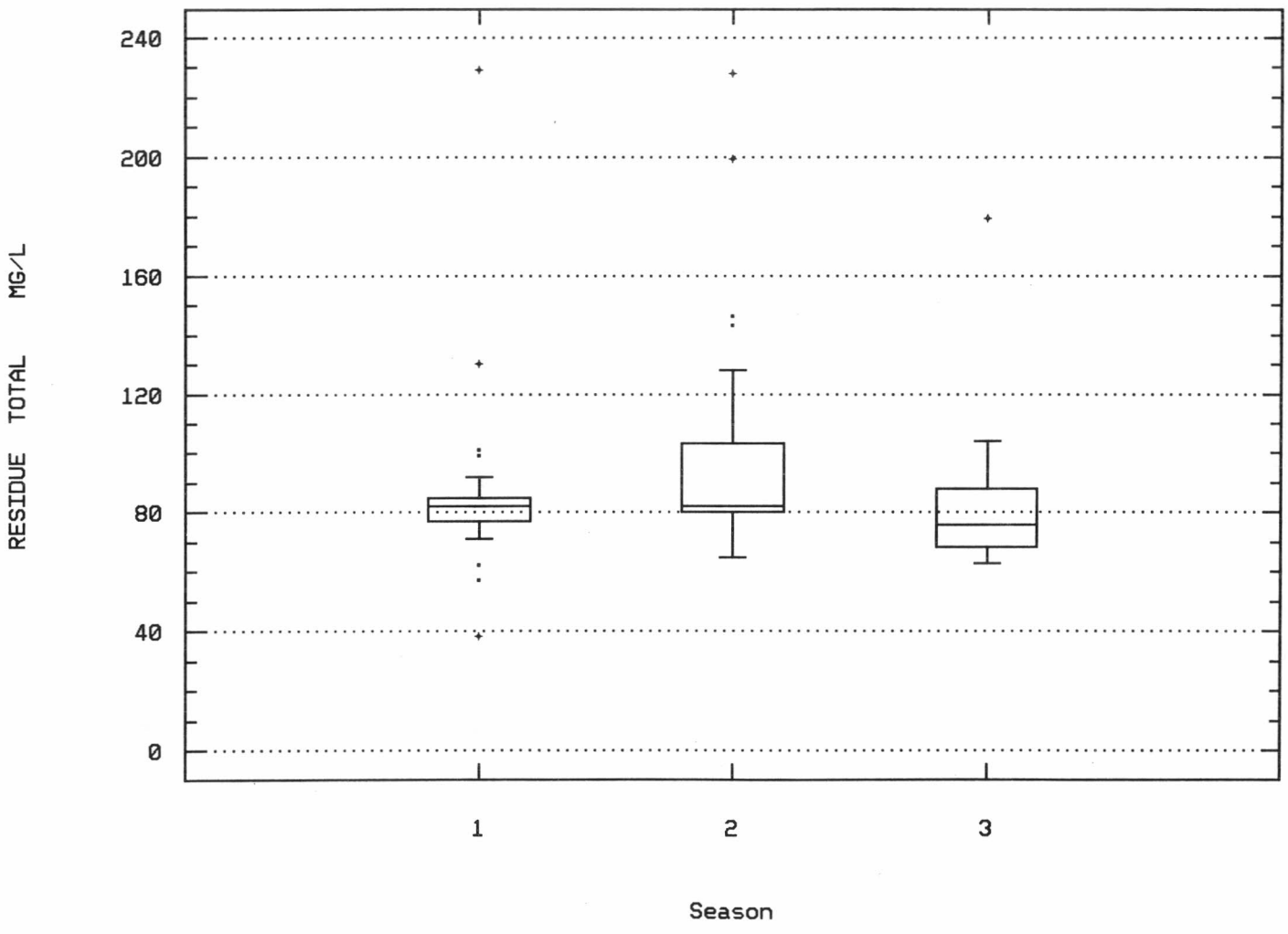
ALKALINITY, TOTAL (MG/L AS CACO3)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00500

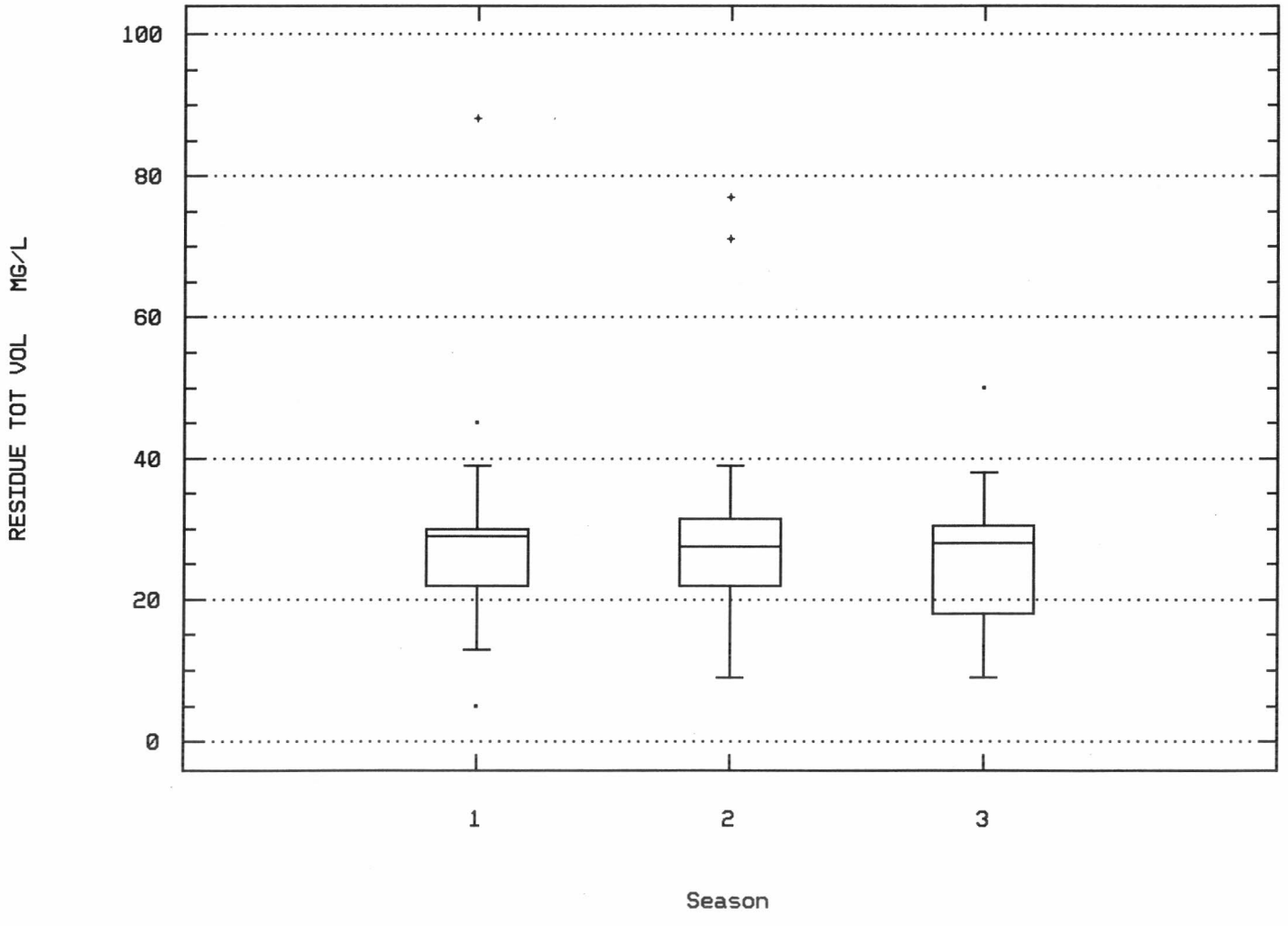
RESIDUE, TOTAL (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00505

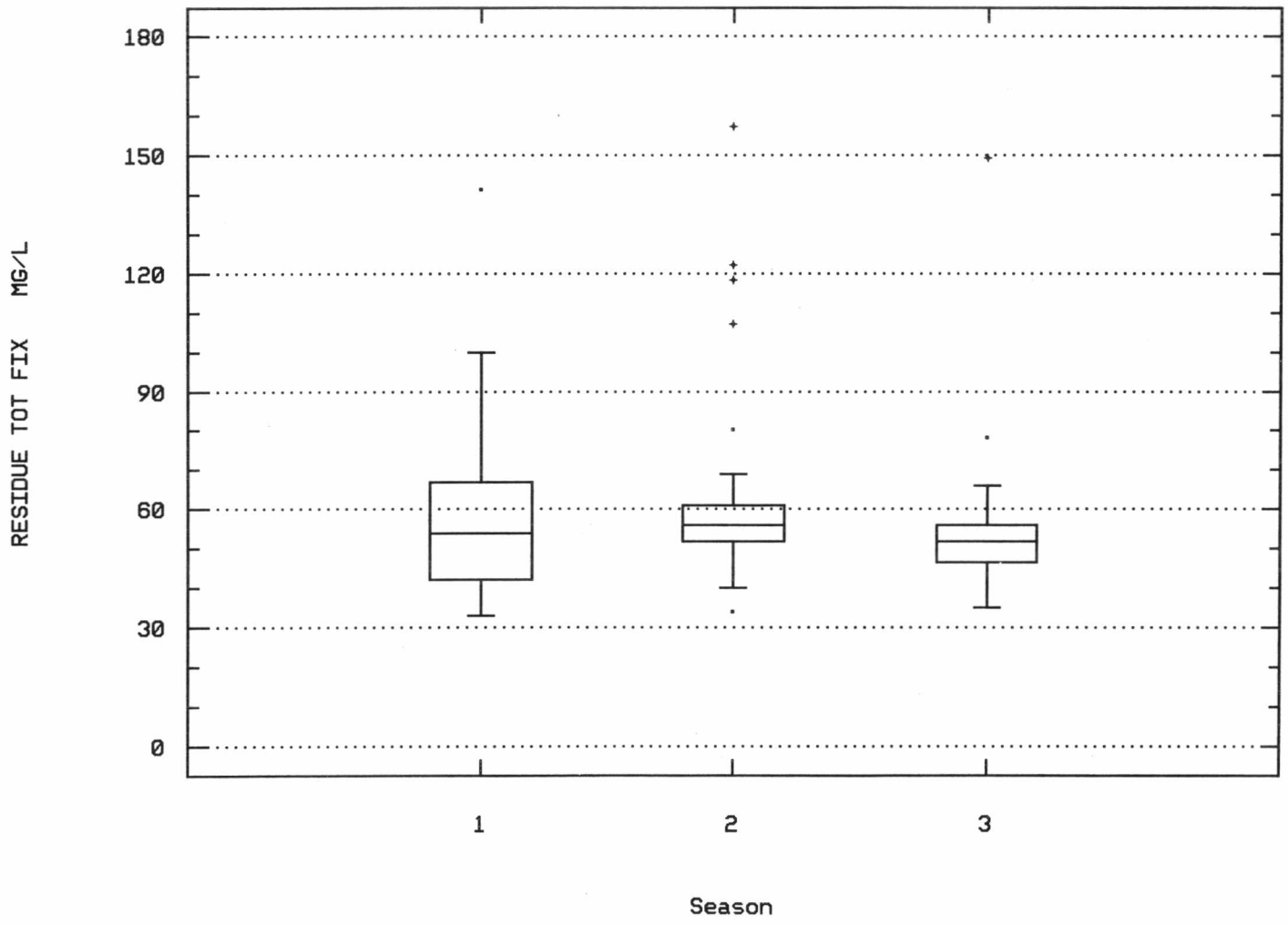
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00510

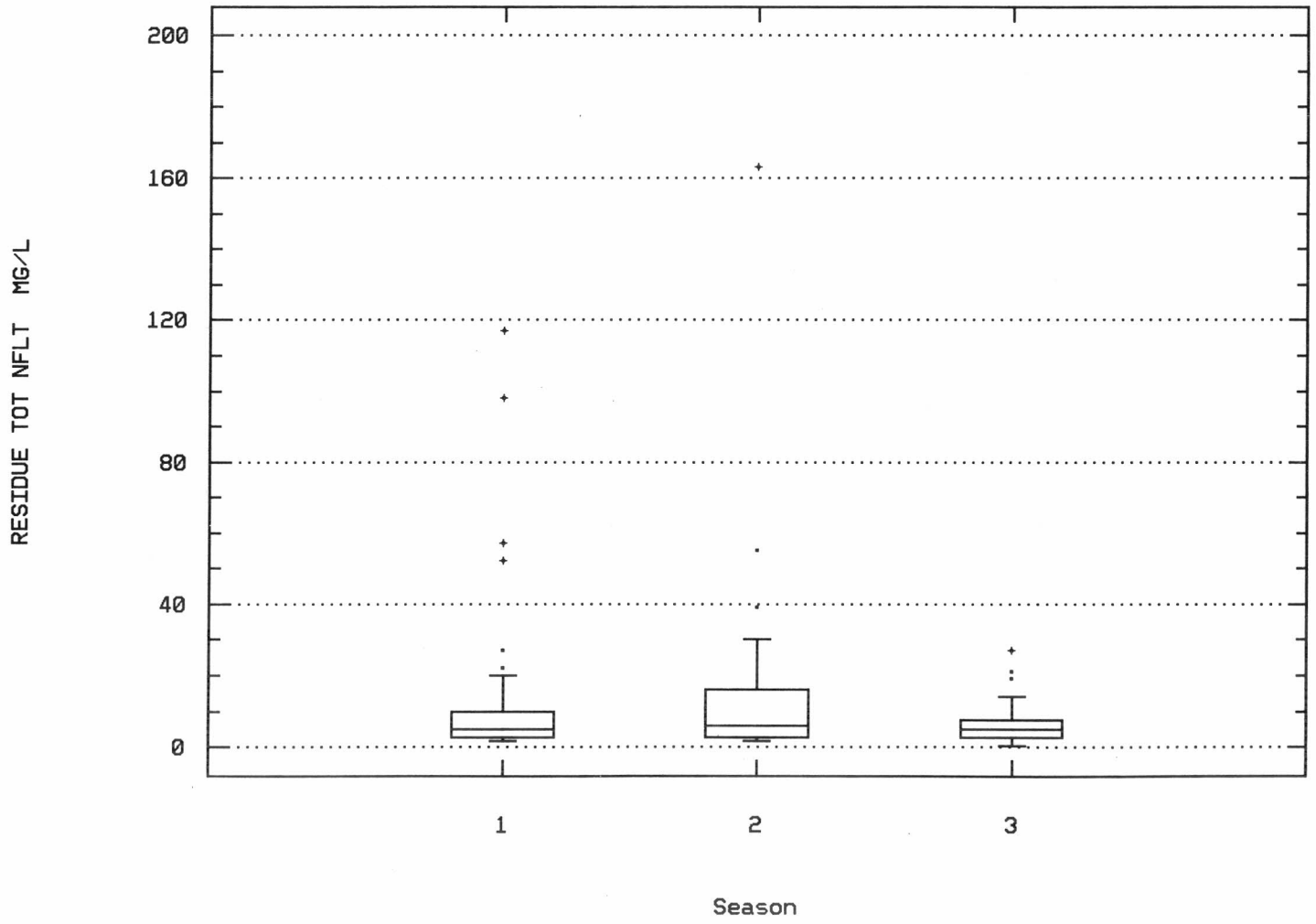
RESIDUE, TOTAL FIXED (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00530

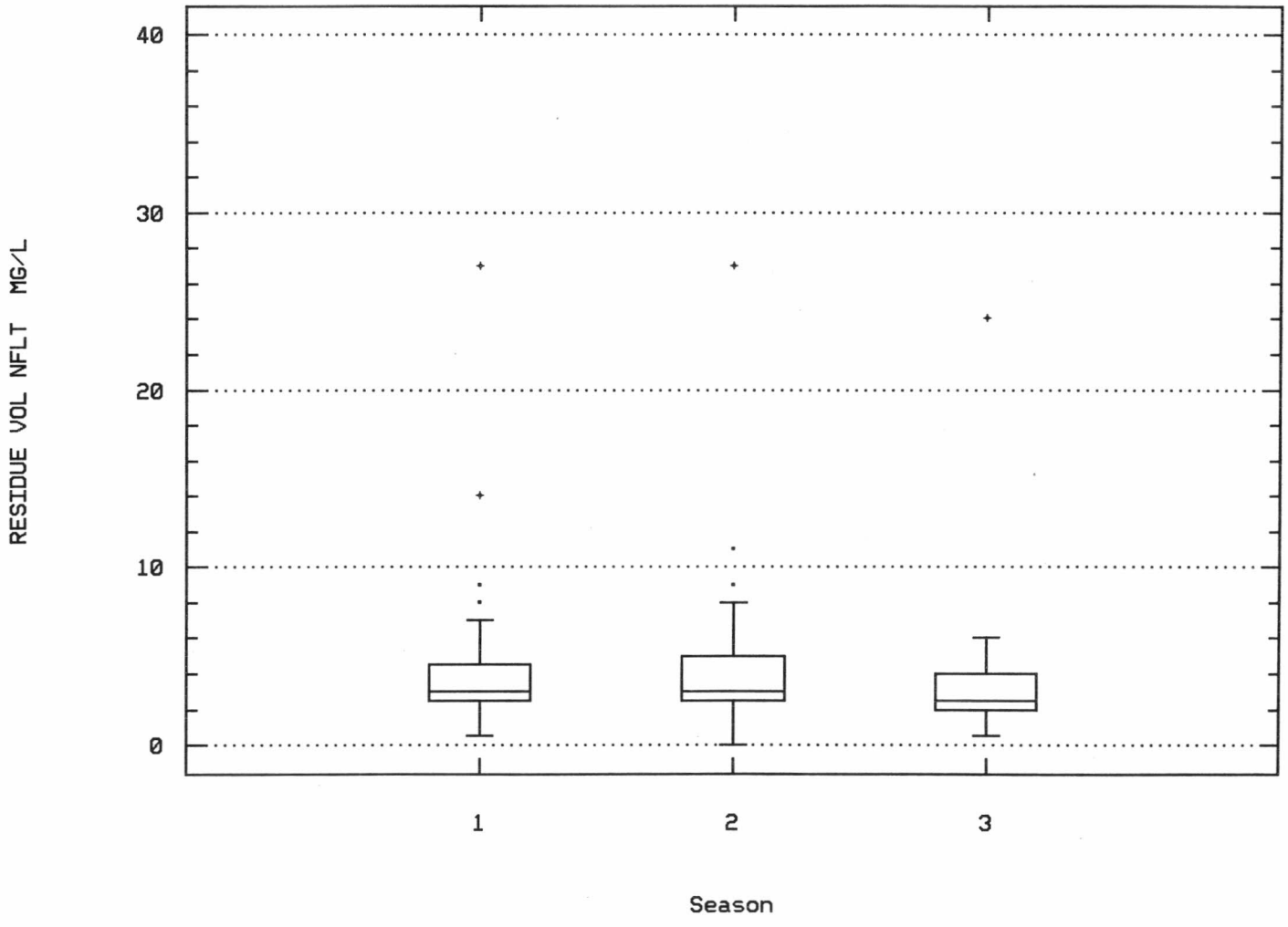
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00535

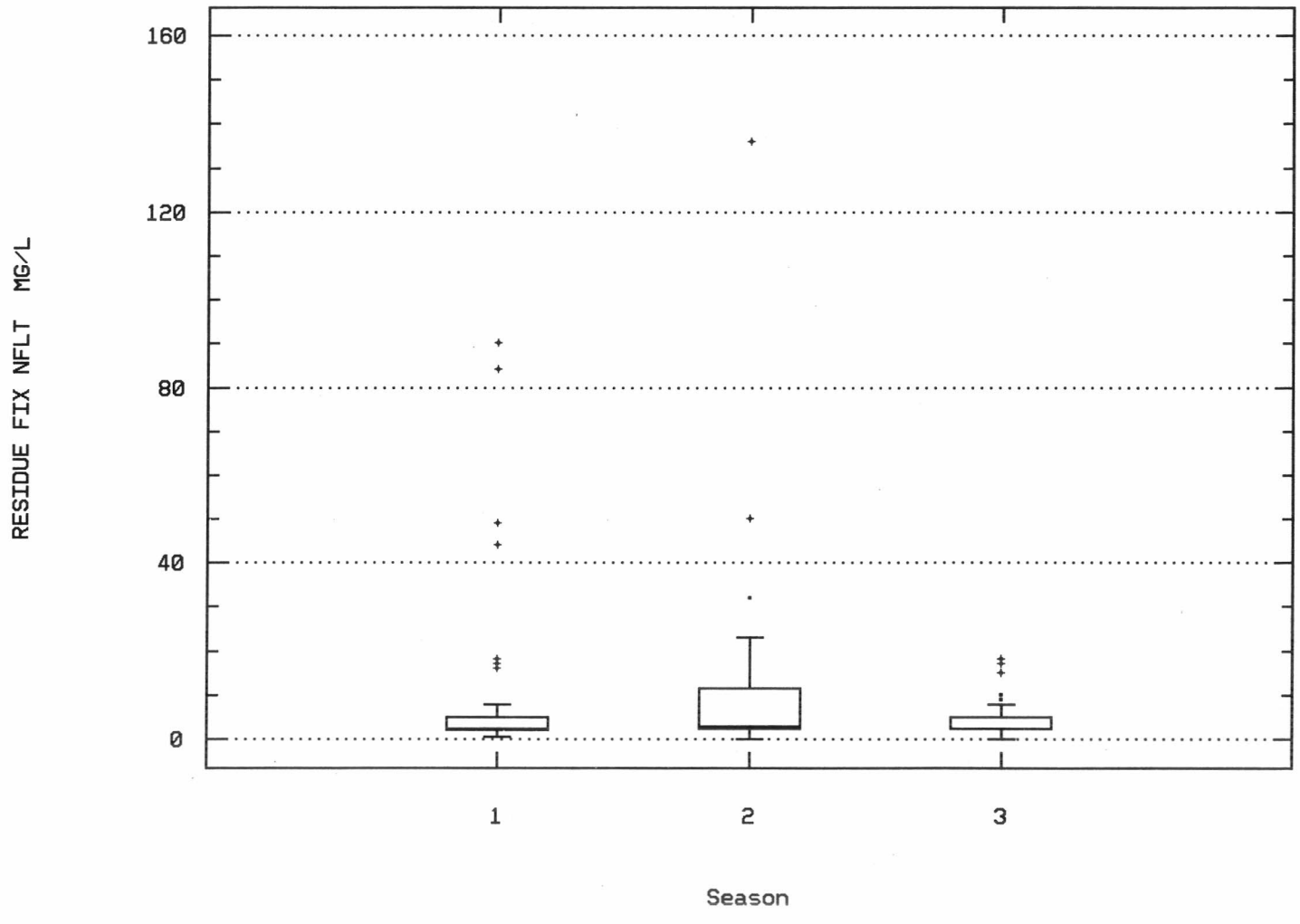
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00540

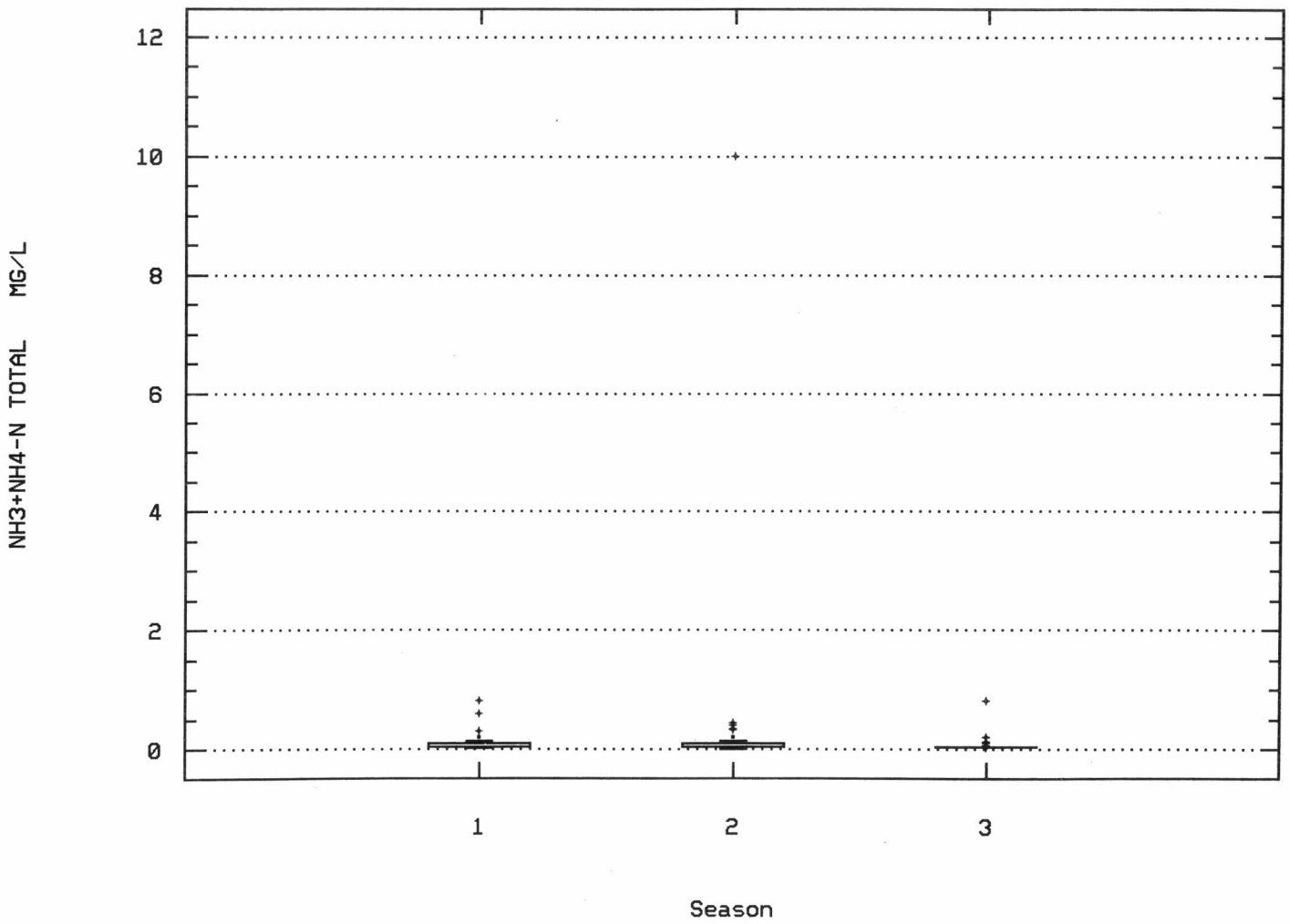
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00610

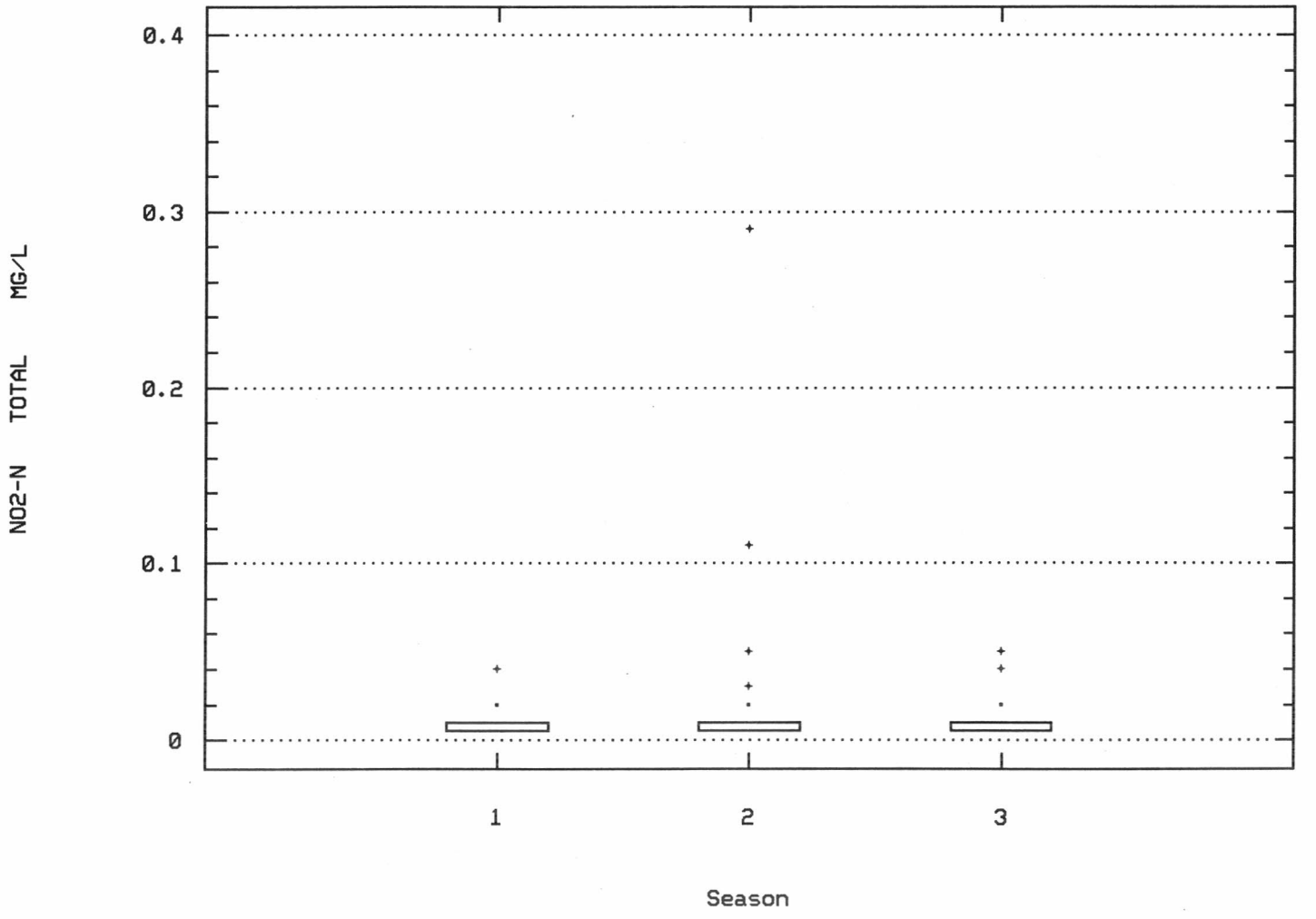
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00615

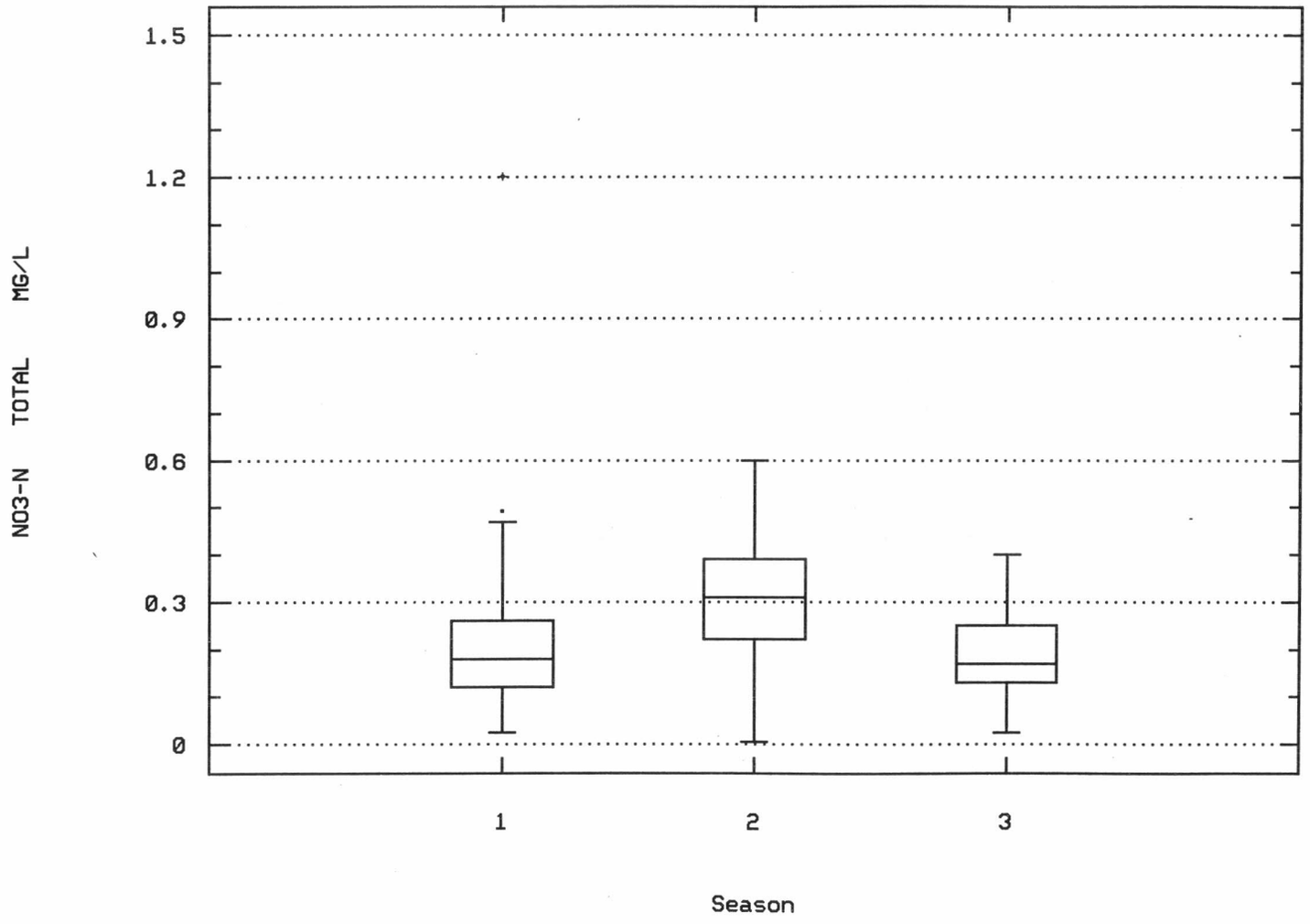
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00620

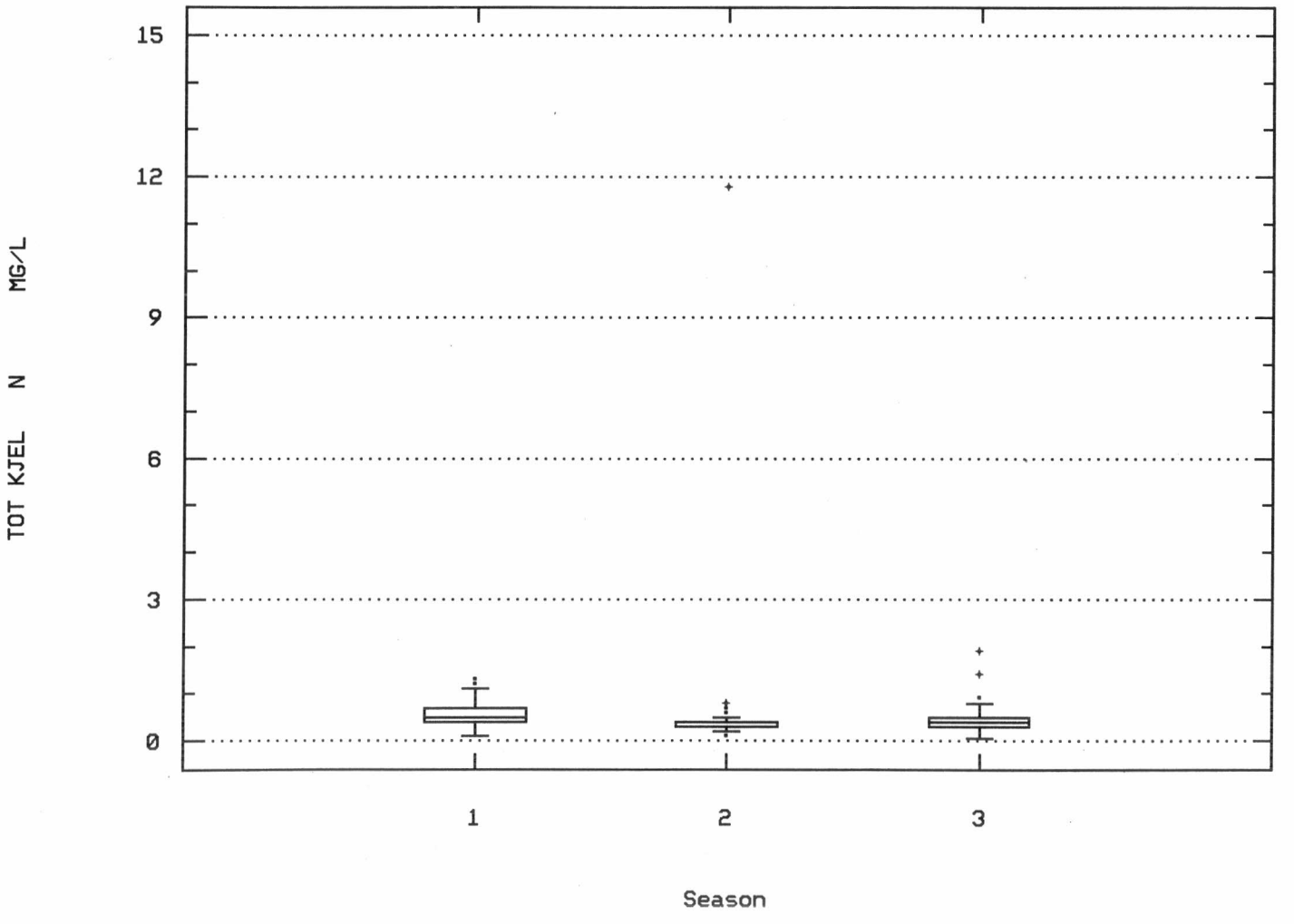
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 00625

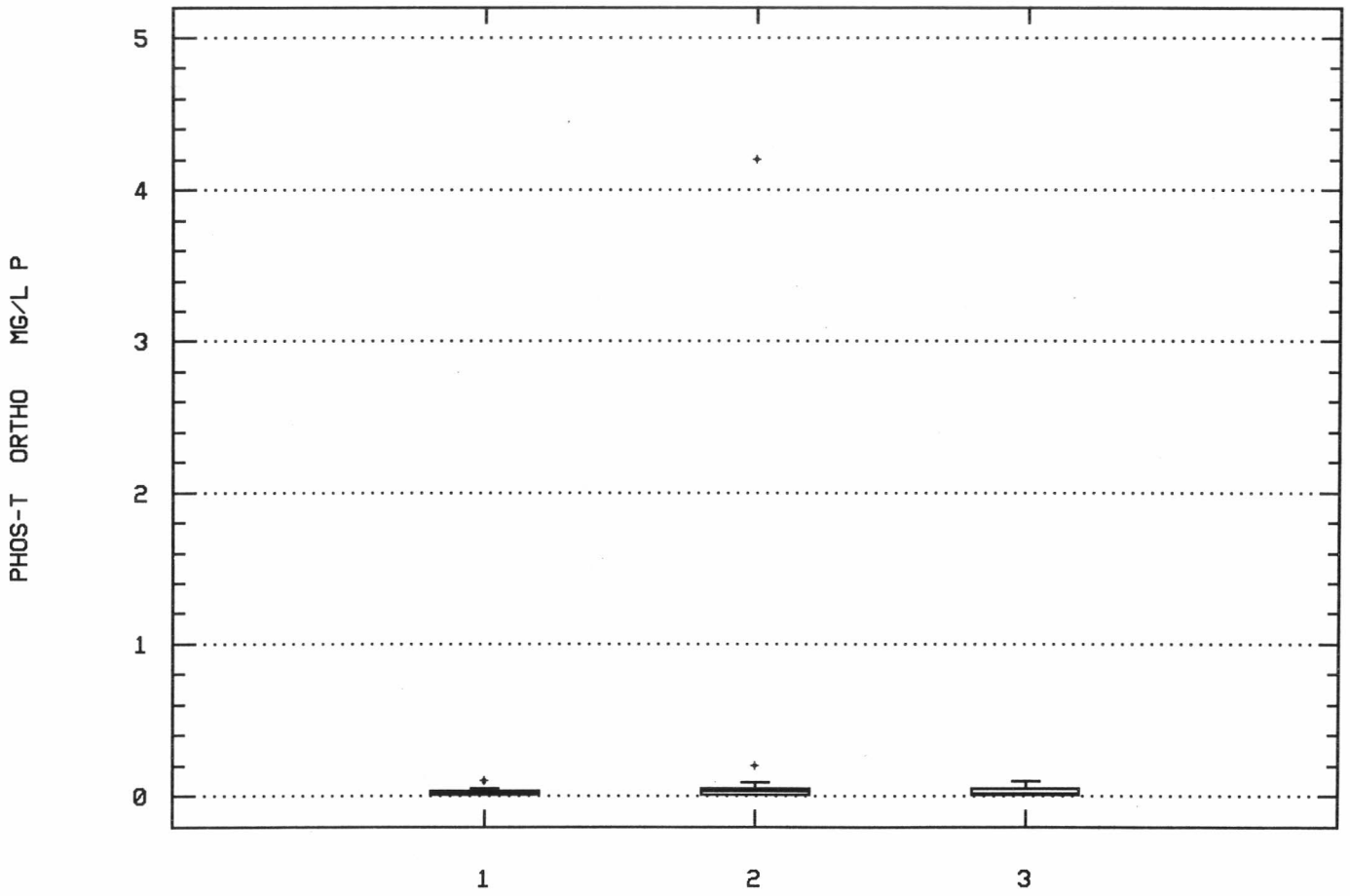
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 1 BRIDGE

Station: RICH0065 Parameter Code: 70507

PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



RT. 1 BRIDGE

Station Inventory for Station: RICH0066

NPS Station ID: RICH0066 LAT/LON: 37.440170/ -77.431920 Agency: 21VASWCB Date Created: / /
Location: APPROX 100 YDS FROM MOUTH OF CREEK FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-GRK000.05 /VA2-07-X0087/VA2-4X0087
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206047 RF1 Mile Point: 0.350 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004709.76 RF3 Mile Point: 10.20 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: GRINDALL CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/21/79	65	18.3	16.863	30.	0.1	50.045	7.074	6.28	12.35	22.2	24.64
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/21/79	66	8.4	8.692	14.	6.8	1.956	1.398	7.14	7.6	9.6	10.46
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/26/75-06/21/79	39	2.	4.436	38.	1.	43.726	6.613	1.	2.	4.	9.
00400 PH (STANDARD UNITS)		09/26/72-06/21/79	65	7.1	7.186	8.2	6.3	0.135	0.368	6.76	7.	7.5	7.54
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/21/79	65	7.1	7.036	8.2	6.3	0.158	0.398	6.76	7.	7.5	7.54
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/21/79	65	0.079	0.092	0.501	0.006	0.008	0.088	0.029	0.032	0.1	0.175
00500 RESIDUE, TOTAL (MG/L)		09/26/72-06/21/79	59	248.	242.305	549.	79.	6441.629	80.26	167.	179.	275.	311.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/26/72-06/21/79	58	65.5	67.966	187.	4.	837.543	28.94	35.7	52.25	82.75	106.
00510 RESIDUE, TOTAL FIXED (MG/L)		09/26/72-06/21/79	59	174.	165.712	470.	11.	6004.519	77.489	75.	118.	198.	218.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/21/79	61	15.	24.803	126.	0.5	851.852	29.187	4.	6.5	32.	77.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/21/79	61	8.	10.262	40.	0.5	58.922	7.676	2.	4.	16.	20.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/21/79	61	4.	14.574	104.	0.	579.665	24.076	0.1	1.	16.	59.2
00545 RESIDUE, SETTLEABLE (ML/L)		03/01/77-03/01/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/21/79	64	8.	8.57	19.5	0.05	30.714	5.542	0.5	3.824	13.	16.
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/21/79	63	0.04	0.238	3.5	0.005	0.28	0.529	0.005	0.01	0.25	0.84
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-03/07/79	52	0.49	1.394	8.	0.05	3.715	1.927	0.08	0.165	1.897	5.119
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/21/79	64	11.295	11.144	23.19	0.3	41.493	6.441	2.399	5.249	16.	20.295
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/23/77-06/21/79	12	1.1	2.282	12.19	0.025	12.768	3.573	0.025	0.283	2.075	10.453
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/26/75-06/21/79	42	18.	20.167	143.	3.	396.972	19.924	11.3	14.	21.	23.7
00940 CHLORIDE,TOTAL IN WATER	MG/L	11/27/72-06/21/79	61	28.	30.334	160.	0.4	460.789	21.466	11.2	22.	35.	39.8
01002 ARSENIC, TOTAL (UG/L AS AS)		08/04/73-06/23/77	3##	1.	2.5	6.	0.5	9.25	3.041	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)		08/04/73-11/17/77	4##	5.	3.875	5.	0.5	5.063	2.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)		01/29/73-11/17/77	8##	5.	12.5	60.	5.	371.429	19.272	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)		01/29/73-11/17/77	8##	5.	6.25	10.	5.	5.357	2.315	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		01/29/73-11/17/77	7	10.	11.5	29.	1.5	99.25	9.962	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		01/29/73-11/17/77	7##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		01/29/73-11/17/77	8	55.	51.25	80.	20.	412.5	20.31	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/21/79	63##	50.	525.873	8000.	30.	2374414.951	1540.914	50.	50.	100.	960.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/21/79	63##	1.699	1.976	3.903	1.477	0.357	0.598	1.699	1.699	2.	2.959
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	94.517								
50060 CHLORINE, TOTAL RESIDUAL (MG/L)		07/11/74-08/03/74	2	1.75	1.75	2.5	1.	1.125	1.061	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		11/27/72-06/21/79	64	4.75	4.683	10.	0.05	7.316	2.705	0.7	2.625	6.15	9.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		11/27/72-06/21/79	64	4.	3.963	9.	0.005	5.48	2.341	0.075	2.199	5.674	7.1

** - 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: RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900 MERCURY, TOTAL (UG/L AS HG)	01/29/73-11/17/77	8##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0066

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	66	0	0.00	20	0	0.00	25	0	0.00	21	0	0.00			
00400 PH	Fresh Chronic	9.	65	0	0.00	19	0	0.00	25	0	0.00	21	0	0.00			
	Other-Lo Lim.	6.5	65	3	0.05	19	1	0.05	25	1	0.04	21	1	0.05			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	63	3	0.05	19	0	0.00	23	1	0.04	21	2	0.10			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	52	0	0.00	18	0	0.00	20	0	0.00	14	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	12	1	0.08	1	0	0.00	4	0	0.00	7	1	0.14			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	61	0	0.00	17	0	0.00	23	0	0.00	21	0	0.00			
	Drinking Water	250.	61	0	0.00	17	0	0.00	23	0	0.00	21	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	50.	3	0	0.00	1	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									
01034 CHROMIUM, TOTAL	Drinking Water	100.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	1300.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Drinking Water	15.	7	2	0.29	1	1	1.00	3	0	0.00	3	1	0.33			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	100.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	5000.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	63	12	0.19	19	6	0.32	23	4	0.17	21	2	0.10			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	2	2	1.00	2	2	1.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	2.	8	0	0.00	1	0	0.00	3	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

Annual Analysis for 1972 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	2	17.2	17.2	21.1	13.3	30.42	5.515	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	2	8.4	8.4	9.8	7.	3.92	1.98	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	2	7.6	7.6	8.2	7.	0.72	0.849	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	2	7.274	7.274	8.2	7.	0.932	0.965	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	2	0.053	0.053	0.1	0.006	0.004	0.066	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	2	45.5	45.5	87.	4.	3444.5	58.69	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	2	9.	9.	14.	4.	50.	7.071	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	2	36.5	36.5	73.	0.	2664.5	51.619	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	1	5.099	5.099	5.099	5.099	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	1	8.	8.	8.	8.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	2##	1225.	1225.	2400.	50.	2761250.	1661.701	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	2##	2.54	2.54	3.38	1.699	1.413	1.189	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 346.41											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	1	2.	2.	2.	2.	0.	0.	**	**	**	**

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Annual Analysis for 1973 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	8	21.1	18.75	25.	7.8	42.257	6.501	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	9	8.	8.7	12.	7.	3.15	1.775	7.	7.45	10.4	12.
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.	6.9	7.	6.7	0.015	0.122	6.7	6.8	7.	7.
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.	6.884	7.	6.7	0.015	0.124	6.7	6.8	7.	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	9	0.1	0.131	0.2	0.1	0.001	0.038	0.1	0.1	0.158	0.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	23.	21.778	41.	8.	112.944	10.628	8.	12.5	29.	41.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	8.	10.111	22.	3.	45.111	6.716	3.	5.	16.	22.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	7.	11.667	29.	2.	111.5	10.559	2.	3.	23.5	29.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	9	7.	7.311	15.5	0.1	32.154	5.67	0.1	1.6	13.	15.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	9##	0.005	0.021	0.1	0.005	0.001	0.032	0.005	0.005	0.025	0.1
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	9	8.5	9.4	21.	1.	47.405	6.885	1.	2.55	14.5	21.
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	9	26.	26.778	41.	9.	119.944	10.952	9.	17.5	37.5	41.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	50.	1211.111	6000.	50.	5384236.111	2320.396	50.	50.	2300.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	1.699	2.181	3.778	1.699	0.768	0.876	1.699	1.699	2.827	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 151.557											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	9	5.3	5.	10.	0.1	13.288	3.645	0.1	1.1	8.5	10.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	9	5.	3.894	8.	0.05	7.815	2.796	0.05	0.65	5.65	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 1974 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	11	18.3	17.373	26.7	8.9	35.126	5.927	9.12	12.2	22.8	26.14
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	11	8.8	8.709	10.4	7.	1.499	1.224	7.	7.2	9.8	10.32
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	11	7.	7.2	7.5	7.	0.054	0.232	7.	7.	7.4	7.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	11	7.	7.148	7.5	7.	0.057	0.239	7.	7.	7.4	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	11	0.1	0.071	0.1	0.032	0.001	0.033	0.032	0.04	0.1	0.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	10	24.	40.9	126.	6.	1758.767	41.938	6.5	11.75	65.5	124.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	10	14.	13.1	22.	2.	49.878	7.062	2.2	7.	20.	21.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	10	10.	27.8	104.	2.	1460.622	38.218	2.1	3.	47.	102.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	11	6.	8.731	17.	0.05	39.775	6.307	0.36	3.399	15.	16.8

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Annual Analysis for 1974 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	10	0.01	0.012	0.02	0.005	0.	0.006	0.005	0.005	0.02	0.02
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	11	9.	12.218	22.	0.4	51.358	7.166	1.6	6.599	19.	21.6
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	10	30.	30.9	50.	17.	94.767	9.735	17.5	22.75	38.5	49.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	11##	50.	52.727	100.	30.	281.818	16.787	34.	50.	50.	90.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	11##	1.699	1.706	2.	1.477	0.014	0.118	1.521	1.699	1.699	1.94
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		50.836									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	11	5.4	5.345	10.	2.2	7.443	2.728	2.28	2.9	8.	9.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	11	5.199	4.781	9.	1.199	6.643	2.577	1.379	2.399	7.199	8.8

** - 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 1975 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	12	18.3	18.467	23.9	10.	19.475	4.413	10.84	15.15	22.2	23.57
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	12	8.6	8.517	10.4	7.	1.087	1.043	7.06	7.55	9.	10.28
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	12	7.05	7.142	7.5	6.7	0.075	0.275	6.73	7.	7.45	7.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	12	7.047	7.065	7.5	6.7	0.082	0.286	6.73	7.	7.45	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	12	0.09	0.086	0.2	0.032	0.003	0.053	0.032	0.036	0.1	0.187
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	34.	35.333	120.	4.	1232.	35.1	4.	11.	43.	120.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	18.	16.333	40.	2.	143.	11.958	2.	6.	22.5	40.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	12.	19.	80.	2.	579.5	24.073	2.	5.	22.5	80.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	11	13.	10.445	18.	0.2	35.843	5.987	0.94	5.	15.	17.6
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	11	0.03	0.093	0.37	0.005	0.016	0.126	0.005	0.005	0.19	0.35
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	11	13.	12.626	23.19	0.8	54.897	7.409	1.5	5.199	19.	22.752
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	11	27.	30.909	96.	10.	529.891	23.019	10.4	20.	34.	83.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	12##	50.	679.167	6000.	50.	2925208.333	1710.324	50.	50.	387.5	4560.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	12##	1.699	2.071	3.778	1.699	0.506	0.712	1.699	1.699	2.449	3.568
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		117.648									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	11	5.	4.686	8.4	0.05	7.305	2.703	0.1	3.8	7.1	8.32
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	11	4.5	4.318	8.	0.05	6.027	2.455	0.05	3.799	5.599	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 1976 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	8	22.8	21.613	30.	8.9	46.53	6.821	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	8	8.1	8.413	9.6	7.6	0.464	0.681	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	7	7.3	7.086	7.8	6.3	0.365	0.604	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	7	7.3	6.769	7.8	6.3	0.482	0.694	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	7	0.05	0.17	0.501	0.016	0.036	0.19	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	8	11.	15.5	40.	2.	166.571	12.906	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	8	8.	7.75	16.	2.	24.5	4.95	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	8	5.	7.75	24.	0.	77.071	8.779	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	8	6.45	8.037	19.5	0.3	54.037	7.351	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	8	0.235	0.288	0.9	0.01	0.089	0.299	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	8	12.99	11.957	22.	2.599	58.707	7.662	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	8	30.5	28.5	38.	5.	114.	10.677	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	7##	50.	85.714	200.	50.	3095.238	55.635	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	7##	1.699	1.871	2.301	1.699	0.056	0.237	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		74.3									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	8	5.5	6.188	9.4	4.	4.284	2.07	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	8	5.	4.9	6.5	3.	1.56	1.249	**	**	**	**

** - Less 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 RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	10	7.5	9.55	21.	1.4	62.907	7.931	1.47	2.1	18.25	20.8
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	10	8.5	9.12	12.	7.2	2.168	1.473	7.29	8.175	10.25	11.9
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	10	7.45	7.26	8.	6.4	0.223	0.472	6.44	6.875	7.525	7.96
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	10	7.447	7.021	8.	6.4	0.286	0.535	6.44	6.875	7.525	7.96
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	10	0.036	0.095	0.398	0.01	0.014	0.117	0.012	0.03	0.134	0.374
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	4.	18.556	95.	0.5	934.215	30.565	0.5	2.25	26.	95.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	3.	6.778	21.	0.5	54.632	7.391	0.5	1.25	13.	21.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	2.	11.889	74.	0.5	594.049	24.373	0.5	0.75	13.	74.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	10	5.15	6.235	13.	0.05	24.533	4.953	0.115	1.749	11.875	13.
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	10	0.18	0.339	1.5	0.005	0.199	0.446	0.011	0.06	0.448	1.406
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	10	6.4	7.778	15.	0.3	28.8	5.367	0.65	3.874	14.79	14.979
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	9	31.	40.822	160.	0.4	2194.134	46.842	0.4	15.5	41.5	160.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	50.	138.889	600.	50.	36736.111	191.667	50.	50.	175.	600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	1.699	1.905	2.778	1.699	0.173	0.416	1.699	1.699	2.088	2.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		80.416									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	10	5.05	4.455	9.4	0.05	9.207	3.034	0.135	1.575	6.7	9.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	10	3.35	3.322	6.5	0.005	7.848	2.801	0.006	0.01	6.05	6.47

** - Less 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 RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	9	20.	17.9	27.	0.1	61.915	7.869	0.1	14.5	23.	27.
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	9	7.6	8.5	14.	6.8	5.04	2.245	6.8	7.4	9.	14.
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.5	7.378	7.7	7.	0.057	0.239	7.	7.15	7.5	7.7
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.5	7.314	7.7	7.	0.061	0.248	7.	7.15	7.5	7.7
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	9	0.032	0.048	0.1	0.02	0.001	0.03	0.02	0.032	0.075	0.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	9.	16.778	84.	3.	659.444	25.68	3.	3.5	15.5	84.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	7.	7.889	18.	2.	27.361	5.231	2.	3.5	11.5	18.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	9	1.	9.	66.	0.	464.938	21.562	0.	0.25	6.	66.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	9	9.5	8.955	13.	1.599	12.532	3.54	1.599	7.5	12.25	13.
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	9	0.11	0.757	3.5	0.01	1.306	1.143	0.01	0.045	1.15	3.5
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	9	11.59	11.432	16.5	2.199	23.122	4.809	2.199	8.3	16.	16.5
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	8	26.5	28.	39.	17.	56.286	7.502	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	50.	983.333	8000.	50.	6945625.	2635.455	50.	50.	275.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	9##	1.699	2.055	3.903	1.699	0.59	0.768	1.699	1.699	2.199	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		113.497									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	9	3.8	3.811	7.8	0.5	4.614	2.148	0.5	2.2	4.9	7.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	9	3.5	3.478	7.8	0.5	4.625	2.15	0.5	1.95	4.55	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 1979 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	5	12.5	13.9	21.5	10.	23.175	4.814	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	5	8.8	9.12	10.6	8.	0.932	0.965	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	5	7.2	7.26	7.5	7.	0.053	0.23	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	5	7.2	7.214	7.5	7.	0.056	0.236	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	5	0.063	0.061	0.1	0.032	0.001	0.03	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	5	9.	11.4	20.	7.	28.3	5.32	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	5	8.	9.	16.	5.	17.5	4.183	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	5	2.	2.4	4.	1.	2.3	1.517	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	5	12.5	12.	16.	8.	8.875	2.979	**	**	**	**

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Annual Analysis for 1979 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	5	0.06	0.23	0.9	0.04	0.141	0.375	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	5	15.8	14.78	17.6	10.3	7.722	2.779	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	5	27.	26.6	30.	22.	10.3	3.209	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	4##	50.	87.5	200.	50.	5625.	75.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	4##	1.699	1.849	2.301	1.699	0.091	0.301	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		70.711									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	5	2.7	2.7	3.4	1.9	0.435	0.66	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	5	2.5	2.56	3.4	1.7	0.443	0.666	**	**	**	**

** - Less 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 10/14 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	20	22.8	22.27	27.8	2.9	24.942	4.994	19.12	21.775	24.3	26.8
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	20	7.45	7.645	8.8	6.8	0.278	0.528	7.	7.2	8.	8.2
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	19	7.3	7.242	8.2	6.3	0.239	0.489	6.6	7.	7.5	8.
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	19	7.3	7.001	8.2	6.3	0.301	0.548	6.6	7.	7.5	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	19	0.05	0.1	0.501	0.006	0.014	0.118	0.01	0.032	0.1	0.251
00500 RESIDUE, TOTAL (MG/L)	09/26/72-06/21/79	19	258.	239.	403.	79.	6338.667	79.616	83.	230.	268.	311.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/21/79	18	58.5	59.444	121.	4.	697.438	26.409	28.3	38.25	72.25	101.2
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/21/79	19	189.	171.	322.	48.	4678.333	68.398	52.	153.	204.	219.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	19	11.	21.526	106.	2.	799.041	28.267	3.	4.	32.	84.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	19	8.	8.	20.	2.	33.889	5.821	2.	3.	10.	18.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	19	3.	13.526	92.	0.	599.708	24.489	0.	0.	14.	66.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	19	7.5	6.976	16.	0.05	28.317	5.321	0.1	2.399	11.5	15.
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	19	0.07	0.251	0.9	0.005	0.1	0.316	0.005	0.01	0.41	0.9
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	18	0.99	2.211	6.899	0.09	5.722	2.392	0.099	0.283	4.4	6.09
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	19	8.6	10.078	22.	0.4	47.717	6.908	1.	4.799	16.	20.
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	17	34.	30.235	50.	5.	128.191	11.322	8.2	28.	37.	40.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	19##	50.	1468.421	8000.	50.	6729780.702	2594.182	50.	50.	2400.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	19##	1.699	2.304	3.903	1.699	0.768	0.876	1.699	1.699	3.38	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	201.557								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	19	5.2	5.4	10.	0.1	8.206	2.865	0.2	4.	7.1	9.4
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	19	5.199	4.829	9.	0.05	5.645	2.376	0.1	4.	6.5	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: 10/15 to 3/15 - Station RICH0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	25	12.2	11.74	21.1	0.1	33.027	5.747	1.82	9.45	16.7	19.4
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	25	9.6	9.736	14.	7.	2.342	1.53	7.66	8.7	10.5	12.
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	25	7.	7.1	7.6	6.5	0.082	0.286	6.76	7.	7.45	7.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	25	7.	7.015	7.6	6.5	0.089	0.299	6.76	7.	7.45	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	25	0.1	0.097	0.316	0.025	0.004	0.063	0.032	0.036	0.1	0.175
00500 RESIDUE, TOTAL (MG/L)	09/26/72-06/21/79	20	227.5	235.05	474.	128.	5949.945	77.136	167.2	177.25	269.5	325.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/21/79	20	65.	66.25	114.	28.	430.303	20.744	45.1	49.25	75.75	100.6
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/21/79	20	140.5	151.05	399.	11.	6712.471	81.93	33.4	112.25	195.75	217.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	22.	30.571	126.	0.5	1120.932	33.48	1.2	6.5	37.	93.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	10.	11.143	22.	0.5	60.304	7.766	0.8	3.5	20.	21.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	4.	19.476	104.	0.	847.137	29.106	0.5	2.	26.	73.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	24	7.25	7.906	17.	0.05	28.814	5.368	0.7	3.474	13.	15.
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	23	0.04	0.27	3.5	0.005	0.538	0.733	0.005	0.005	0.25	0.704
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	20	0.54	1.112	8.	0.05	3.153	1.776	0.105	0.285	1.294	3.002
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	24	8.099	9.899	22.	0.3	38.762	6.226	2.399	4.224	15.725	18.7
00940 CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	23	25.	30.826	160.	8.	876.332	29.603	11.4	20.	34.	40.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	23##	50.	162.174	1200.	30.	79135.968	281.311	50.	50.	50.	560.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	23##	1.699	1.883	3.079	1.477	0.197	0.444	1.699	1.699	1.699	2.746
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	76.421								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	24	2.8	3.644	10.	0.05	6.904	2.628	0.4	1.925	5.175	8.4
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	24	2.299	2.84	8.	0.005	5.347	2.312	0.01	1.199	4.5	6.65

** - Less 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: 3/16 to 6/30 - Station RICH0066

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	20	18.15	17.86	30.	2.1	35.558	5.963	9.31	15.125	21.075	26.25
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	21	8.4	8.448	10.	7.	0.761	0.872	7.12	7.8	9.	9.96
00400	PH (STANDARD UNITS)	09/26/72-06/21/79	21	7.3	7.238	7.6	6.4	0.104	0.323	6.8	7.	7.5	7.5
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	21	7.3	7.099	7.6	6.4	0.125	0.353	6.8	7.	7.5	7.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	21	0.05	0.08	0.398	0.025	0.007	0.085	0.032	0.032	0.1	0.158
00500	RESIDUE, TOTAL (MG/L)	09/26/72-06/21/79	20	249.	252.7	549.	166.	7528.853	86.769	172.2	183.75	278.5	357.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/21/79	20	78.	77.35	187.	12.	1293.713	35.968	33.9	57.	85.75	114.1
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/21/79	20	163.5	175.35	470.	86.	6832.976	82.662	94.1	122.5	196.5	261.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	12.	22.	120.	4.	662.1	25.731	4.4	7.5	29.	46.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	8.	11.429	40.	2.	78.857	8.88	2.2	6.	15.	22.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/21/79	21	4.	10.619	80.	0.5	309.423	17.59	0.6	1.	13.	24.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/21/79	21	12.5	10.771	19.5	0.2	30.097	5.486	1.699	6.5	15.5	17.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/21/79	21	0.04	0.191	1.5	0.005	0.183	0.427	0.005	0.01	0.09	1.2
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	14	0.17	0.746	2.799	0.06	0.983	0.991	0.065	0.08	1.317	2.694
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/21/79	21	14.79	13.53	23.19	0.8	34.262	5.853	4.439	8.75	17.8	20.918
00940	CHLORIDE,TOTAL IN WATER MG/L	11/27/72-06/21/79	21	27.	29.876	96.	0.4	315.342	17.758	12.2	25.	31.5	45.8
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	21##	50.	71.429	300.	50.	3892.857	62.393	50.	50.	50.	180.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	21##	1.699	1.779	2.477	1.699	0.046	0.215	1.699	1.699	1.699	2.241
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	60.121								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/21/79	21	5.	5.221	9.4	0.05	5.632	2.373	2.38	3.5	7.65	8.32
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/21/79	21	4.199	4.464	8.	0.05	3.546	1.883	2.3	3.2	5.95	6.999

** - Less 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: RICH0067

NPS Station ID: RICH0067 LAT/LON: 37.444448/ -77.436948 Agency: 21VASWCB Date Created: / /
Location: FALLING CREEK EXIT OFF I-95
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes:
RMI-Miles:
HUC: 02080206 Depth of Water: 0
Major Basin: 02-NORTH ATLANTIC Elevation: 0
Minor Basin: 2-JAMES
RF1 Index: 02080206047 RF1 Mile Point: 0.700
RF3 Index: 02080206138400.00 RF3 Mile Point: 0.07
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING
RIVER: GRINDALL CREEK SECTION: 07

FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
STORET Station ID(s): 2-GRK000.57 /VA2-07-X0088/VA2-4X0088
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 0.00 On/Off RF1: OFF
Distance from RF3: 0.06 On/Off RF3:
BASIN: 2 JAMES REGION: 4 PIEDMONT
TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	180	17.1	16.878	35.	0.	63.771	7.986	6.14	10.125	23.875	26.45
00062 ELEVATION, RESERVOIR SURFACE WATER IN FEET	10/09/80-10/09/80	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-06/20/90	17	8.6	19.012	160.	3.8	1376.105	37.096	4.28	4.8	12.55	59.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	106	194.5	221.623	1277.	60.	20576.466	143.445	128.8	160.75	243.25	309.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-06/20/90	8	189.	217.5	436.	145.	8380.857	91.547	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	179	9.4	9.734	16.4	6.	3.489	1.868	7.8	8.4	10.9	12.4
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	114	2.	2.856	16.	0.05	8.864	2.977	1.	1.	3.	6.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	114	19.5	21.272	125.	2.	187.704	13.701	11.	13.	24.	35.5
00400 PH (STANDARD UNITS)	03/30/73-06/20/90	178	7.385	7.361	9.5	5.7	0.322	0.568	6.7	7.	7.7	8.
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	178	7.385	7.013	9.5	5.7	0.444	0.666	6.7	7.	7.7	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	178	0.041	0.097	1.995	0.	0.036	0.19	0.01	0.02	0.1	0.2
00403 PH, LAB, STANDARD UNITS SU	11/29/83-06/20/90	18	6.95	6.944	7.4	6.4	0.106	0.326	6.49	6.675	7.225	7.4
00403 CONVERTED PH, LAB, STANDARD UNITS	11/29/83-06/20/90	18	6.947	6.831	7.4	6.4	0.12	0.346	6.49	6.675	7.225	7.4
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/29/83-06/20/90	18	0.113	0.148	0.398	0.04	0.012	0.11	0.04	0.06	0.212	0.324
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	11/29/83-06/20/90	19	25.	25.158	41.	8.	74.14	8.61	15.	18.	31.	39.
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	77	140.	157.766	574.	13.	6467.076	80.418	97.4	117.5	167.5	251.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	76	46.	47.289	134.	1.	583.968	24.165	19.8	32.25	61.	78.3
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	76	90.	110.842	490.	10.	5009.521	70.778	61.4	76.25	115.75	187.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	174	7.	18.385	270.	0.	1325.909	36.413	2.	2.5	13.25	43.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	173	3.	5.61	104.	0.	93.72	9.681	0.5	2.	6.	12.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	174	3.	13.31	220.	0.	904.157	30.069	0.5	2.	9.	32.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	173##	0.05	0.206	3.699	0.01	0.224	0.473	0.05	0.05	0.2	0.36
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	174	0.01	0.028	1.1	0.005	0.007	0.087	0.005	0.005	0.03	0.05
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	160	0.465	0.519	4.879	0.005	0.238	0.488	0.05	0.173	0.75	0.969
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	171	0.5	0.862	40.	0.1	9.358	3.059	0.2	0.3	0.7	1.2
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	12	0.3	0.429	1.1	0.025	0.149	0.386	0.042	0.09	0.768	1.07
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	107	0.1	0.245	3.9	0.05	0.285	0.534	0.05	0.05	0.2	0.4
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	108	0.05	0.119	1.55	0.005	0.047	0.216	0.02	0.03	0.11	0.211
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	108	7.1	11.103	200.	0.5	377.969	19.441	5.	6.	10.	18.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-06/20/90	41	46.	44.951	68.	21.	123.248	11.102	27.2	39.	52.	59.2
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	79	21.	27.81	210.	2.	766.899	27.693	14.	17.	28.	41.
00945 SULFATE, TOTAL (MG/L AS SO4)	11/29/88-06/20/90	16	11.	11.188	16.	8.	6.029	2.455	8.	9.	13.	15.3
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	17	0.14	0.125	0.2	0.05	0.002	0.048	0.05	0.075	0.16	0.176

** - Less 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: RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955 SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	13	9.5	10.215	14.2	7.4	4.3	2.074	7.56	8.9	11.5	14.04
01002 ARSENIC, TOTAL (UG/L AS AS)	08/04/73-03/28/85	5##	1.	6.8	31.	0.5	183.075	13.531	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	3	3.2	3.253	4.7	1.86	2.019	1.421	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	08/04/73-03/28/85	6##	2.75	2.75	5.	0.5	6.075	2.465	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3##	0.055	0.062	0.08	0.05	0.	0.016	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3	7.9	7.317	8.19	5.86	1.612	1.27	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-03/28/85	9##	5.	6.167	20.	0.5	29.125	5.397	0.5	5.	5.	20.
01042 COPPER, TOTAL (UG/L AS CU)	05/29/73-03/28/85	9##	5.	8.333	20.	5.	43.75	6.614	5.	5.	12.5	20.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	3	4.52	4.473	4.9	4.	0.204	0.452	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	08/04/73-03/28/85	8	19.	23.375	62.	1.	474.839	21.791	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	3	2.1	8.067	20.5	1.6	116.003	10.77	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	6##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3	1.6	8.133	22.	0.8	144.373	12.016	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/29/73-03/28/85	9	50.	45.	80.	5.	450.	21.213	5.	30.	55.	80.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	3	44.2	39.133	45.2	28.	93.213	9.655	**	**	**	**
05053 INVALID PARAMETER	08/15/79-08/15/79	1	1.	1.	1.	1.	0.	0.	**	**	**	**
05109 INVALID PARAMETER	08/15/79-08/15/79	1	8.	8.	8.	8.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	174	400.	1265.54	8000.	50.	4226325.984	2055.803	50.	100.	1125.	4300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	174	2.602	2.615	3.903	1.699	0.454	0.674	1.699	2.	3.051	3.632
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	411.714								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	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: RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-08/03/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	63	0.1	0.265	5.2	0.05	0.608	0.779	0.05	0.05	0.1	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	62	0.05	0.13	4.	0.005	0.272	0.522	0.005	0.018	0.053	0.1
71900 MERCURY, TOTAL (UG/L AS HG)	05/29/73-03/28/85	9##	0.25	0.267	0.5	0.15	0.009	0.094	0.15	0.25	0.25	0.5
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	3##	0.025	0.045	0.1	0.01	0.002	0.048	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	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

EPA Water Quality Criteria Analysis for Station: RICH0067

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	17	1	0.06	3	0	0.00	6	1	0.17	8	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	179	0	0.00	50	0	0.00	69	0	0.00	60	0	0.00			
00400 PH	Fresh Chronic	9.	178	2	0.01	50	1	0.02	70	0	0.00	58	1	0.02			
	Other-Lo Lim.	6.5	178	12	0.07	50	0	0.00	70	8	0.11	58	4	0.07			
00403 PH, LAB	Fresh Chronic	9.	18	0	0.00	3	0	0.00	8	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	18	3	0.17	3	0	0.00	8	2	0.25	7	1	0.14			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	174	1	0.01	47	0	0.00	71	1	0.01	56	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	160	0	0.00	45	0	0.00	66	0	0.00	49	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	12	0	0.00	1	0	0.00	4	0	0.00	7	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	79	0	0.00	19	0	0.00	31	0	0.00	29	0	0.00			
	Drinking Water	250.	79	0	0.00	19	0	0.00	31	0	0.00	29	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	16	0	0.00	1	0	0.00	7	0	0.00	8	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	17	0	0.00	2	0	0.00	7	0	0.00	8	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00	1	0	0.00				4	0	0.00			
	Drinking Water	50.	5	0	0.00	1	0	0.00				4	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	3&	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	5.	3&	0	0.00	1	0	0.00				2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	9	0	0.00	1	0	0.00	2	0	0.00	6	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	9	2	0.22	1	0	0.00	2	0	0.00	6	2	0.33			
	Drinking Water	1300.	9	0	0.00	1	0	0.00	2	0	0.00	6	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	8	0	0.00	1	0	0.00	2	0	0.00	5	0	0.00			
	Drinking Water	15.	8	5	0.63	1	1	1.00	2	1	0.50	5	3	0.60			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
	Drinking Water	100.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00							2	0	0.00			
	Drinking Water	100.	2	0	0.00							2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	9	0	0.00	1	0	0.00	2	0	0.00	6	0	0.00			
	Drinking Water	5000.	9	0	0.00	1	0	0.00	2	0	0.00	6	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	174	118	0.68	46	32	0.70	71	45	0.63	57	41	0.72			
34356 ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	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

EPA Water Quality Criteria Analysis for Station: RICH0067

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	9	0	0.00	1	0	0.00	2	0	0.00	6	0	0.00			
		Drinking Water	2.	9	0	0.00	1	0	0.00	2	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 1973 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	9	21.1	18.622	25.6	2.2	53.484	7.313	2.2	15.25	23.85	25.6
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	10	8.8	9.02	13.4	6.2	3.444	1.856	6.38	8.	9.45	13.08
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	9	7.	7.067	7.5	6.5	0.13	0.361	6.5	6.75	7.45	7.5
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	9	7.	6.937	7.5	6.5	0.149	0.386	6.5	6.75	7.45	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	9	0.1	0.116	0.316	0.032	0.009	0.095	0.032	0.036	0.179	0.316
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	9	131.	122.778	201.	13.	3360.944	57.974	13.	78.	168.	201.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	9	25.	35.667	134.	3.	1672.25	40.893	3.	7.5	47.	134.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	9	84.	86.667	169.	10.	1919.25	43.809	10.	63.5	114.	169.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	6.	9.	28.	1.	68.5	8.276	1.	4.	12.5	28.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	2.	3.	8.	0.	9.75	3.122	0.	0.5	6.	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	5.	6.	20.	0.	36.75	6.062	0.	2.	8.5	20.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.3	0.645	3.699	0.05	1.217	1.103	0.05	0.05	0.7	3.399
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.01	0.031	0.14	0.005	0.002	0.042	0.005	0.005	0.05	0.131
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.7	1.066	4.879	0.25	1.878	1.371	0.254	0.365	0.965	4.507
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	10	1.05	1.	1.5	0.4	0.124	0.352	0.42	0.675	1.249	1.49
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	9	18.	25.111	84.	12.	505.361	22.48	12.	14.	23.5	84.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	200.	740.	3000.	50.	1135444.444	1065.572	50.	87.5	1400.	2930.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	2.301	2.436	3.477	1.699	0.424	0.651	1.699	1.925	3.121	3.466
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		272.732									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.075	0.745	5.2	0.05	2.591	1.61	0.05	0.05	0.75	4.8
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10	0.1	0.58	4.	0.05	1.569	1.253	0.05	0.05	0.375	3.72

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	14.4	15.918	26.7	8.3	56.162	7.494	8.42	8.9	25.6	26.48
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	11	9.9	9.818	12.4	7.6	2.558	1.599	7.68	8.4	11.	12.2
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.5	7.427	9.	6.5	0.416	0.645	6.6	7.	7.7	8.76
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.5	7.132	9.	6.5	0.512	0.715	6.6	7.	7.7	8.76
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.032	0.074	0.316	0.001	0.008	0.088	0.004	0.02	0.1	0.273
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	11	126.	153.727	301.	90.	5074.218	71.234	93.2	111.	152.	298.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	11	46.	47.091	78.	1.	427.291	20.671	7.4	36.	61.	76.8
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	11	89.	106.909	240.	44.	3975.291	63.05	46.8	59.	119.	233.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	12.	27.	136.	0.	1742.4	41.742	0.2	1.	27.	123.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	16.909	104.	0.	902.291	30.038	0.2	1.	22.	87.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	3.	10.091	52.	0.	278.691	16.694	0.	0.	9.	48.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.2	0.177	0.3	0.05	0.01	0.101	0.05	0.05	0.3	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.01	0.022	0.09	0.005	0.001	0.027	0.005	0.005	0.03	0.082
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.6	0.644	1.089	0.3	0.059	0.242	0.328	0.46	0.79	1.071
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	11	0.7	0.664	1.	0.3	0.043	0.206	0.32	0.5	0.8	0.98
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	10	17.	19.9	43.	9.	92.767	9.632	9.4	14.5	24.25	41.5
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	100.	504.545	2700.	50.	622727.273	789.131	50.	50.	800.	2340.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.	2.315	3.431	1.699	0.355	0.595	1.699	1.699	2.903	3.336
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		206.529									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.109	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.28
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	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

Annual Analysis for 1975 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	12	18.6	16.8	24.4	6.1	35.296	5.941	7.27	10.7	21.925	23.92
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	12	8.7	9.2	12.9	7.2	2.973	1.724	7.26	7.85	10.6	12.33
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.	7.117	7.5	6.5	0.1	0.316	6.62	7.	7.5	7.5
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.	7.012	7.5	6.5	0.112	0.334	6.62	7.	7.5	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	12	0.1	0.097	0.316	0.032	0.006	0.077	0.032	0.032	0.1	0.259
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	9	154.	169.	250.	111.	1766.25	42.027	111.	142.5	202.	250.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	9	66.	65.111	96.	38.	367.861	19.18	38.	49.5	81.	96.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	9	87.	103.889	178.	45.	2335.611	48.328	45.	65.5	158.5	178.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	24.	26.444	72.	6.	501.778	22.4	6.	8.	43.	72.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	8.	9.556	22.	2.	37.778	6.146	2.	5.	13.	22.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	10.	16.889	50.	0.	285.111	16.885	0.	4.	31.	50.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.2	0.39	1.399	0.05	0.171	0.414	0.05	0.163	0.625	1.329
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.02	0.022	0.05	0.005	0.	0.014	0.005	0.005	0.03	0.048
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.33	0.419	1.099	0.07	0.111	0.333	0.071	0.118	0.698	1.064
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	10	0.9	5.07	40.	0.5	151.211	12.297	0.51	0.675	2.174	36.3
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	11	18.	26.455	120.	8.	980.873	31.319	9.2	16.	19.	101.2
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	500.	1000.	6000.	50.	3001500.	1732.484	50.	100.	900.	5140.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.699	2.549	3.778	1.699	0.445	0.667	1.699	2.	2.954	3.669
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		354.221									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	9##	0.04	0.032	0.05	0.005	0.	0.02	0.005	0.008	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 1976 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	8	21.4	21.113	35.	3.9	87.35	9.346	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	8	9.05	8.8	10.	7.	1.289	1.135	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	7	8.	7.914	8.7	7.3	0.305	0.552	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	7	8.	7.668	8.7	7.3	0.376	0.613	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	7	0.01	0.022	0.05	0.002	0.	0.021	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	8	171.5	202.75	456.	121.	11399.357	106.768	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	8	66.	67.625	104.	46.	325.411	18.039	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	8	103.5	135.125	352.	69.	8358.411	91.424	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	12.	44.313	270.	0.5	8431.924	91.826	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	5.	11.313	50.	0.	279.496	16.718	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	6.	33.063	220.	0.5	5737.031	75.743	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	8	0.1	0.281	1.299	0.05	0.183	0.428	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	8	0.02	0.024	0.07	0.005	0.	0.021	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	8	0.27	0.38	1.	0.18	0.085	0.291	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	8	0.4	0.413	0.5	0.3	0.007	0.083	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	8	19.5	19.75	28.	12.	24.786	4.979	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	7	100.	221.429	500.	50.	38214.286	195.485	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	7	2.	2.2	2.699	1.699	0.147	0.383	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		158.382									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	8	0.1	0.125	0.3	0.05	0.007	0.085	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	8	0.05	0.056	0.16	0.005	0.002	0.046	**	**	**	**

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Annual Analysis for 1977 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	10	14.	13.18	28.	1.	105.531	10.273	1.01	1.175	21.625	27.55
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	10	9.95	10.36	13.5	8.4	2.485	1.576	8.46	9.15	11.4	13.35
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	10	7.6	7.64	8.3	7.	0.194	0.44	7.	7.3	8.	8.27
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	10	7.589	7.446	8.3	7.	0.236	0.485	7.	7.3	8.	8.27
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	10	0.026	0.036	0.1	0.005	0.001	0.036	0.006	0.01	0.055	0.1
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	9	163.	207.889	574.	129.	19308.861	138.956	129.	146.	190.5	574.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	9	61.	61.444	85.	36.	289.278	17.008	36.	47.	77.	85.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	9	111.	146.444	490.	76.	17233.278	131.276	76.	80.	138.	490.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	5.	19.889	121.	1.	1475.611	38.414	1.	3.	16.	121.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	3.	5.222	19.	0.	34.694	5.89	0.	1.5	8.	19.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	2.	14.667	102.	0.	1111.25	33.335	0.	0.5	11.5	102.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10##	0.05	0.094	0.3	0.04	0.008	0.087	0.041	0.05	0.125	0.29
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.015	0.028	0.12	0.005	0.001	0.035	0.005	0.005	0.04	0.112
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	5	0.67	0.481	0.86	0.025	0.131	0.362	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	10	0.3	0.62	2.5	0.1	0.504	0.71	0.11	0.2	0.8	2.33
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	10	26.	42.9	210.	2.	3588.767	59.906	3.3	16.5	40.75	193.3
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	200.	995.	6000.	50.	3451916.667	1857.933	50.	50.	1025.	5600.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	2.239	2.428	3.778	1.699	0.538	0.734	1.699	1.699	2.959	3.73
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		267.699									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10	0.1	0.41	3.4	0.05	1.104	1.051	0.05	0.05	0.1	3.07
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10##	0.013	0.025	0.11	0.005	0.001	0.033	0.005	0.005	0.028	0.104

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Annual Analysis for 1978 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	9	16.	17.744	29.	0.7	72.15	8.494	0.7	13.75	24.75	29.
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	9	8.6	9.6	16.4	7.5	8.08	2.843	7.5	7.75	10.6	16.4
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	9	7.5	7.456	8.	7.	0.093	0.305	7.	7.25	7.55	8.
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	9	7.5	7.36	8.	7.	0.103	0.321	7.	7.25	7.55	8.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	9	0.032	0.044	0.1	0.01	0.001	0.033	0.01	0.028	0.066	0.1
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	9	120.	141.111	270.	98.	2900.111	53.853	98.	107.	163.5	270.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	9	34.	37.333	47.	26.	69.25	8.322	26.	30.	46.	47.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	9	87.	103.778	223.	68.	2351.194	48.489	68.	74.5	118.5	223.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	8.	26.611	162.	0.5	2643.486	51.415	0.5	3.	22.	162.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	4.	4.389	18.	0.	28.986	5.384	0.	1.25	4.5	18.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	9	4.	22.278	144.	0.5	2141.694	46.278	0.5	2.	19.	144.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.1	0.117	0.4	0.05	0.012	0.109	0.05	0.05	0.1	0.4
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.02	0.019	0.04	0.005	0.	0.012	0.005	0.01	0.03	0.04
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	4	0.12	0.206	0.56	0.025	0.059	0.242	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	9	0.5	0.544	1.1	0.1	0.088	0.296	0.1	0.35	0.75	1.1
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	9	22.	20.667	27.	13.	18.5	4.301	13.	17.	23.5	27.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	9	100.	1877.778	8000.	50.	12053819.444	3471.861	50.	75.	4150.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	9	2.	2.442	3.903	1.699	0.748	0.865	1.699	1.849	3.19	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		276.997									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	9	0.1	0.217	1.	0.05	0.091	0.301	0.05	0.05	0.2	1.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	9	0.05	0.062	0.2	0.005	0.003	0.058	0.005	0.02	0.08	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 box-and-whisker plot

Annual Analysis for 1979 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	10	14.5	15.25	25.5	4.	49.903	7.064	4.1	11.	20.875	25.15
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	5	138.	358.2	1277.	91.	264472.7	514.269	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	10	9.1	9.91	12.4	8.	2.468	1.571	8.09	8.975	11.825	12.38
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	5	1.	4.2	16.	1.	43.7	6.611	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	5	22.	31.	63.	20.	332.5	18.235	**	**	**	**
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	10	7.3	7.25	8.	6.5	0.214	0.462	6.52	6.775	7.55	7.97
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	10	7.3	7.033	8.	6.5	0.266	0.516	6.52	6.775	7.55	7.97
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	10	0.05	0.093	0.316	0.01	0.01	0.1	0.011	0.029	0.169	0.305
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	8	109.	112.5	145.	94.	305.143	17.468	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	7	33.	35.714	67.	23.	217.238	14.739	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	7	77.	74.429	108.	27.	602.286	24.542	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	10	6.	23.3	178.	1.	2971.567	54.512	1.1	2.75	13.	161.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	10	2.5	5.5	28.	0.	68.5	8.276	0.1	1.	6.5	26.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	10	3.5	17.85	150.	0.	2163.114	46.509	0.	0.375	6.25	135.7
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.01	0.12	1.1	0.005	0.119	0.344	0.005	0.005	0.023	0.993
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	8	0.445	0.478	0.8	0.005	0.069	0.262	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	10	0.4	0.42	0.5	0.2	0.008	0.092	0.22	0.4	0.5	0.5
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	5	0.03	0.032	0.05	0.02	0.	0.011	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	5	12.	16.4	33.	10.	89.3	9.45	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	5	18.	19.8	25.	16.	19.2	4.382	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	9	800.	1216.667	3700.	50.	1531250.	1237.437	50.	300.	2000.	3700.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	9	2.903	2.809	3.568	1.699	0.377	0.614	1.699	2.349	3.263	3.568
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		644.344									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	5	0.01	0.009	0.01	0.005	0.	0.002	**	**	**	**

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	12	17.25	16.917	31.	4.5	82.083	9.06	5.25	7.5	22.875	30.7
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	186.	194.545	318.	112.	4149.673	64.418	114.8	136.	231.	312.2
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	12	9.35	9.325	12.7	6.2	4.217	2.053	6.44	7.425	10.875	12.43
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	2.	4.	16.	1.	18.	4.243	1.2	2.	5.	14.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	17.	29.909	125.	12.	1062.691	32.599	12.2	13.	32.	107.
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.15	7.275	8.4	6.	0.449	0.67	6.21	6.85	7.875	8.31
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.147	6.827	8.4	6.	0.668	0.817	6.21	6.85	7.875	8.31
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	12	0.071	0.149	1.	0.004	0.076	0.275	0.005	0.015	0.144	0.76
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	13.	20.864	88.	2.5	581.105	24.106	3.2	8.	26.	77.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	5.045	9.	0.	7.723	2.779	0.4	2.5	7.	8.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	9.	16.045	80.	0.	522.423	22.857	0.2	2.5	17.	69.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	11##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.01	0.014	0.03	0.005	0.	0.009	0.005	0.005	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.465	0.461	1.1	0.025	0.109	0.331	0.025	0.179	0.65	1.07
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	11	0.3	0.382	0.8	0.2	0.048	0.218	0.2	0.2	0.5	0.78
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11##	0.05	0.091	0.3	0.05	0.007	0.083	0.05	0.05	0.1	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.04	0.046	0.13	0.02	0.001	0.032	0.02	0.02	0.05	0.118
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	12.	16.727	49.	8.	139.418	11.808	8.2	10.	20.	44.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	200.	1763.636	8000.	50.	8796045.455	2965.813	50.	100.	3200.	7780.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.301	2.548	3.903	1.699	0.683	0.826	1.699	2.	3.505	3.89
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		352.979									

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	16.5	17.318	30.	2.	82.864	9.103	2.8	10.5	24.5	29.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	197.	208.364	336.	126.	3106.655	55.737	129.2	184.	232.	317.6
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	11	8.3	9.127	13.	6.7	3.8	1.949	6.92	8.1	9.5	12.9
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	2.	3.636	13.	1.	17.855	4.225	1.	1.	3.	12.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	20.	24.364	47.	13.	104.055	10.201	13.4	18.	33.	44.4
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.4	7.445	8.2	6.9	0.171	0.413	6.92	7.	7.8	8.14
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.4	7.293	8.2	6.9	0.196	0.443	6.92	7.	7.8	8.14
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.04	0.051	0.126	0.006	0.002	0.04	0.008	0.016	0.1	0.121
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	16.773	69.	2.5	518.518	22.771	2.5	2.5	16.	66.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	2.5	4.227	12.	0.	16.118	4.015	0.2	2.	7.	11.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	13.227	58.	1.	353.018	18.789	1.3	2.5	10.	54.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	11##	0.05	0.091	0.3	0.05	0.007	0.083	0.05	0.05	0.1	0.28
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11##	0.005	0.013	0.04	0.005	0.	0.014	0.005	0.005	0.02	0.04
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.13	0.253	1.	0.025	0.082	0.286	0.025	0.09	0.41	0.89
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	11	0.3	0.409	1.	0.2	0.053	0.23	0.2	0.3	0.5	0.92
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.095	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.18
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.06	0.061	0.13	0.02	0.001	0.034	0.022	0.03	0.08	0.126
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	13.	13.727	24.	5.	44.218	6.65	5.2	7.	19.	23.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	800.	909.091	2800.	50.	728409.091	853.469	50.	100.	1500.	2580.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.903	2.667	3.447	1.699	0.398	0.631	1.699	2.	3.176	3.404
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		465.026									

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	16.5	16.5	32.5	0.	79.55	8.919	1.3	11.	23.5	31.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	195.	230.455	461.	130.	8424.673	91.786	136.2	170.	278.	429.
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	10	8.75	8.76	12.2	6.	3.854	1.963	6.08	6.8	10.425	12.06
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	2.	2.277	5.	0.05	1.596	1.263	0.24	2.	3.	4.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	20.	18.727	27.	10.	32.818	5.729	10.2	12.	23.	26.6
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.	7.136	7.5	6.7	0.111	0.332	6.7	6.8	7.5	7.5
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.	7.027	7.5	6.7	0.124	0.352	6.7	6.8	7.5	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.1	0.094	0.2	0.032	0.004	0.066	0.032	0.032	0.158	0.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	5.	5.318	10.	2.5	9.814	3.133	2.5	2.5	8.	10.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	3.	3.682	6.	2.5	2.014	1.419	2.5	2.5	5.	6.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	2.5	2.773	6.	0.	2.268	1.506	0.4	2.	4.	5.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.39	0.372	0.9	0.025	0.096	0.309	0.036	0.08	0.64	0.858
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	11	0.4	0.35	0.5	0.2	0.012	0.107	0.2	0.25	0.4	0.5
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10##	0.075	0.095	0.2	0.05	0.004	0.06	0.05	0.05	0.125	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.05	0.042	0.07	0.02	0.	0.019	0.02	0.02	0.05	0.07
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	6.	23.545	200.	1.	3428.673	58.555	1.8	5.	8.	161.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	650.	1270.	6800.	100.	4115666.667	2028.711	110.	200.	1275.	6330.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	2.812	2.77	3.833	2.	0.291	0.539	2.03	2.301	3.081	3.781
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		589.15									

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Annual Analysis for 1983 - Station RICH0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/30/73-06/20/90	10	11.75	14.7	31.	0.5	93.956	9.693	1.15	8.5	23.	30.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	10	182.	193.8	307.	109.	4145.289	64.384	112.8	156.	227.	306.8
00300p OXYGEN, DISSOLVED	MG/L	03/30/73-06/20/90	10	10.75	10.78	14.	8.	4.18	2.044	8.02	8.5	12.5	13.88
00310 BOD, 5 DAY, 20 DEG C	MG/L	07/26/76-06/20/90	9	2.	2.	5.	1.	1.75	1.323	1.	1.	2.5	5.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	10	14.	17.6	42.	10.	96.711	9.834	10.1	11.	21.75	40.2
00400p PH (STANDARD UNITS)		03/30/73-06/20/90	9	7.	6.967	8.	5.7	0.42	0.648	5.7	6.6	7.4	8.
00400p CONVERTED PH (STANDARD UNITS)		03/30/73-06/20/90	9	7.	6.491	8.	5.7	0.674	0.821	5.7	6.6	7.4	8.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/30/73-06/20/90	9	0.1	0.323	1.995	0.01	0.402	0.634	0.01	0.041	0.258	1.995
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/30/73-06/20/90	10	9.	8.9	21.	2.5	42.878	6.548	2.5	2.5	14.25	20.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/30/73-06/20/90	10	2.5	3.9	11.	2.	8.433	2.904	2.	2.375	4.75	10.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/30/73-06/20/90	10	3.	6.	19.	2.5	28.111	5.302	2.5	2.5	8.25	18.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/30/73-06/20/90	10##	0.05	0.065	0.15	0.05	0.001	0.034	0.05	0.05	0.063	0.145
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/20/90	10##	0.008	0.01	0.02	0.005	0.	0.006	0.005	0.005	0.013	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/20/90	10	0.685	0.594	1.	0.025	0.12	0.347	0.035	0.225	0.843	1.
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/30/73-06/20/90	10	0.4	0.44	0.9	0.2	0.047	0.217	0.2	0.275	0.6	0.87
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	10##	0.05	0.09	0.3	0.05	0.006	0.077	0.05	0.05	0.1	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	10	0.02	0.032	0.1	0.01	0.001	0.026	0.011	0.02	0.035	0.095
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	10	8.	8.	18.	2.	19.111	4.372	2.3	5.	10.	17.2
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/20/90	10	200.	735.	2100.	50.	705583.333	839.99	55.	100.	1700.	2090.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/20/90	10	2.301	2.533	3.322	1.699	0.358	0.599	1.729	2.	3.228	3.32
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		341.391									

** - Less 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 1984 - Station RICH0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/30/73-06/20/90	7	22.5	20.786	28.5	11.5	40.238	6.343	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	7	139.	150.857	244.	60.	4186.81	64.706	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	03/30/73-06/20/90	7	9.	9.386	11.	8.1	1.308	1.144	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	07/26/76-06/20/90	7	2.	2.571	7.	1.	4.952	2.225	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	7	13.	18.429	37.	7.	163.286	12.778	**	**	**	**
00400p PH (STANDARD UNITS)		03/30/73-06/20/90	7	6.9	7.164	8.4	6.2	0.709	0.842	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		03/30/73-06/20/90	7	6.9	6.681	8.4	6.2	0.981	0.991	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/30/73-06/20/90	7	0.126	0.208	0.631	0.004	0.065	0.254	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/30/73-06/20/90	7	7.	35.357	130.	2.5	2913.643	53.978	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/30/73-06/20/90	7	4.	5.929	16.	2.5	25.119	5.012	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/30/73-06/20/90	7	2.5	30.5	114.	2.	2347.5	48.451	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/30/73-06/20/90	7##	0.05	0.093	0.2	0.05	0.005	0.073	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/20/90	7##	0.005	0.011	0.04	0.005	0.	0.013	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/20/90	7	0.13	0.279	0.79	0.02	0.102	0.319	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/30/73-06/20/90	7	0.3	0.386	0.9	0.2	0.071	0.267	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	7	0.1	0.136	0.3	0.05	0.01	0.099	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	7	0.08	0.097	0.21	0.01	0.006	0.078	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	7	6.	9.571	21.	5.	37.952	6.161	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/20/90	6	700.	2675.	8000.	50.	12865750.	3586.886	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/20/90	6	2.841	2.849	3.903	1.699	0.818	0.905	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		706.918									

** - 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 box-and-whisker plot

Annual Analysis for 1985 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	17.5	17.109	26.5	3.6	54.209	7.363	4.28	13.	25.	26.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	202.	240.091	692.	81.	27698.291	166.428	93.8	151.	251.	627.
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	11	10.1	10.155	14.2	8.	3.437	1.854	8.02	8.6	11.2	13.76
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	1.	1.5	4.	0.5	0.95	0.975	0.6	1.	2.	3.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	18.	17.545	25.	11.	22.073	4.698	11.4	13.	21.	24.8
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	6.7	7.145	9.5	6.2	0.951	0.975	6.24	6.6	7.3	9.28
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	6.7	6.717	9.5	6.2	1.153	1.074	6.24	6.6	7.3	9.28
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.2	0.192	0.631	0.	0.035	0.188	0.001	0.05	0.251	0.584
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11##	2.5	7.091	26.	2.5	59.141	7.69	2.5	2.5	9.	24.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11##	2.5	3.273	10.	0.	6.268	2.504	0.5	2.5	3.	9.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11##	2.5	5.182	16.	2.5	21.214	4.606	2.5	2.5	6.	15.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	9##	0.05	0.111	0.6	0.05	0.034	0.183	0.05	0.05	0.05	0.6
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.01	0.023	0.09	0.005	0.001	0.029	0.005	0.008	0.035	0.09
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.54	0.552	0.95	0.05	0.077	0.278	0.05	0.37	0.775	0.95
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	6	0.3	0.317	0.4	0.3	0.002	0.041	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	6##	0.075	0.158	0.5	0.05	0.031	0.177	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	9	0.03	0.084	0.4	0.005	0.015	0.123	0.005	0.02	0.1	0.4
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	7.	6.5	9.	0.5	5.85	2.419	1.4	6.	9.	9.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	200.	354.545	1000.	50.	109727.273	331.251	50.	50.	700.	940.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.301	2.308	3.	1.699	0.278	0.527	1.699	1.699	2.845	2.969
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	203.285										

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	12	14.5	16.917	28.	6.5	58.811	7.669	7.55	10.	24.5	27.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	12	223.	266.583	822.	160.	32610.811	180.585	160.	168.5	262.25	663.9
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	12	10.45	9.833	11.4	7.9	1.761	1.327	7.9	8.625	10.975	11.34
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	12	2.	3.75	12.	1.	15.477	3.934	1.	1.	5.5	11.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	12	17.5	19.667	42.	2.	117.697	10.849	5.	13.	24.75	40.2
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.31	7.24	7.95	6.3	0.249	0.499	6.45	6.848	7.68	7.908
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	12	7.307	6.977	7.95	6.3	0.324	0.569	6.45	6.847	7.68	7.908
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	12	0.049	0.105	0.501	0.011	0.019	0.136	0.013	0.021	0.142	0.398
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	12##	4.75	12.417	46.	2.5	233.22	15.272	2.5	2.5	21.	43.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	12##	2.5	5.083	13.	2.	14.129	3.759	2.15	2.5	8.5	12.1
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	12##	2.5	8.583	33.	2.	121.22	11.01	2.15	2.5	11.75	31.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	12##	0.05	0.108	0.3	0.05	0.01	0.1	0.05	0.05	0.175	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	12	0.02	0.02	0.05	0.005	0.	0.014	0.005	0.005	0.03	0.044
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	12	0.335	0.454	1.28	0.025	0.181	0.426	0.033	0.075	0.863	1.187
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	12	0.6	0.792	1.4	0.3	0.179	0.423	0.33	0.425	1.275	1.4
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	12	0.15	0.175	0.4	0.05	0.014	0.12	0.05	0.1	0.2	0.4
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	12	0.07	0.089	0.28	0.01	0.005	0.074	0.013	0.035	0.11	0.244
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	12	7.	8.083	15.	5.	9.174	3.029	5.	6.25	10.25	14.1
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	804.	1891.273	8000.	50.	5951537.818	2439.577	50.	300.	3700.	7180.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.905	2.871	3.903	1.699	0.522	0.722	1.699	2.477	3.568	3.841
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	742.991										

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	16.5	17.236	30.	6.8	62.237	7.889	7.04	11.	24.	29.16
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	243.	230.273	324.	148.	4467.818	66.842	150.2	165.	315.	322.8
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	10	10.3	10.02	11.7	7.6	1.593	1.262	7.7	9.2	10.85	11.69
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	2.	2.091	6.	1.	2.491	1.578	1.	1.	2.	5.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	20.	19.909	40.	11.	62.291	7.892	11.2	15.	22.	36.8
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.6	7.536	7.99	6.97	0.104	0.322	7.022	7.27	7.82	7.968
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.6	7.427	7.99	6.97	0.117	0.342	7.022	7.27	7.82	7.968
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.025	0.037	0.107	0.01	0.001	0.029	0.011	0.015	0.054	0.097
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	10.818	54.	2.5	227.264	15.075	2.5	2.5	13.	46.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	10##	2.5	3.25	6.	0.	3.514	1.875	0.25	2.5	5.25	6.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	6.	8.909	48.	2.	177.391	13.319	2.1	2.5	7.	40.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	11##	0.05	0.132	0.8	0.05	0.05	0.223	0.05	0.05	0.1	0.66
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.02	0.017	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.038
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	11	0.33	0.379	0.87	0.025	0.081	0.285	0.042	0.14	0.63	0.844
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	11	0.5	0.627	2.1	0.4	0.246	0.496	0.4	0.4	0.5	1.82
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.15	0.3	0.05	0.009	0.095	0.05	0.05	0.2	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.07	0.096	0.2	0.03	0.003	0.054	0.032	0.05	0.14	0.19
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	7	7.	7.571	9.	7.	0.619	0.787	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	1200.	2031.818	7300.	50.	5594136.364	2365.193	120.	700.	2000.	7040.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	3.079	3.035	3.863	1.699	0.338	0.581	1.88	2.845	3.301	3.846
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1082.914									

** - Less 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 RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	17.	16.6	26.5	5.	80.436	8.969	5.22	8.	25.5	26.38
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	8	200.5	202.	257.	169.	808.857	28.44	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	11	9.7	10.345	13.5	8.	4.375	2.092	8.02	8.4	12.5	13.38
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	8	2.	2.125	3.	1.	0.696	0.835	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	8	19.	18.25	29.	7.	53.071	7.285	**	**	**	**
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.63	7.72	8.9	6.84	0.342	0.584	6.942	7.42	7.72	8.854
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.63	7.464	8.9	6.84	0.414	0.643	6.942	7.42	7.72	8.854
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.023	0.034	0.145	0.001	0.002	0.039	0.001	0.019	0.038	0.125
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	6.	15.875	57.	1.	400.696	20.017	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	2.	3.125	9.	1.	6.982	2.642	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	8	4.	12.813	48.	0.5	305.853	17.489	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.24	0.978	3.4	0.01	1.658	1.287	0.01	0.125	2.225	3.4
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.04	0.073	0.24	0.005	0.006	0.075	0.005	0.025	0.12	0.24
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.72	0.606	0.96	0.02	0.122	0.35	0.02	0.265	0.935	0.96
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	9	0.6	1.411	4.2	0.3	1.946	1.395	0.3	0.5	2.65	4.2
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	9	0.2	1.144	3.9	0.1	2.23	1.493	0.1	0.1	2.65	3.9
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	6	0.095	0.153	0.53	0.04	0.035	0.187	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	6	5.75	5.35	7.3	2.7	4.299	2.073	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	2	37.	37.	52.	22.	450.	21.213	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	600.	1295.455	8000.	50.	5244227.273	2290.028	60.	200.	1600.	6740.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	11	2.778	2.716	3.903	1.699	0.367	0.606	1.759	2.301	3.204	3.769
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		520.021									

** - 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

Annual Analysis for 1989 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	11	16.3	16.136	25.8	2.1	57.403	7.576	3.52	9.9	24.2	25.62
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	8	204.	196.125	244.	122.	1679.268	40.979	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	11	10.	10.845	15.5	8.1	6.095	2.469	8.16	8.6	13.2	15.1
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	11	2.	2.909	10.	1.	7.091	2.663	1.	1.	3.	9.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	20.	19.727	38.	9.	62.418	7.901	9.6	14.	24.	35.4
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.73	7.631	8.11	7.02	0.162	0.402	7.032	7.17	7.97	8.098
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	11	7.73	7.459	8.11	7.02	0.194	0.441	7.032	7.17	7.97	8.098
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	11	0.019	0.035	0.095	0.008	0.001	0.032	0.008	0.011	0.068	0.093
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	8	138.	174.5	374.	91.	8850.	94.074	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	8	39.	40.	79.	21.	342.286	18.501	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	8	97.	134.5	295.	69.	6540.857	80.876	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	3.	21.864	199.	0.5	3464.805	58.863	0.6	2.	9.	161.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	2.	3.955	27.	0.5	60.023	7.747	0.5	0.5	3.	22.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	11	2.	18.227	172.	0.5	2608.918	51.078	0.5	0.5	5.	139.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	10##	0.02	0.207	0.87	0.02	0.096	0.31	0.02	0.02	0.34	0.85
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	10	0.015	0.026	0.08	0.005	0.001	0.024	0.005	0.009	0.043	0.077
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	9	0.75	0.882	1.43	0.28	0.166	0.408	0.28	0.575	1.325	1.43
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	10	0.55	0.68	1.5	0.3	0.148	0.385	0.3	0.45	0.825	1.47
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	0.25	0.5	1.6	0.1	0.258	0.508	0.1	0.1	0.8	1.55
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.38	0.556	1.55	0.09	0.254	0.504	0.092	0.14	0.965	1.505
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	6.4	6.364	8.1	4.8	1.079	1.039	4.82	5.8	7.4	8.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	9	33.	38.333	110.	17.	789.	28.089	17.	22.	39.	110.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	400.	1905.	6100.	50.	6790250.	2605.811	55.	175.	5050.	6100.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	10	2.602	2.783	3.785	1.699	0.547	0.739	1.729	2.226	3.7	3.785
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		606.33									

** - 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 box-and-whisker plot

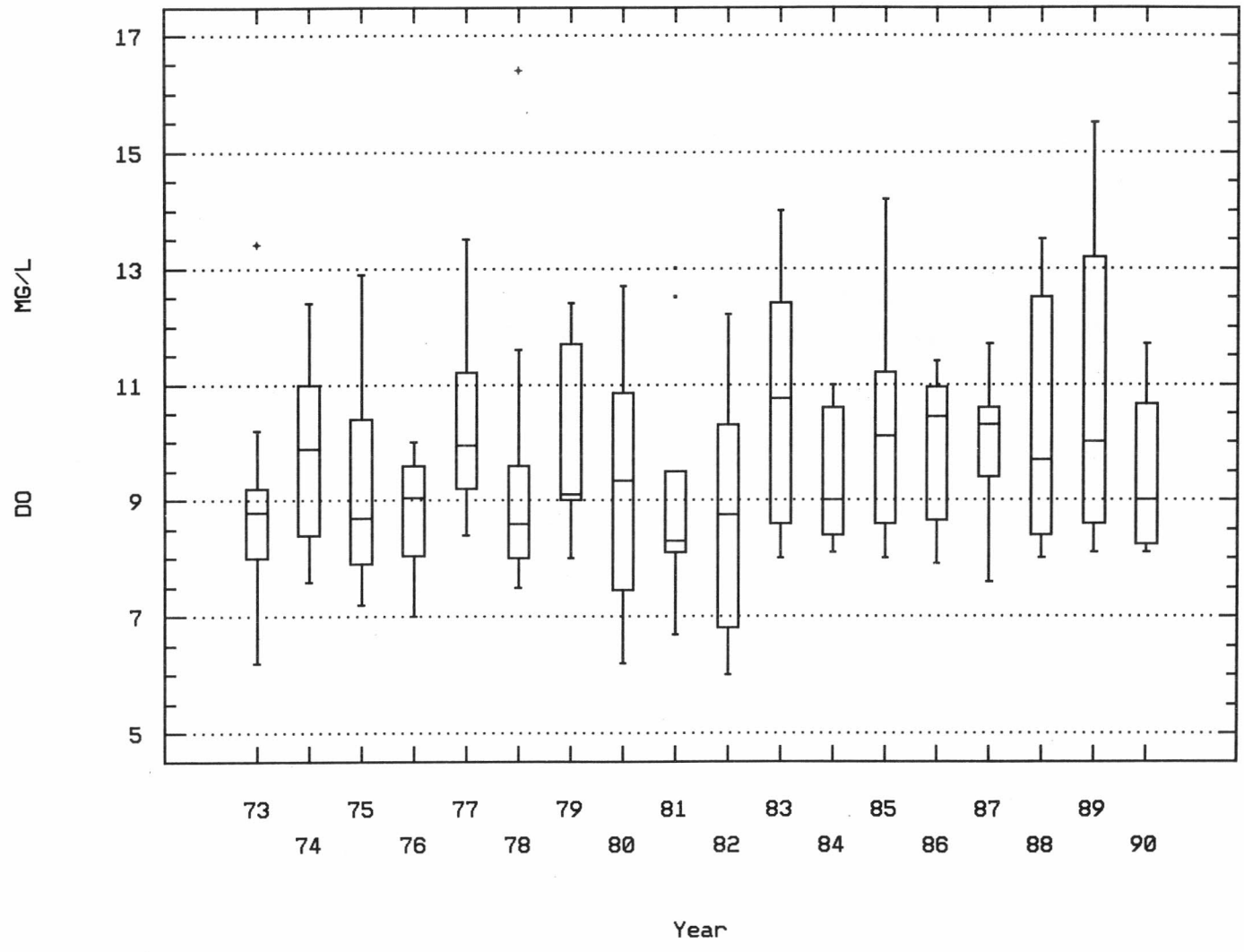
Annual Analysis for 1990 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	4	19.5	18.1	24.1	9.3	40.62	6.373	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	1	182.	182.	182.	182.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	4	9.	9.45	11.7	8.1	2.67	1.634	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	6	4.	4.	9.	1.	7.6	2.757	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	6	20.5	25.167	51.	17.	168.967	12.999	**	**	**	**
00400p PH (STANDARD UNITS)	03/30/73-06/20/90	4	7.545	7.6	8.01	7.3	0.093	0.305	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	4	7.537	7.53	8.01	7.3	0.099	0.315	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	4	0.029	0.03	0.05	0.01	0.	0.017	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	6	128.5	128.667	145.	110.	168.667	12.987	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	6	29.5	28.167	46.	13.	144.567	12.024	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	6	101.	100.5	113.	86.	99.5	9.975	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	6	8.5	9.083	24.	0.5	67.042	8.188	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	6	2.5	3.083	8.	0.5	7.442	2.728	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	6	4.	6.083	20.	0.5	53.642	7.324	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	5	0.05	0.066	0.12	0.02	0.003	0.051	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	5	0.02	0.02	0.03	0.01	0.	0.007	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	5	0.68	0.724	1.2	0.42	0.087	0.295	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	5	0.7	0.68	1.	0.4	0.057	0.239	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	5	0.2	0.22	0.4	0.1	0.012	0.11	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	5	0.11	0.146	0.35	0.08	0.013	0.115	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	6	7.35	8.75	16.7	6.3	15.779	3.972	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	6	31.	31.667	40.	26.	25.867	5.086	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	5	1000.	2210.	8000.	50.	10665500.	3265.808	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	5	3.	2.917	3.903	1.699	0.622	0.789	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		825.784									

** - Less 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: RICH0067 Parameter Code: 00300

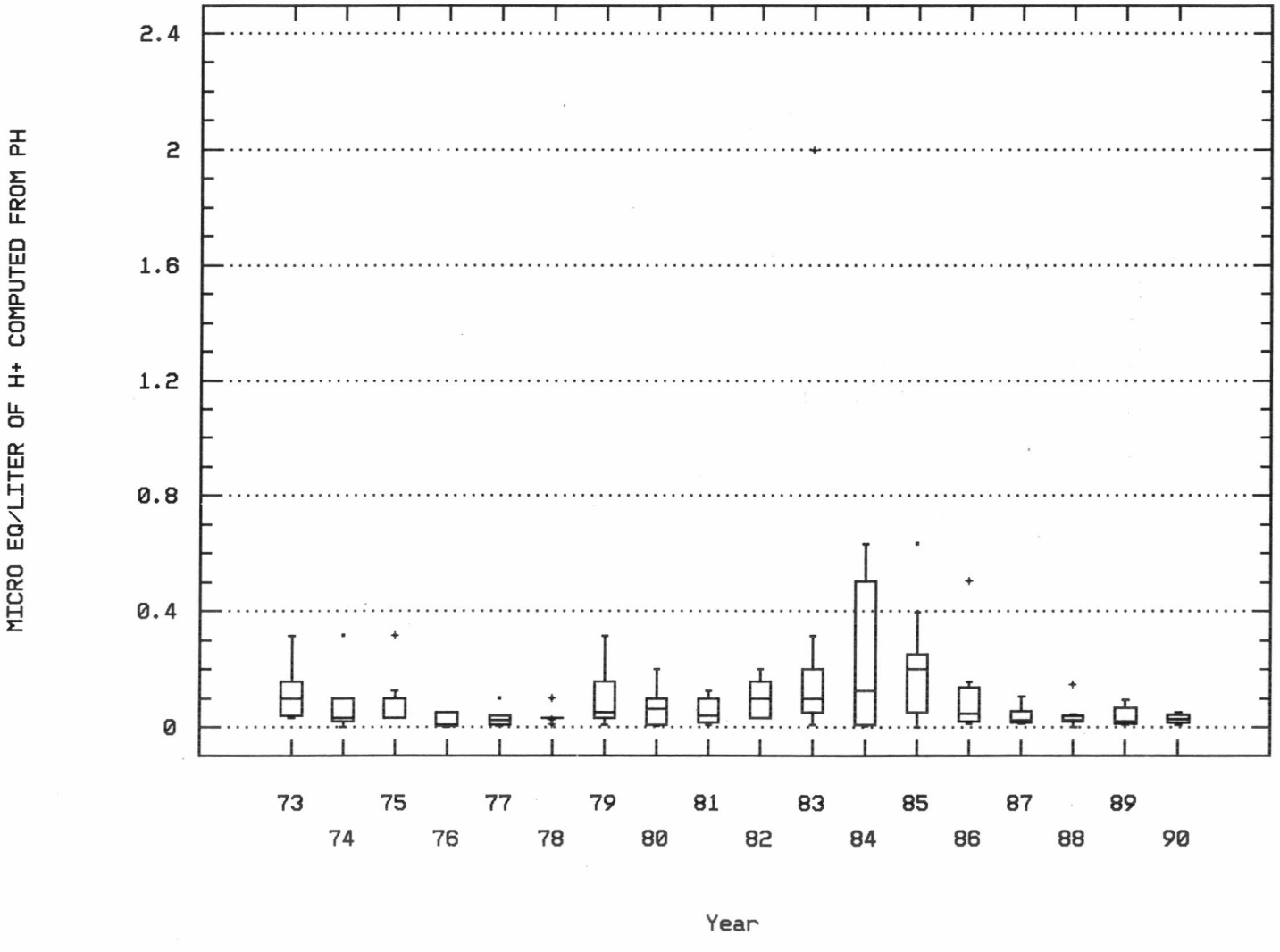
OXYGEN, DISSOLVED



FALLING CREEK EXIT OFF I-95

Station: RICH0067 Parameter Code: 00400

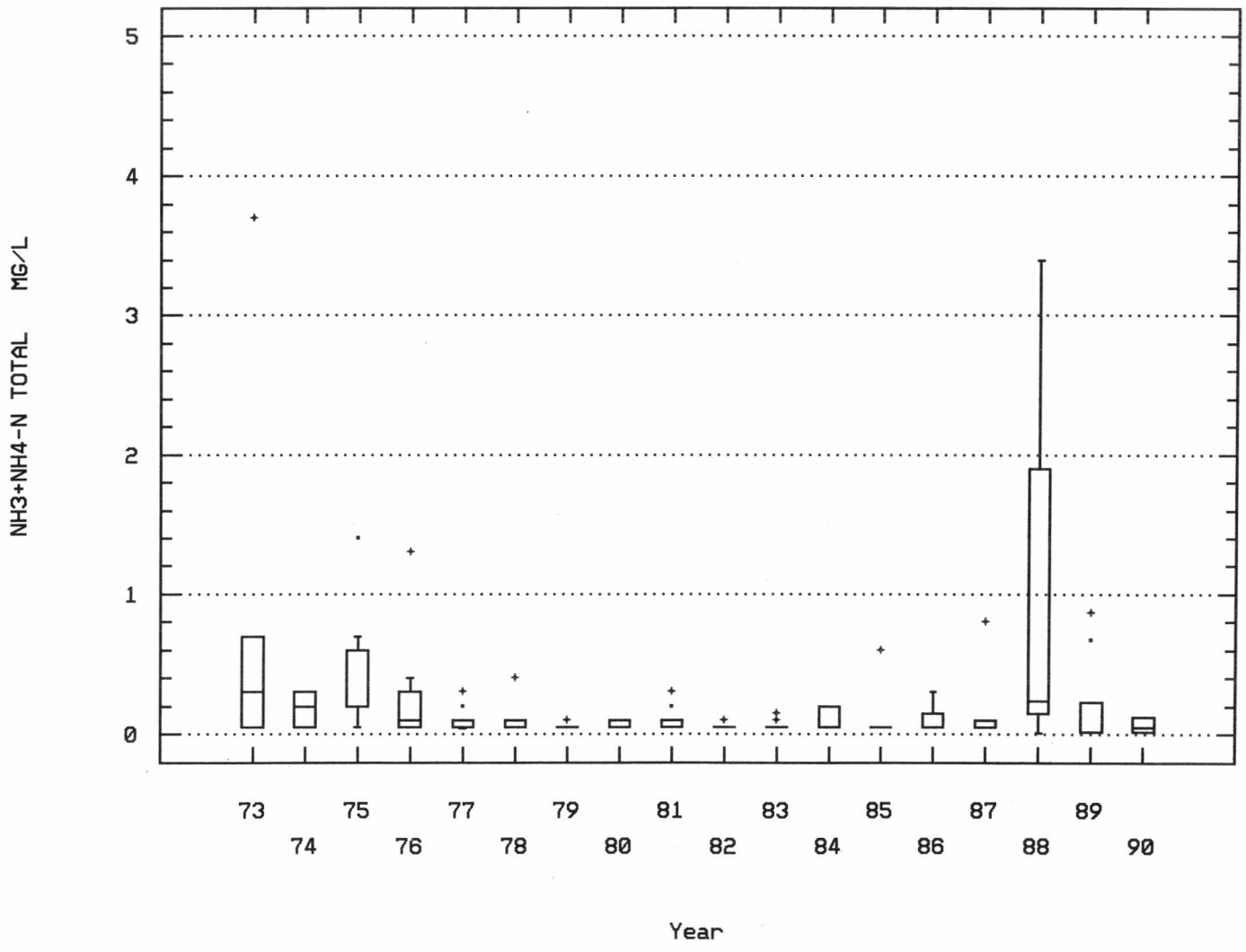
MICRO EQ/LITER OF H+ COMPUTED FROM PH



FALLING CREEK EXIT OFF I-95

Station: RICH0067 Parameter Code: 00610

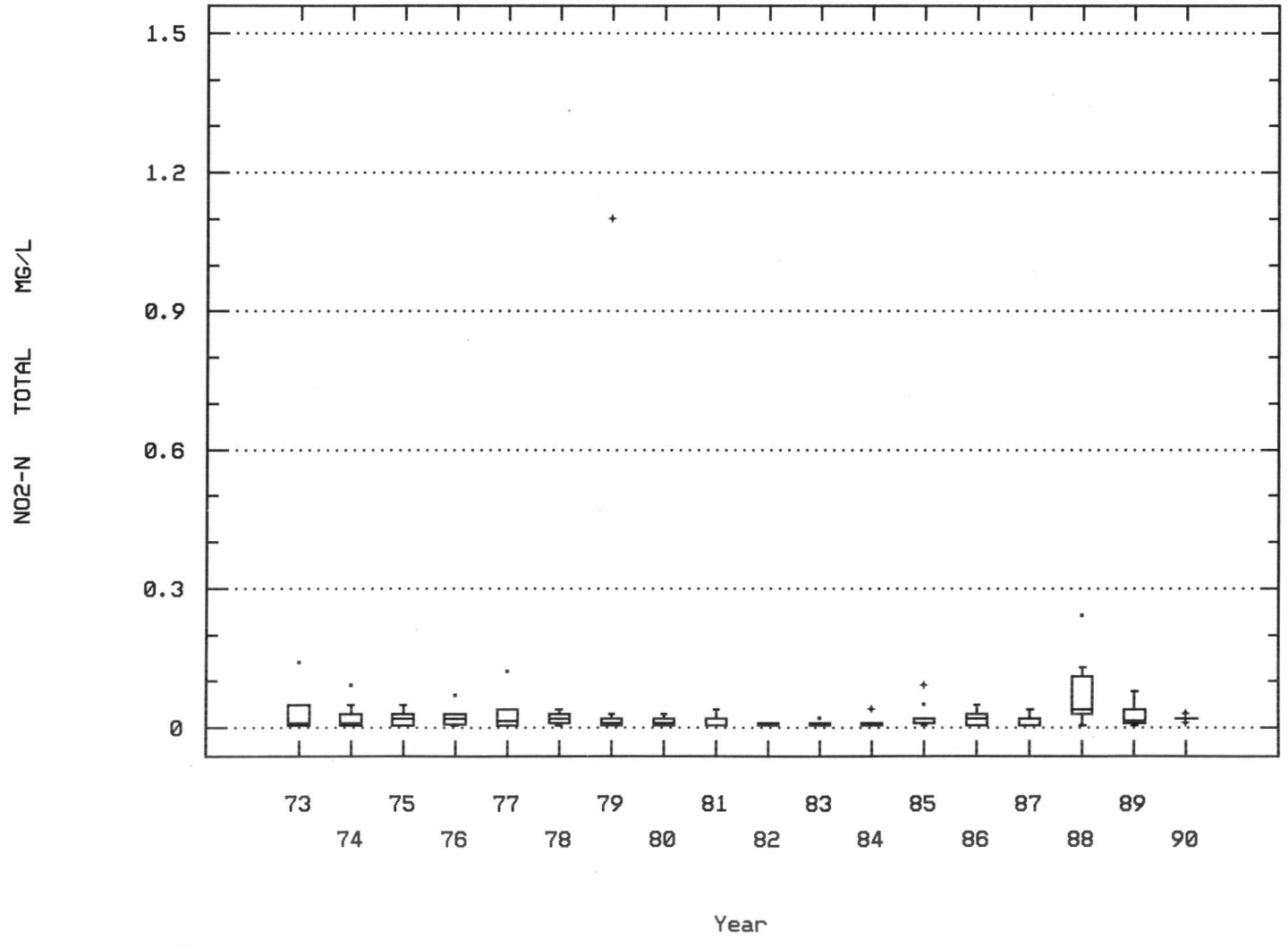
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



FALLING CREEK EXIT OFF I-95

Station: RICH0067 Parameter Code: 00615

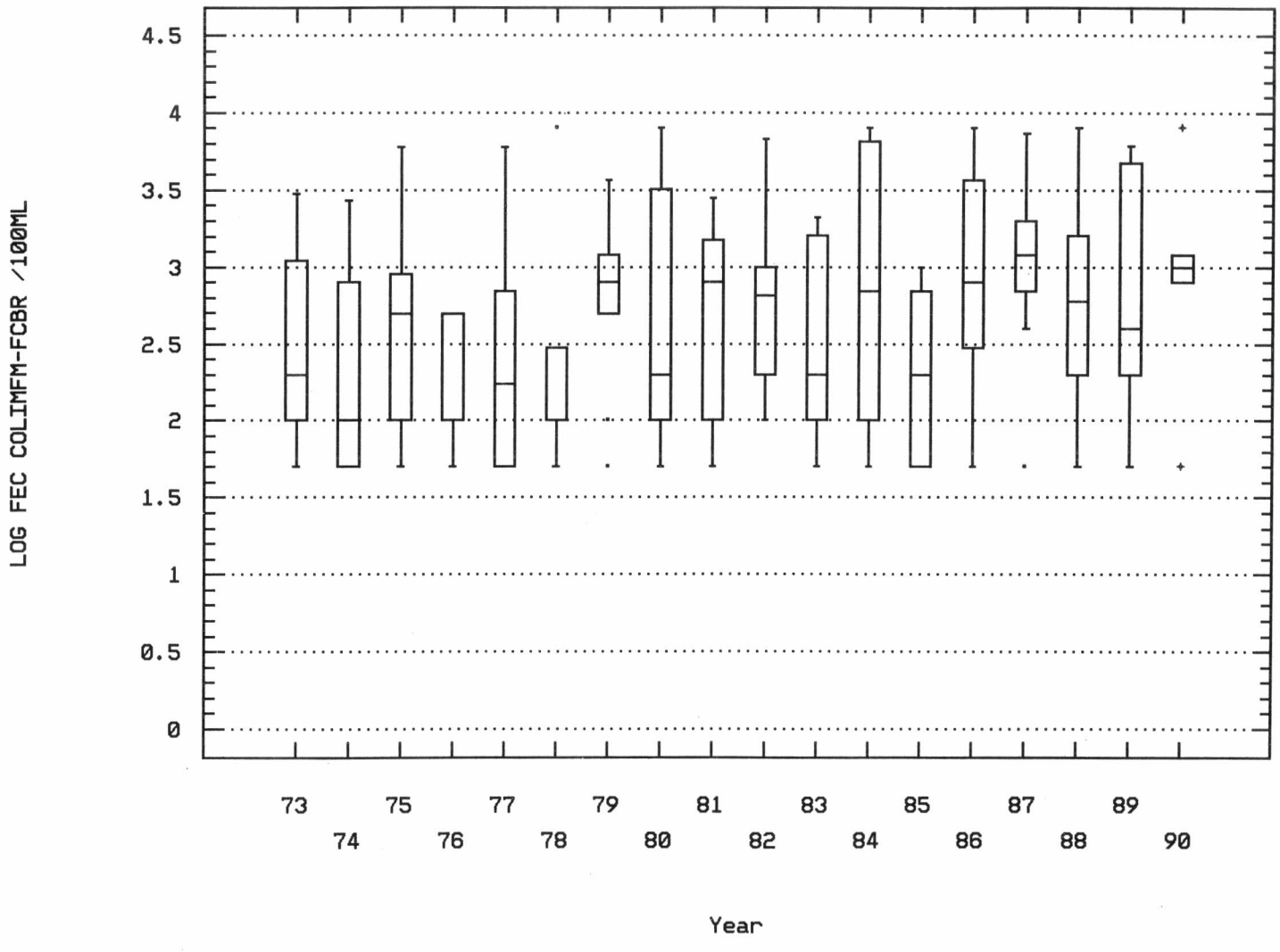
NITRITE NITROGEN, TOTAL (MG/L AS N)



FALLING CREEK EXIT OFF I-95

Station: RICH0067 Parameter Code: 31616

LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



FALLING CREEK EXIT OFF I-95

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	50	24.3	24.1	32.5	14.4	15.899	3.987	18.91	22.	26.5	30.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	28	243.	280.107	1277.	81.	44321.581	210.527	149.8	197.	306.5	376.4
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	50	8.4	8.356	10.6	6.	0.985	0.992	7.01	7.875	9.	9.49
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	30	1.	2.433	16.	1.	8.599	2.932	1.	1.	2.25	5.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	29	19.	23.552	125.	11.	442.399	21.033	12.	13.5	24.	38.
00400 PH (STANDARD UNITS)	03/30/73-06/20/90	50	7.5	7.562	9.	6.7	0.24	0.49	6.91	7.25	7.843	8.09
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	50	7.5	7.326	9.	6.7	0.297	0.545	6.91	7.25	7.842	8.09
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	50	0.032	0.047	0.2	0.001	0.003	0.051	0.008	0.014	0.057	0.123
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	20	146.	152.8	270.	70.	2172.589	46.611	92.1	124.25	192.75	210.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	19	45.	46.368	96.	10.	334.69	18.295	25.	36.	56.	71.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	19	107.	107.474	223.	44.	1773.93	42.118	60.	77.	140.	160.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	47	6.	13.957	162.	0.	714.987	26.739	1.	2.5	12.	36.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	47	2.5	4.277	18.	0.	17.748	4.213	0.	1.	6.	10.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	47	3.	10.181	144.	0.	560.831	23.682	0.5	2.	7.	21.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	47##	0.05	0.199	3.4	0.01	0.253	0.503	0.05	0.05	0.15	0.42
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	47	0.01	0.019	0.11	0.005	0.001	0.023	0.005	0.005	0.03	0.05
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	45	0.28	0.321	1.43	0.02	0.086	0.294	0.025	0.085	0.485	0.692
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	47	0.4	0.657	4.2	0.2	0.424	0.651	0.3	0.3	0.8	1.399
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	28	0.1	0.318	3.9	0.05	0.579	0.761	0.05	0.1	0.2	0.61
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	27	0.05	0.133	1.55	0.03	0.086	0.293	0.03	0.04	0.1	0.208
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	28	7.8	17.189	200.	3.4	1359.711	36.874	5.	6.05	11.75	26.5
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	19	19.	24.	84.	14.	247.	15.716	16.	17.	24.	40.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	46	450.	1320.739	8000.	50.	4480194.019	2116.647	50.	100.	1300.	4390.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	46	2.651	2.666	3.903	1.699	0.43	0.656	1.699	2.	3.11	3.631
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	463.335								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	19##	0.05	0.089	0.3	0.05	0.004	0.064	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	18	0.05	0.053	0.16	0.005	0.001	0.039	0.005	0.028	0.065	0.106

** - Less 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: 10/15 to 3/15 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	71	10.	9.348	21.	0.	23.684	4.867	2.02	6.1	13.	15.88
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	46	186.	214.283	822.	90.	16693.629	129.204	122.7	157.75	231.25	305.2
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	69	11.	11.206	16.4	6.7	2.959	1.72	9.1	10.	12.3	13.5
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	48	2.	3.083	16.	1.	10.589	3.254	1.	1.	3.	6.4
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	49	20.	20.347	63.	7.	92.398	9.612	11.	13.	24.	34.
00400 PH (STANDARD UNITS)	03/30/73-06/20/90	70	7.01	7.129	8.67	5.7	0.253	0.503	6.5	6.838	7.47	7.79
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	70	7.01	6.824	8.67	5.7	0.347	0.589	6.5	6.837	7.47	7.79
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	70	0.098	0.15	1.995	0.002	0.076	0.275	0.016	0.034	0.145	0.316
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	28	130.	168.75	574.	13.	11712.491	108.224	94.6	116.25	178.75	308.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	28	41.	43.321	90.	1.	603.411	24.564	5.7	26.25	64.75	79.5
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	28	87.5	125.536	490.	10.	9170.258	95.761	60.3	72.75	148.5	245.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	70	6.	20.629	199.	1.	1538.73	39.227	2.05	2.5	16.25	70.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	69	2.5	6.275	104.	0.	178.989	13.379	0.5	2.	6.	13.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	70	4.	15.029	172.	0.	978.202	31.276	0.	2.5	9.75	46.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	71##	0.05	0.16	1.9	0.02	0.069	0.263	0.05	0.05	0.2	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	71	0.01	0.032	1.1	0.005	0.017	0.13	0.005	0.005	0.02	0.038
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	66	0.705	0.642	1.28	0.005	0.115	0.339	0.094	0.428	0.9	1.027
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	71	0.4	0.56	2.7	0.2	0.186	0.431	0.2	0.3	0.7	1.
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	49	0.1	0.201	2.8	0.05	0.161	0.401	0.05	0.05	0.2	0.4
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	48	0.05	0.091	0.54	0.005	0.014	0.117	0.02	0.02	0.11	0.211
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	44	7.15	8.923	33.	0.5	38.16	6.177	4.65	5.25	10.	18.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	31	21.	31.452	210.	2.	1464.923	38.274	9.8	16.	29.	50.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	71	400.	1104.93	8000.	50.	3362939.638	1833.832	50.	100.	1000.	3520.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	71	2.602	2.553	3.903	1.699	0.456	0.676	1.699	2.	3.	3.544

** - Less 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: 10/15 to 3/15 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	357.272								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	22##	0.05	0.195	1.2	0.05	0.102	0.319	0.05	0.05	0.1	0.88
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	22	0.045	0.097	1.199	0.005	0.063	0.251	0.005	0.005	0.063	0.17

** - Less 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: 3/16 to 6/30 - Station RICH0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/20/90	59	20.5	19.819	35.	8.4	31.623	5.623	11.5	15.5	24.5	25.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	32	182.	181.	295.	60.	1986.323	44.568	127.8	160.25	205.75	240.5
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/20/90	60	8.95	9.188	12.9	6.8	1.852	1.361	7.82	8.2	10.	10.98
00310 BOD, 5 DAY, 20 DEG C MG/L	07/26/76-06/20/90	36	2.	2.904	11.	0.05	7.046	2.654	1.	1.	3.	7.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	36	19.	20.694	51.	2.	119.533	10.933	10.1	13.	24.75	37.8
00400 PH (STANDARD UNITS)	03/30/73-06/20/90	58	7.5	7.469	9.5	6.3	0.374	0.612	6.7	7.	7.76	8.31
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/20/90	58	7.5	7.119	9.5	6.3	0.499	0.706	6.7	7.	7.76	8.31
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/20/90	58	0.032	0.076	0.501	0.	0.012	0.11	0.005	0.017	0.1	0.2
00500 RESIDUE, TOTAL (MG/L)	03/30/73-06/20/90	29	140.	150.586	456.	86.	4593.394	67.775	98.	114.5	162.	201.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/30/73-06/20/90	29	47.	51.724	134.	9.	730.493	27.028	17.	35.	70.5	85.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/30/73-06/20/90	29	89.	98.862	352.	27.	3062.98	55.344	59.	77.	107.	129.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/30/73-06/20/90	57	8.	19.281	270.	0.5	1589.304	39.866	2.5	3.	15.	46.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/30/73-06/20/90	57	4.	5.904	50.	0.5	53.807	7.335	2.	2.5	6.5	12.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/30/73-06/20/90	57	3.	13.781	220.	0.	1115.098	33.393	0.5	2.	9.5	34.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/20/90	55##	0.05	0.271	3.699	0.02	0.401	0.633	0.05	0.05	0.2	0.708
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	56	0.02	0.029	0.24	0.005	0.002	0.039	0.005	0.006	0.038	0.056
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/20/90	49	0.43	0.534	4.879	0.025	0.497	0.705	0.08	0.175	0.635	0.92
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/20/90	53	0.5	1.449	40.	0.1	29.454	5.427	0.3	0.4	0.75	1.46
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	30	0.1	0.25	2.5	0.05	0.229	0.478	0.05	0.05	0.2	0.67
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	33	0.07	0.149	1.1	0.01	0.065	0.255	0.02	0.03	0.12	0.538
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	36	7.	9.033	20.	2.7	19.686	4.437	5.	6.45	9.75	17.3
00940 CHLORIDE,TOTAL IN WATER MG/L	03/30/73-06/20/90	29	23.	26.414	120.	12.	381.466	19.531	13.	16.5	28.5	37.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	57	400.	1421.053	8000.	50.	5192673.872	2278.744	50.	100.	1200.	6180.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/20/90	57	2.602	2.65	3.903	1.699	0.478	0.691	1.699	2.	3.079	3.79
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	446.601								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	22	0.1	0.486	5.2	0.05	1.604	1.267	0.05	0.05	0.2	2.44
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	22	0.05	0.225	4.	0.005	0.712	0.844	0.007	0.02	0.055	0.107

** - Less 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: RICH0068

NPS Station ID: RICH0068 LAT/LON: 37.445837/ -77.323616 Agency: 21VASWCB Date Created: 05/06/95
Location: FOURMILE CREEK, I-295 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM004.72
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0068

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-12/07/94	1	13.4	13.4	13.4	13.4	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-12/07/94	1	64.	64.	64.	64.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/07/94-12/07/94	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	12/07/94-12/07/94	1	5.31	5.31	5.31	5.31	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	12/07/94-12/07/94	1	5.31	5.31	5.31	5.31	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/07/94-12/07/94	1	4.898	4.898	4.898	4.898	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: RICH0068

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0069

NPS Station ID: RICH0069 LAT/LON: 37.449753/ -77.420004 Agency: 21VASWCB Date Created: / /
Location: BUOY 166 FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS104.16 /VA2-02-X0139/VA2-4X0139
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 1.000 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080205075300.00 RF3 Mile Point: 0.33 Distance from RF3: 0.04 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 845101 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	576	19.3	18.37	31.9	2.6	72.736	8.529	6.1	10.5	26.7	29.1
00070 TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-10/05/93	12	5.4	14.508	51.	1.3	330.906	18.191	1.63	2.925	23.	50.7
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	70	6.55	12.081	213.	0.5	655.082	25.595	2.73	4.4	11.3	19.9
00078 TRANSPARENCY, SECCHI DISC (METERS)		11/18/82-12/15/98	145	1.3	1.246	3.	0.1	0.383	0.619	0.4	0.75	1.6	2.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-12/15/98	516	180.5	203.372	408.	12.	5727.387	75.68	121.	141.25	265.75	310.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		12/20/88-12/15/98	88	161.5	187.591	523.	92.	5617.325	74.949	114.9	132.75	236.75	290.3
00096 SALINITY AT 25 DEGREES C (MG/ML)		06/29/88-11/18/98	450	0.	0.002	0.2	0.	0.	0.019	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/29/88-12/15/98	500	9.1	9.504	14.3	5.1	4.811	2.194	6.9	7.6	11.175	12.9
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-09/27/83	77	7.4	7.205	12.8	1.	5.217	2.284	4.16	6.1	8.5	9.62
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	98	1.	2.281	74.	0.5	55.36	7.44	0.5	1.	2.	3.03
00340 COD, .25N K2CR2O7	MG/L	05/19/80-12/15/98	72	10.	10.333	27.	2.5	32.394	5.692	2.5	7.	12.	19.
00400p PH (STANDARD UNITS)		07/22/68-12/15/98	221	7.5	7.588	9.09	6.7	0.17	0.412	7.16	7.3	7.78	8.192
00400p CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	221	7.5	7.434	9.09	6.7	0.194	0.44	7.16	7.3	7.78	8.192
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	221	0.032	0.037	0.2	0.001	0.001	0.031	0.006	0.017	0.05	0.069
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	64	7.35	7.325	8.	6.	0.134	0.366	6.85	7.1	7.6	7.8
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	64	7.347	7.13	8.	6.	0.173	0.415	6.85	7.1	7.6	7.8
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	64	0.045	0.074	1.	0.01	0.016	0.127	0.016	0.025	0.079	0.142
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	67	46.	49.525	80.	0.2	238.681	15.449	32.8	41.	61.	71.2
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		07/28/83-09/27/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00480 SALINITY - PARTS PER THOUSAND		11/18/82-06/28/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/28/83	36	121.5	132.611	368.	57.	2859.33	53.473	89.7	104.25	139.75	201.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/28/83	36	34.5	38.167	88.	11.	284.543	16.868	18.8	27.25	48.75	58.3
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/28/83	36	87.5	94.444	352.	32.	3052.654	55.251	46.7	64.	106.75	153.4
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		07/27/81-09/27/83	4	144.	147.5	173.	129.	355.667	18.859	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	202	8.	15.606	261.	0.5	900.154	30.003	3.	4.	15.	29.1
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	202	2.	3.636	32.	0.	21.781	4.667	1.	1.5	4.	9.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	198	6.	12.28	231.	0.	721.143	26.854	1.5	3.	11.	22.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		06/29/88-12/15/98	140	0.13	0.178	0.94	0.002	0.032	0.179	0.018	0.05	0.25	0.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/21/70-09/27/83	71	0.2	0.249	1.099	0.03	0.045	0.212	0.05	0.1	0.33	0.5
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		06/29/88-12/15/98	144	0.005	0.016	0.15	0.001	0.001	0.028	0.002	0.004	0.01	0.045
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	72	0.01	0.013	0.06	0.	0.	0.012	0.005	0.005	0.02	0.03
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		06/29/88-12/15/98	144	0.25	0.251	0.62	0.002	0.015	0.121	0.085	0.16	0.348	0.41
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/27/83	70	0.35	0.414	1.549	0.005	0.098	0.313	0.061	0.168	0.58	0.792

** - Less 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: RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	3	0.8	0.933	1.3	0.7	0.103	0.321	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	157	0.5	0.56	2.	0.1	0.116	0.341	0.2	0.3	0.7	1.
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-12/15/98	36	0.3	0.337	1.	0.04	0.028	0.166	0.2	0.2	0.4	0.5
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	104	0.11	0.144	0.55	0.03	0.012	0.11	0.05	0.07	0.2	0.32
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	105	0.06	0.089	0.6	0.01	0.01	0.101	0.03	0.04	0.085	0.208
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-09/27/83	3	0.4	0.433	0.7	0.2	0.063	0.252	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	160	0.04	0.073	0.51	0.002	0.007	0.083	0.02	0.03	0.07	0.18
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	153	4.	4.693	57.1	1.2	21.709	4.659	2.34	3.1	5.	7.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	55	59.	63.091	134.	26.	364.38	19.089	41.6	50.	71.	86.8
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	87	9.	11.207	37.	2.5	52.335	7.234	4.	6.	14.	21.2
00945 SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	50	16.	20.86	62.	8.	153.511	12.39	10.	12.	29.	37.
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	128	7.3	6.887	10.7	2.3	3.578	1.892	3.98	5.55	8.25	9.11
01002 ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	5##	1.	1.5	2.5	0.5	0.875	0.935	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	7##	5.	4.357	5.	0.5	2.893	1.701	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	15##	5.	5.8	20.	0.5	22.993	4.795	0.5	5.	5.	14.
01042 COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	15##	5.	15.	110.	5.	732.143	27.058	5.	5.	10.	62.
01051 LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	13	5.	5.654	10.	1.	11.058	3.325	1.	2.75	9.	10.
01055 MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	4##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	30.	31.25	60.	5.	772.917	27.801	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	15##	5.	19.667	120.	5.	965.952	31.08	5.	5.	20.	78.
01140 SILICON, DISSOLVED (UG/L AS SI)	06/29/88-04/13/89	16	6350.	6381.25	10000.	4400.	2546958.333	1595.919	4400.	4850.	7475.	8600.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-09/09/70	13	11000.	236461.538	1100000.	11000.	147764102564.103	384400.966	11000.	11000.	460000.	1032000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-09/09/70	13	4.041	4.644	6.041	4.041	0.706	0.84	4.041	4.041	5.663	6.012
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	44017.105								
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	430.	8240.	24000.	290.	186288100.	13648.74	**	**	**	**
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	2.633	3.159	4.38	2.462	1.126	1.061	**	**	**	**
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	1441.095								
31614 FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	159.5	172.75	350.	22.	22484.917	149.95	**	**	**	**
31614 LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	2.139	2.041	2.544	1.342	0.292	0.541	**	**	**	**
31614 GM FECAL COLIFORM,MPN,TUBE CONFIGURATION			GEOMETRIC MEAN =	109.921								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	53	170.	921.509	16000.	9.	6568329.139	2562.875	18.8	56.5	490.	2740.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	53	2.23	2.258	4.204	0.954	0.572	0.756	1.274	1.743	2.69	3.408
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	181.018								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	68	300.	2588.088	80000.	0.	96509311.216	9823.915	50.	50.	1375.	7730.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	68	2.477	2.484	4.903	-6.046	1.723	1.313	1.699	1.699	3.138	3.888
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	305.101								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	4	1.1	3.15	10.2	0.2	22.297	4.722	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	4	1.05	1.375	3.2	0.2	1.656	1.287	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	44	0.02	0.047	0.873	0.003	0.018	0.133	0.007	0.012	0.029	0.047
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	43	0.47	0.745	5.606	0.038	0.851	0.923	0.176	0.409	0.806	1.18
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	43	0.066	0.091	0.601	0.018	0.01	0.1	0.026	0.038	0.104	0.183
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	44	0.54	0.542	1.084	0.066	0.029	0.17	0.344	0.431	0.641	0.711
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	46	0.046	0.063	0.605	0.017	0.007	0.086	0.023	0.036	0.061	0.102
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-09/27/83	4	0.	0.025	0.1	0.	0.002	0.05	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	55	0.1	0.111	0.35	0.05	0.006	0.076	0.05	0.05	0.2	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	55	0.06	0.094	0.35	0.01	0.005	0.073	0.03	0.05	0.12	0.204
71900 MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	15##	0.25	0.39	2.	0.15	0.23	0.48	0.15	0.25	0.25	1.34

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: RICH0069

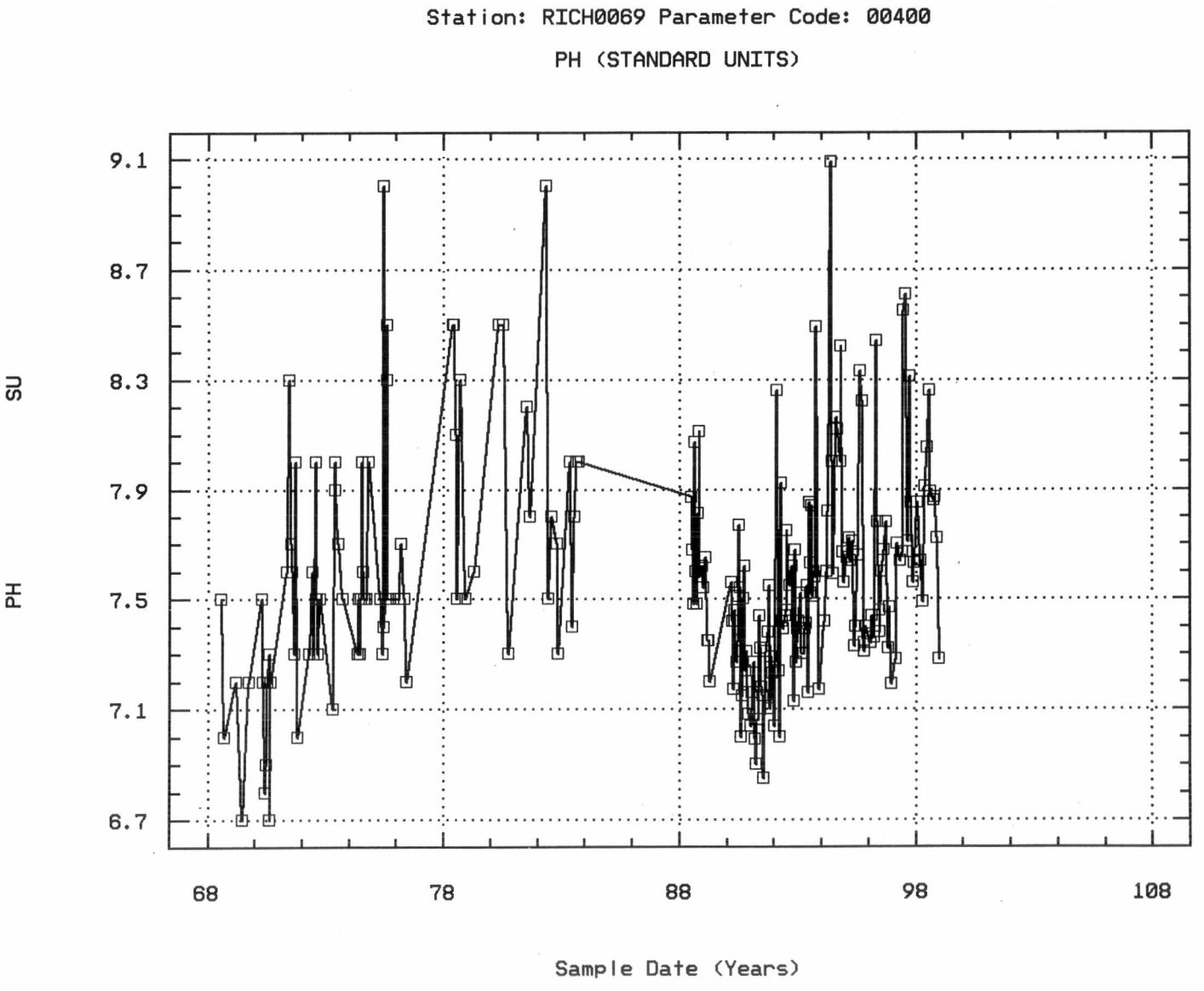
Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	12	2	0.17	7	1	0.14	2	1	0.50	3	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	70	1	0.01	18	0	0.00	26	1	0.04	26	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	500	0	0.00	154	0	0.00	176	0	0.00	170	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: RICH0069

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	77	7	0.09	40	5	0.13	8	0	0.00	29	2	0.07			
00400	PH	Fresh Chronic	9.	221	3	0.01	84	0	0.00	58	0	0.00	79	3	0.04			
		Other-Lo Lim.	6.5	221	0	0.00	84	0	0.00	58	0	0.00	79	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	64	0	0.00	15	0	0.00	22	0	0.00	27	0	0.00			
		Other-Lo Lim.	6.5	64	1	0.02	15	0	0.00	22	0	0.00	27	1	0.04			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	144	0	0.00	46	0	0.00	49	0	0.00	49	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	72	0	0.00	36	0	0.00	9	0	0.00	27	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	144	0	0.00	46	0	0.00	49	0	0.00	49	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	70	0	0.00	34	0	0.00	9	0	0.00	27	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	36	0	0.00	12	0	0.00	12	0	0.00	12	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	87	0	0.00	31	0	0.00	25	0	0.00	31	0	0.00			
		Drinking Water	250.	87	0	0.00	31	0	0.00	25	0	0.00	31	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	50	0	0.00	13	0	0.00	21	0	0.00	16	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00				1	0	0.00	4	0	0.00			
		Drinking Water	50.	5	0	0.00				1	0	0.00	4	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.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	15	2	0.13	4	0	0.00	2	0	0.00	9	2	0.22			
		Drinking Water	1300.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	13	0	0.00	4	0	0.00	2	0	0.00	7	0	0.00			
		Drinking Water	15.	13	0	0.00	4	0	0.00	2	0	0.00	7	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00							4	0	0.00			
		Drinking Water	100.	4	0	0.00							4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
		Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	15	1	0.07	4	0	0.00	2	0	0.00	9	1	0.11			
		Drinking Water	5000.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	13	1.00	8	8	1.00				5	5	1.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	3	1	0.33	3	1	0.33									
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	4	2	0.50							4	2	0.50			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	53	23	0.43	15	5	0.33	22	11	0.50	16	7	0.44			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	68	42	0.62	35	23	0.66	10	5	0.50	23	14	0.61			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	4	1	0.25	3	1	0.33				1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	15	0	0.00	5	0	0.00	2	0	0.00	8	0	0.00			
		Drinking Water	2.	15	1	0.07	5	1	0.20	2	0	0.00	8	0	0.00			

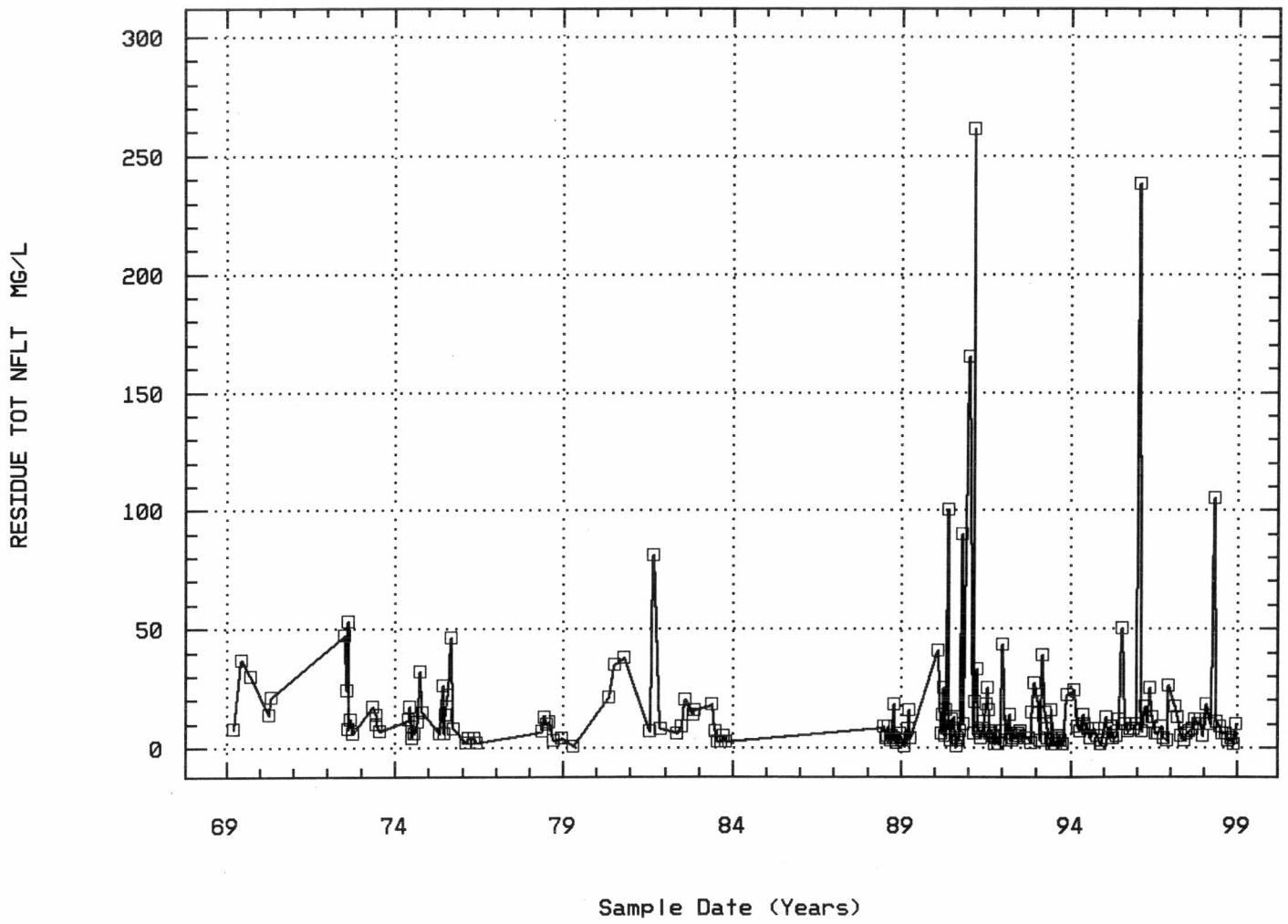
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter


Station: RICH0069 Parameter Code: 00400
PH (STANDARD UNITS)
PH
SU
9.1
8.7
8.3
7.9
7.5
7.1
6.7
68
78
88
98
108
Sample Date (Years)

BUOY 166

Station: RICH0069 Parameter Code: 00530

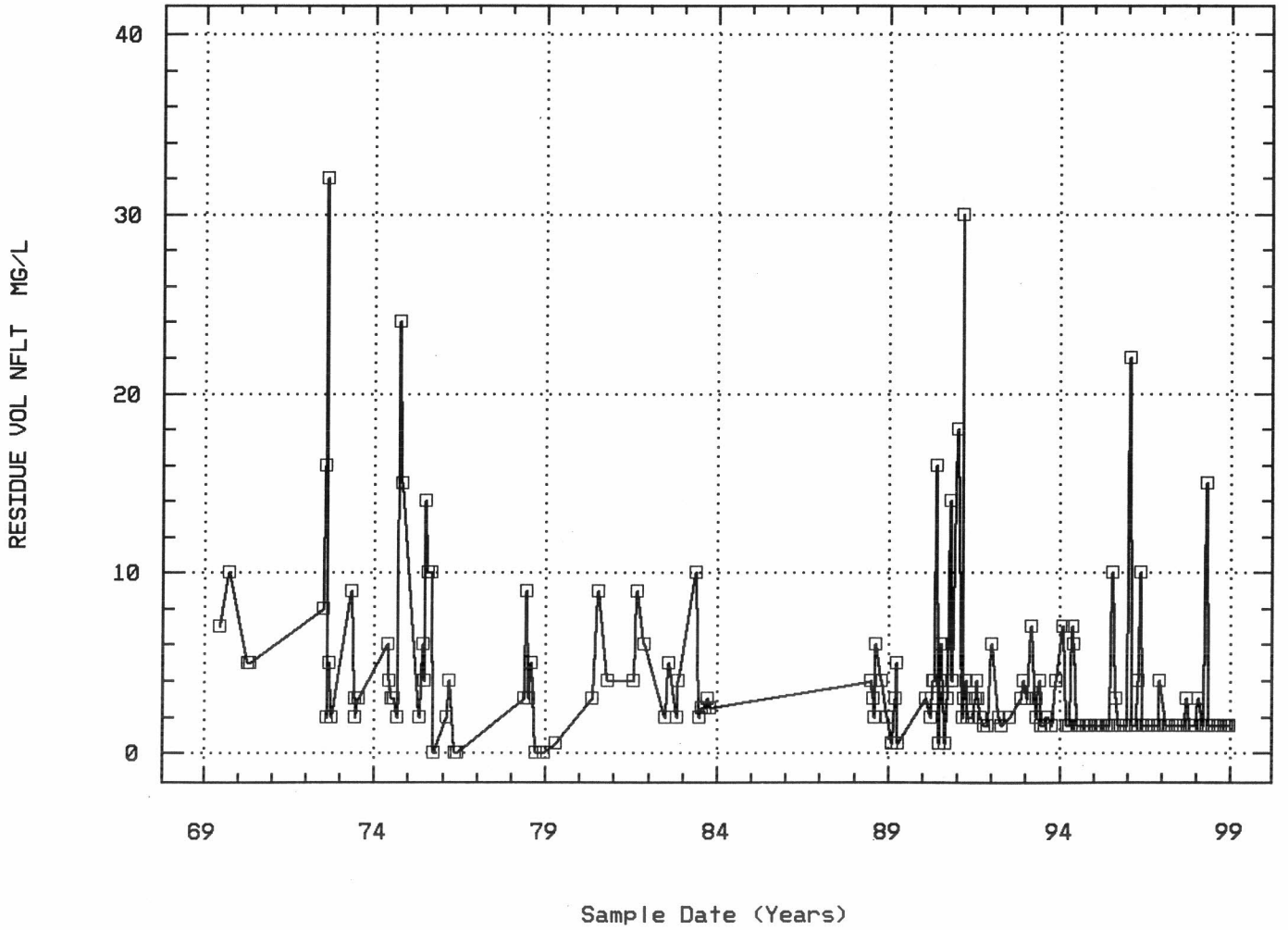
RESIDUE, TOTAL NONFILTRABLE (MG/L)



BUOY 166

Station: RICH0069 Parameter Code: 00535

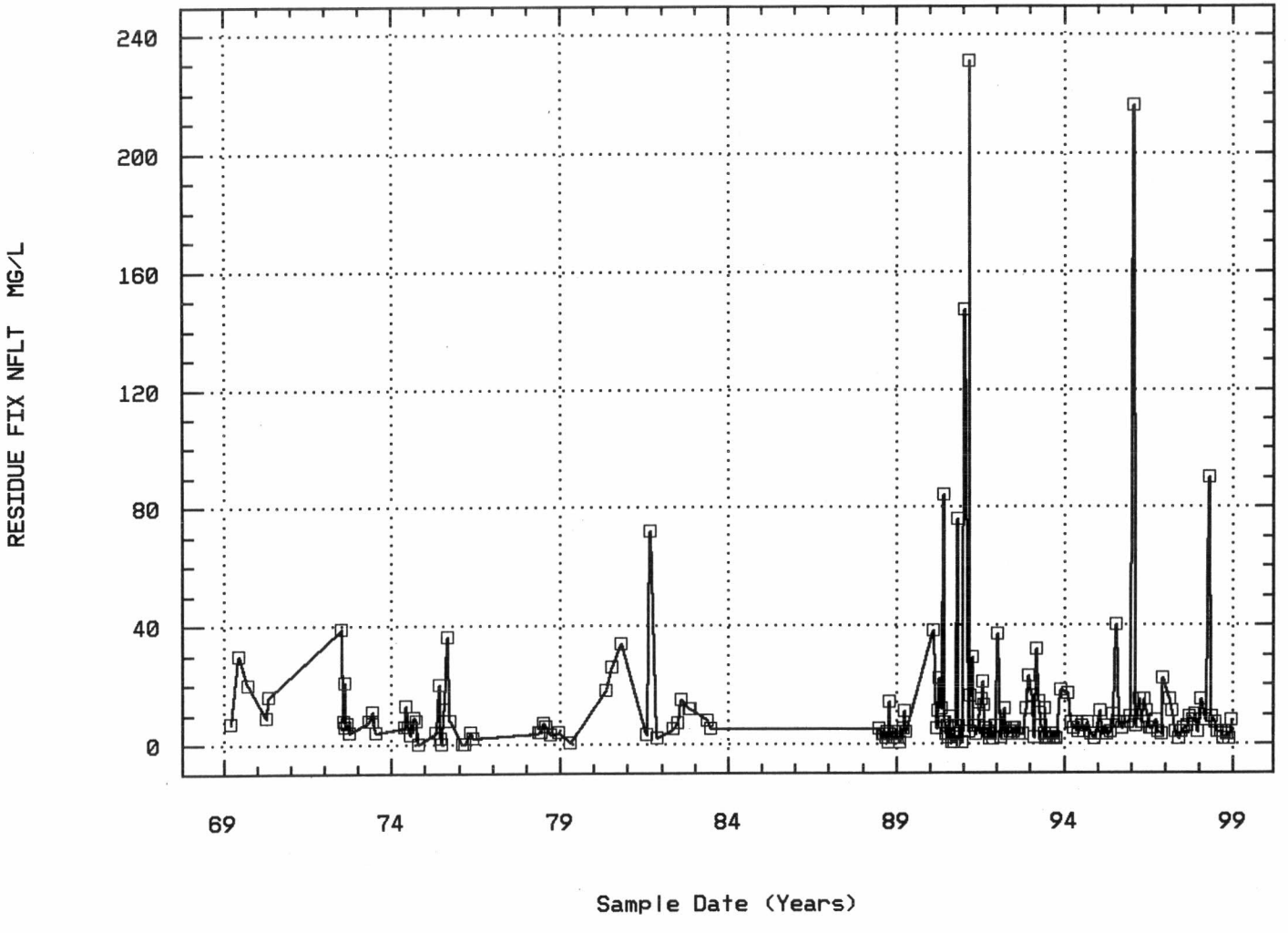
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



BUOY 166

Station: RICH0069 Parameter Code: 00540

RESIDUE, FIXED NONFILTRABLE (MG/L)



BUOY 166

Annual Analysis for 1968 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	2	28.35	28.35	30.	26.7	5.445	2.333	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	2	7.25	7.25	7.5	7.	0.125	0.354	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	2	7.182	7.182	7.5	7.	0.134	0.367	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	2	0.066	0.066	0.1	0.032	0.002	0.048	**	**	**	**

** - 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 1969 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	3	23.3	20.	25.6	11.1	60.73	7.793	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	3	3.9	26.567	74.	1.8	1688.543	41.092	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	3	7.2	7.033	7.2	6.7	0.083	0.289	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	3	7.2	6.964	7.2	6.7	0.09	0.301	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	3	0.063	0.109	0.2	0.063	0.006	0.079	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	3	6.8	6.733	7.4	6.	0.493	0.702	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	3	6.8	6.399	7.4	6.	0.661	0.813	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	3	0.158	0.399	1.	0.04	0.274	0.523	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	3	32.	30.333	51.	8.	464.333	21.548	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	30.	25.	37.	8.	229.	15.133	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	7.	6.	10.	1.	21.	4.583	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	20.	19.	30.	7.	133.	11.533	**	**	**	**

** - Less 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 RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	8	27.5	25.35	31.1	16.1	28.797	5.366	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	7	4.2	4.771	8.6	1.	7.702	2.775	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	8	7.2	7.1	7.5	6.7	0.074	0.273	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	8	7.2	7.025	7.5	6.7	0.081	0.284	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	8	0.063	0.094	0.2	0.032	0.004	0.06	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	2	7.3	7.3	7.4	7.2	0.02	0.141	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	2	7.289	7.289	7.4	7.2	0.02	0.142	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	2	0.051	0.051	0.063	0.04	0.	0.016	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	2	37.5	37.5	45.	30.	112.5	10.607	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	2	17.5	17.5	21.	14.	24.5	4.95	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	2	12.5	12.5	16.	9.	24.5	4.95	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	8	1.349	1.225	2.	0.4	0.348	0.59	**	**	**	**

** - 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

Annual Analysis for 1971 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	7	23.3	23.957	30.6	17.2	26.946	5.191	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	7	7.6	7.643	8.3	7.	0.183	0.428	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	7	7.6	7.473	8.3	7.	0.216	0.465	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	7	0.025	0.034	0.1	0.005	0.001	0.033	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	7	0.7	0.614	0.9	0.3	0.048	0.219	**	**	**	**

** - Less 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 RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std, Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	7	23.9	23.257	26.7	19.4	9.55	3.09	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	8	7.5	7.5	8.	7.3	0.054	0.233	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	8	7.5	7.455	8.	7.3	0.057	0.238	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	8	0.032	0.035	0.05	0.01	0.	0.014	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	18.	25.	53.	6.	417.6	20.435	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	6.5	10.833	32.	2.	134.567	11.6	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	7.5	14.167	39.	4.	184.567	13.586	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	8	0.4	0.45	0.8	0.2	0.046	0.214	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	6	6.5	7.333	12.	4.	10.267	3.204	**	**	**	**

** - Less 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 RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	5	27.2	25.98	29.4	17.8	22.952	4.791	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	5	7.7	7.64	8.	7.1	0.128	0.358	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	5	7.7	7.513	8.	7.1	0.148	0.385	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	5	0.02	0.031	0.079	0.01	0.001	0.028	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	12.	12.	17.	7.	19.333	4.397	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	3.	4.25	9.	2.	10.25	3.202	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	8.	7.75	11.	4.	8.25	2.872	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	4	0.4	0.45	0.7	0.3	0.03	0.173	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	4	5.5	6.	10.	3.	10.	3.162	**	**	**	**

** - Less 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 RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	9	24.4	23.822	28.	15.	16.074	4.009	15.	21.85	26.95	28.
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.578	8.	7.3	0.067	0.259	7.3	7.4	7.8	8.
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.52	8.	7.3	0.071	0.266	7.3	7.4	7.8	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	9	0.032	0.03	0.05	0.01	0.	0.014	0.01	0.018	0.041	0.05
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-12/15/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-12/15/98	2	20.6	20.6	41.	0.2	832.32	28.85	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	8	11.5	13.25	32.	4.	75.929	8.714	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	8	3.5	7.5	24.	2.	62.	7.874	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	8	6.	5.75	13.	0.	18.786	4.334	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	8	0.4	0.5	1.299	0.3	0.108	0.329	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	8	11.5	11.	19.	5.	23.714	4.87	**	**	**	**

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Annual Analysis for 1975 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	8	26.15	24.863	29.4	16.1	22.854	4.781	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	9	1.	1.278	3.	0.5	0.569	0.755	0.5	1.	1.5	3.

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Annual Analysis for 1975 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.833	9.	7.3	0.368	0.606	7.3	7.45	8.4	9.
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	9	7.5	7.601	9.	7.3	0.428	0.654	7.3	7.45	8.4	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	9	0.032	0.025	0.05	0.001	0.	0.018	0.001	0.004	0.036	0.05
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	14.	18.286	46.	6.	211.238	14.534	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	6.	6.571	14.	0.	24.952	4.995	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	7	8.	11.714	36.	0.	160.571	12.672	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	9	0.3	0.289	0.4	0.1	0.011	0.105	0.1	0.2	0.4	0.4
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	9	6.	6.333	11.	5.	3.75	1.936	5.	5.	7.	11.
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	8	10.	11.625	20.	4.	37.411	6.116	**	**	**	**

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Annual Analysis for 1976 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	4	15.6	14.475	21.1	5.6	49.436	7.031	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	4	7.5	7.475	7.7	7.2	0.042	0.206	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	4	7.5	7.437	7.7	7.2	0.044	0.211	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	4	0.032	0.037	0.063	0.02	0.	0.019	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	3.	3.	4.	2.	1.333	1.155	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	1.	1.5	4.	0.	3.667	1.915	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	4	1.	1.5	4.	0.	3.667	1.915	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	4	0.2	0.25	0.4	0.2	0.01	0.1	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	4	5.	5.5	7.	5.	1.	1.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	4	7.5	7.25	8.	6.	0.917	0.957	**	**	**	**

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Annual Analysis for 1978 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	6	24.75	22.583	29.5	7.	69.342	8.327	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	6	8.2	8.067	8.5	7.5	0.215	0.463	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	6	8.189	7.862	8.5	7.5	0.265	0.515	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-12/15/98	6	0.006	0.014	0.032	0.003	0.	0.014	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	8.5	8.	13.	3.	16.	4.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	3.	3.333	9.	0.	11.467	3.386	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-12/15/98	6	4.	4.667	7.	3.	2.267	1.506	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-12/02/93	6	0.25	0.467	1.7	0.1	0.379	0.615	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/01/75-08/20/96	5	8.	7.6	9.	6.	1.3	1.14	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-12/15/98	6	10.5	11.333	22.	4.	39.867	6.314	**	**	**	**

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Annual Analysis for 1979 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-12/15/98	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-12/15/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		07/22/68-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**

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Annual Analysis for 1979 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**

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Annual Analysis for 1980 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	3	21.	23.333	30.	19.	34.333	5.859	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	3	218.	210.333	265.	148.	3466.333	58.876	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	3	10.	14.	26.	6.	112.	10.583	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/68-12/15/98	3	8.5	8.1	8.5	7.3	0.48	0.693	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	3	8.5	7.726	8.5	7.3	0.69	0.831	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	3	0.003	0.019	0.05	0.003	0.001	0.027	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	35.	31.333	38.	21.	82.333	9.074	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	4.	5.333	9.	3.	10.333	3.215	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	26.	26.	34.	18.	64.	8.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	3	0.2	0.16	0.23	0.05	0.009	0.096	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	3	0.1	0.13	0.23	0.06	0.008	0.089	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	3	9.	8.667	10.	7.	2.333	1.528	**	**	**	**

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Annual Analysis for 1981 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	2	26.25	26.25	27.5	25.	3.125	1.768	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	3	216.	226.	253.	209.	559.	23.643	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	3	11.	15.333	25.	10.	70.333	8.386	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/68-12/15/98	2	8.	8.	8.2	7.8	0.08	0.283	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	2	7.955	7.955	8.2	7.8	0.084	0.29	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	2	0.011	0.011	0.016	0.006	0.	0.007	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	8.	32.	81.	7.	1801.	42.438	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	6.	6.333	9.	4.	6.333	2.517	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	3	3.	25.667	72.	2.	1610.333	40.129	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	3	0.4	0.433	0.5	0.4	0.003	0.058	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	3	0.2	0.2	0.3	0.1	0.01	0.1	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	3	0.2	0.193	0.23	0.15	0.002	0.04	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	3	9.	8.333	10.	6.	4.333	2.082	**	**	**	**

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Annual Analysis for 1982 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	5	23.	19.4	27.5	9.	60.675	7.789	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	5	160.	167.6	212.	131.	920.3	30.336	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	5	2.	2.	3.	1.	0.5	0.707	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	5	12.	14.	20.	7.	29.5	5.431	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.7	7.86	9.	7.3	0.443	0.666	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.7	7.625	9.	7.3	0.512	0.716	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	5	0.02	0.024	0.05	0.001	0.	0.018	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	14.	13.	20.	6.	31.	5.568	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	2.	2.8	5.	1.	2.7	1.643	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	12.	10.2	15.	5.	16.7	4.087	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	5	0.7	0.68	0.9	0.4	0.037	0.192	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	5	0.2	0.18	0.2	0.1	0.002	0.045	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	5	0.14	0.118	0.17	0.07	0.002	0.045	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	5	4.	4.	5.	3.	1.	1.	**	**	**	**

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Annual Analysis for 1983 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	5	27.5	25.2	29.5	18.5	26.2	5.119	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	8##	0.225	0.318	1.	0.185	0.077	0.277	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	5	230.	220.8	295.	139.	3870.7	62.215	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	2	6.5	6.5	7.	6.	0.5	0.707	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	5	8.	7.84	8.	7.4	0.068	0.261	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	5	8.	7.766	8.	7.4	0.075	0.274	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	5	0.01	0.017	0.04	0.01	0.	0.013	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	3	71.	70.333	79.	61.	81.333	9.018	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	6##	3.75	6.25	18.	2.5	36.475	6.039	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	6##	2.5	3.75	10.	2.	9.475	3.078	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	2	6.5	6.5	8.	5.	4.5	2.121	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	5	0.7	0.72	1.	0.3	0.087	0.295	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	5	0.2	0.29	0.5	0.05	0.041	0.201	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	5	0.2	0.22	0.4	0.04	0.019	0.137	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	5	4.	4.2	6.	3.	1.2	1.095	**	**	**	**

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Annual Analysis for 1988 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	43	22.4	19.351	31.	2.6	72.589	8.52	6.02	13.9	28.	30.32
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	10	1.25	1.09	1.5	0.6	0.137	0.37	0.6	0.675	1.4	1.49
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	43	306.	304.767	397.	210.	2710.468	52.062	240.4	250.	345.	394.6
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	1	238.	238.	238.	238.	0.	0.	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	43	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	43	7.9	8.312	14.3	5.1	6.126	2.475	6.14	6.5	9.6	12.8
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.62	7.719	8.11	7.48	0.048	0.219	7.48	7.58	7.87	8.102
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.62	7.675	8.11	7.48	0.05	0.223	7.48	7.58	7.87	8.102
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	11	0.024	0.021	0.033	0.008	0.	0.009	0.008	0.013	0.026	0.033
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	5.	6.	18.	1.	22.2	4.712	1.2	3.	9.	16.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	2.	2.364	6.	1.	2.855	1.69	1.	1.	4.	5.6

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Annual Analysis for 1988 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	3.	3.682	14.	0.5	13.714	3.703	0.6	1.	4.	12.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	10	0.645	0.616	0.94	0.24	0.044	0.21	0.257	0.448	0.778	0.929
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.08	0.079	0.15	0.01	0.002	0.043	0.016	0.04	0.11	0.148
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.19	0.229	0.36	0.14	0.006	0.08	0.144	0.16	0.28	0.356
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	10	1.05	1.077	1.4	0.8	0.045	0.213	0.807	0.893	1.3	1.39
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	11	0.35	0.343	0.55	0.2	0.009	0.095	0.206	0.27	0.39	0.52
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	12	0.315	0.331	0.6	0.15	0.018	0.135	0.165	0.228	0.393	0.585
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.29	0.29	0.51	0.15	0.01	0.1	0.156	0.21	0.34	0.482
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	11	4.	4.036	5.3	2.4	0.669	0.818	2.6	3.5	4.9	5.24

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Annual Analysis for 1989 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	20	7.8	8.855	13.2	5.7	8.89	2.982	5.71	6.025	11.5	13.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	5	1.1	1.12	1.5	0.7	0.112	0.335	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	20	142.	159.1	201.	129.	771.989	27.785	131.	138.	186.75	197.8
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	3	144.	157.	195.	132.	1119.	33.451	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	20	11.9	11.56	12.6	10.5	0.73	0.854	10.51	10.6	12.375	12.5
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.35	7.418	7.65	7.2	0.031	0.177	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	5	7.35	7.39	7.65	7.2	0.032	0.18	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	5	0.045	0.041	0.063	0.022	0.	0.016	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	4.	6.3	16.	0.5	36.7	6.058	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	1.	2.	5.	0.5	3.875	1.969	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	5	4.	4.5	11.	0.5	16.25	4.031	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	5	0.25	0.256	0.44	0.06	0.024	0.154	**	**	**	**
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	5	0.01	0.015	0.03	0.005	0.	0.01	**	**	**	**
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	5	0.33	0.316	0.41	0.23	0.004	0.067	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	5	0.7	0.62	0.8	0.4	0.027	0.164	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	5	0.14	0.142	0.19	0.1	0.001	0.035	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	5	0.08	0.098	0.17	0.06	0.002	0.044	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	5	0.08	0.096	0.18	0.06	0.002	0.048	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	5	2.9	2.96	3.4	2.6	0.113	0.336	**	**	**	**

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Annual Analysis for 1990 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	62	21.45	20.631	30.9	6.4	49.057	7.004	10.5	14.65	27.125	29.45
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	15	1.3	1.293	2.2	0.2	0.242	0.492	0.56	1.	1.5	2.08
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	63	158.	190.603	378.	106.	4435.372	66.599	120.	139.	234.	303.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	18	160.5	172.111	321.	104.	3703.046	60.853	106.7	130.	202.75	292.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	62	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	62	8.3	8.703	13.	6.7	2.54	1.594	6.93	7.4	9.8	11.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	8	9.	8.75	13.	4.	12.786	3.576	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.385	7.365	7.77	7.	0.042	0.204	7.072	7.193	7.518	7.635

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Annual Analysis for 1990 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.384	7.321	7.77	7.	0.044	0.209	7.072	7.192	7.517	7.635
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	18	0.041	0.048	0.1	0.017	0.	0.022	0.023	0.03	0.064	0.085
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	8.	19.289	100.	0.5	804.148	28.357	1.	4.	16.	90.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	3.	3.947	16.	0.5	18.247	4.272	0.5	1.	4.	14.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	19	6.	15.395	84.	0.5	600.488	24.505	0.5	2.	12.	76.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	19	0.15	0.194	0.53	0.02	0.02	0.143	0.02	0.08	0.32	0.4
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	19	0.01	0.036	0.14	0.005	0.002	0.042	0.005	0.005	0.06	0.11
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	19	0.27	0.232	0.41	0.02	0.017	0.129	0.04	0.1	0.33	0.41
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	19	0.5	0.5	0.9	0.2	0.043	0.208	0.2	0.3	0.7	0.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	19	0.1	0.098	0.23	0.03	0.003	0.052	0.04	0.06	0.12	0.22
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	19	0.04	0.049	0.1	0.01	0.001	0.024	0.02	0.03	0.07	0.08
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	19	0.04	0.042	0.07	0.01	0.	0.02	0.01	0.03	0.06	0.07
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	19	2.8	2.984	4.6	1.2	0.873	0.934	1.9	2.2	3.7	4.3
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	19	7.7	7.016	9.6	2.9	3.264	1.807	3.2	6.2	8.	9.2

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Annual Analysis for 1991 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	66	20.4	18.918	29.2	6.4	58.086	7.621	9.7	10.825	26.6	27.
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	20	1.25	1.175	2.3	0.1	0.44	0.663	0.14	0.6	1.575	2.18
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	66	163.5	180.727	297.	103.	4104.786	64.069	108.	131.75	237.	286.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	9	132.	147.667	252.	99.	2247.	47.403	99.	111.5	171.5	252.
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	66	8.65	9.091	12.4	6.3	3.508	1.873	6.9	7.2	11.	11.33
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.17	7.182	7.55	6.85	0.034	0.185	6.895	7.055	7.313	7.451
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	18	7.17	7.146	7.55	6.85	0.036	0.189	6.895	7.055	7.312	7.451
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	18	0.068	0.072	0.141	0.028	0.001	0.03	0.035	0.049	0.088	0.127
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	7.5	30.65	261.	1.5	4196.95	64.784	1.75	5.25	18.75	151.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	2.	4.15	30.	1.	50.845	7.131	1.	1.	3.	16.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	20	6.	26.65	231.	1.5	3318.213	57.604	1.65	4.	15.75	135.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	20	0.14	0.168	0.54	0.02	0.02	0.142	0.04	0.053	0.24	0.398
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	20##	0.005	0.008	0.03	0.005	0.	0.008	0.005	0.005	0.005	0.028
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	20	0.265	0.255	0.42	0.04	0.011	0.103	0.112	0.163	0.325	0.414
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	20	0.6	0.54	1.1	0.2	0.064	0.252	0.2	0.3	0.7	0.89
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	20	0.085	0.111	0.39	0.05	0.007	0.086	0.05	0.063	0.11	0.291
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	20	0.05	0.051	0.09	0.02	0.	0.02	0.03	0.03	0.06	0.08
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	20	0.04	0.041	0.07	0.02	0.	0.016	0.02	0.03	0.058	0.069
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	20	3.75	6.765	57.1	1.4	145.462	12.061	1.58	2.875	4.875	10.61
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	20	6.85	6.8	9.5	2.4	2.997	1.731	4.42	5.925	8.	9.14

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Annual Analysis for 1992 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	48	17.1	15.827	30.6	5.	63.999	8.	5.1	8.	22.1	26.84
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	15	1.6	1.56	3.	0.4	0.515	0.718	0.46	1.2	2.1	2.64
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	48	178.	200.708	309.	102.	4140.083	64.343	116.5	158.	276.5	287.
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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Annual Analysis for 1992 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	48	9.25	10.081	13.8	7.2	4.792	2.189	7.4	8.175	12.275	13.6
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	15	7.44	7.478	8.26	7.	0.114	0.338	7.024	7.24	7.68	8.056
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	15	7.44	7.374	8.26	7.	0.126	0.355	7.024	7.24	7.68	8.056
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	15	0.036	0.042	0.1	0.005	0.001	0.028	0.009	0.021	0.058	0.095
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	15	5.	9.867	43.	2.	127.124	11.275	2.6	4.	14.	33.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	15	1.	1.833	6.	1.	2.131	1.46	1.	1.	2.	4.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	15	4.	8.133	37.	1.	95.838	9.79	1.6	3.	12.	28.6
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	15	0.13	0.153	0.35	0.06	0.008	0.089	0.072	0.09	0.21	0.332
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	15##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	15	0.27	0.26	0.44	0.04	0.015	0.124	0.094	0.16	0.37	0.428
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	15	0.4	0.433	0.6	0.3	0.008	0.09	0.3	0.4	0.5	0.54
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	15	0.07	0.089	0.15	0.05	0.001	0.034	0.05	0.06	0.12	0.138
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	15	0.04	0.049	0.1	0.02	0.	0.019	0.032	0.04	0.05	0.088
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	15	0.04	0.041	0.09	0.02	0.	0.019	0.02	0.03	0.04	0.078
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	15	4.	3.593	5.1	1.7	1.391	1.179	1.76	2.5	4.4	5.1
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	15	6.3	6.213	9.2	2.5	3.403	1.845	3.22	4.9	7.7	8.9

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Annual Analysis for 1993 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	57	22.8	19.747	31.4	5.1	84.083	9.17	6.7	9.35	29.15	30.08
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	11	3.5	10.427	37.	0.5	152.732	12.358	0.8	2.2	15.	35.6
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	17	1.6	1.553	2.9	0.4	0.533	0.73	0.4	0.9	2.15	2.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	57	185.	212.386	408.	12.	8707.598	93.315	126.6	137.	275.	371.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	57	8.4	9.16	13.4	6.4	5.152	2.27	6.68	7.2	11.55	12.4
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	17	7.52	7.544	8.49	7.16	0.097	0.312	7.168	7.345	7.615	7.978
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	17	7.52	7.466	8.49	7.16	0.103	0.322	7.168	7.345	7.615	7.978
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	17	0.03	0.034	0.069	0.003	0.	0.018	0.012	0.024	0.045	0.068
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	17	4.	8.971	39.	1.5	103.671	10.182	1.5	3.	15.5	25.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	17	1.5	2.206	7.	1.	2.564	1.601	1.	1.	3.	4.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	17	3.	7.029	32.	1.	74.233	8.616	1.	1.5	13.	20.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	17	0.16	0.161	0.39	0.04	0.013	0.115	0.04	0.05	0.255	0.374
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	17##	0.005	0.008	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.012
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	17	0.19	0.212	0.48	0.06	0.013	0.115	0.084	0.11	0.3	0.4
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	17	0.4	0.447	0.7	0.2	0.035	0.187	0.2	0.25	0.65	0.7
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	17	0.09	0.095	0.16	0.04	0.002	0.04	0.048	0.055	0.13	0.16
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	17	0.04	0.057	0.11	0.02	0.001	0.031	0.02	0.03	0.085	0.102
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	17	0.03	0.052	0.12	0.01	0.001	0.036	0.01	0.025	0.08	0.112
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	17	3.8	3.982	7.7	2.2	1.72	1.312	2.6	3.05	4.55	6.1
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	17	7.3	6.841	9.3	2.3	3.305	1.818	3.66	5.8	8.05	8.98

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Annual Analysis for 1994 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	44	16.65	17.784	31.9	4.7	71.609	8.462	6.7	9.725	25.95	29.2
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	11	5.7	6.155	12.2	0.6	8.541	2.922	1.4	4.7	7.6	11.48
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	10	1.4	1.38	2.2	0.6	0.244	0.494	0.62	1.025	1.7	2.18
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	44	220.5	217.136	367.	17.	5301.19	72.809	127.5	143.75	275.75	294.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	11	212.	208.909	308.	114.	5448.491	73.814	115.8	129.	274.	307.
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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Annual Analysis for 1994 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	44	9.6	9.561	13.3	6.3	3.87	1.967	6.8	7.825	11.075	12.45
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	11	1.5	1.691	3.6	0.5	1.055	1.027	0.5	1.	2.	3.56
00340	COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	4	13.5	13.25	16.	10.	10.25	3.202	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/68-12/15/98	12	7.91	7.954	9.09	7.42	0.216	0.465	7.462	7.592	8.15	8.889
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	12	7.901	7.796	9.09	7.42	0.244	0.494	7.462	7.592	8.15	8.889
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	12	0.013	0.016	0.038	0.001	0.	0.011	0.002	0.007	0.026	0.035
00403	PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	10	7.2	7.22	7.6	6.9	0.037	0.193	6.92	7.1	7.325	7.58
00403	CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	10	7.2	7.183	7.6	6.9	0.039	0.197	6.92	7.1	7.325	7.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	10	0.063	0.066	0.126	0.025	0.001	0.028	0.027	0.048	0.079	0.121
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	9	57.	52.333	68.	33.	132.	11.489	33.	43.	61.5	68.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	8.	8.5	24.	1.5	38.75	6.225	1.8	4.	10.	22.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11##	1.5	2.909	7.	1.5	5.891	2.427	1.5	1.5	6.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	5.	5.864	17.	1.5	17.105	4.136	1.8	3.	7.	15.
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.144	0.175	0.369	0.002	0.019	0.137	0.008	0.034	0.313	0.367
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.004	0.006	0.019	0.001	0.	0.006	0.001	0.003	0.008	0.018
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.13	0.161	0.35	0.002	0.013	0.116	0.012	0.08	0.25	0.35
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	5	0.06	0.064	0.11	0.04	0.001	0.029	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.028	0.037	0.1	0.002	0.001	0.027	0.004	0.025	0.055	0.093
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	11	3.5	3.5	4.5	2.1	0.444	0.666	2.28	3.1	4.1	4.46
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	9	66.	65.111	96.	42.	310.111	17.61	42.	50.	79.	96.
00940	CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	4	23.	23.5	37.	11.	123.667	11.121	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	4	30.5	29.75	37.	21.	43.583	6.602	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	11	7.4	6.827	8.3	4.4	1.522	1.234	4.58	5.5	7.6	8.18
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	7	110.	446.	1600.	9.	342013.	584.819	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	7	2.041	2.19	3.204	0.954	0.618	0.786	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		155.029									

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Annual Analysis for 1995 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	44	16.35	16.082	31.	2.8	90.222	9.499	3.95	6.4	24.65	30.25
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	9.	9.592	17.6	4.3	20.617	4.541	4.33	5.725	13.85	17.15
00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	12	1.25	1.25	1.9	0.7	0.188	0.434	0.7	0.825	1.675	1.87
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	44	166.	189.205	343.	142.	3033.422	55.077	147.	155.	196.75	293.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	12	162.	189.333	377.	142.	5268.424	72.584	144.4	153.	177.75	354.5
00096	SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	44	9.3	9.993	13.6	6.8	5.161	2.272	7.05	7.925	12.3	13.3
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	12	1.	0.942	2.4	0.5	0.295	0.543	0.5	0.5	1.15	2.04
00340	COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	12	11.5	10.75	27.	2.5	40.705	6.38	2.5	6.5	12.	23.1
00400	PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.64	7.622	8.33	7.31	0.109	0.33	7.318	7.355	7.715	8.286
00400	CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.64	7.534	8.33	7.31	0.117	0.342	7.318	7.355	7.715	8.286
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	13	0.023	0.029	0.049	0.005	0.	0.015	0.005	0.019	0.044	0.048
00403	PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	12	7.2	7.358	8.	6.8	0.135	0.368	6.86	7.125	7.675	7.97
00403	CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	12	7.2	7.235	8.	6.8	0.152	0.39	6.86	7.125	7.675	7.97
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	12	0.063	0.058	0.158	0.01	0.002	0.042	0.011	0.021	0.075	0.141
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	12	44.	49.25	78.	40.	168.932	12.997	40.3	41.	50.75	76.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	8.5	11.667	50.	4.	154.061	12.412	4.	5.5	11.5	38.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	12##	1.5	2.333	10.	1.5	6.015	2.453	1.5	1.5	1.5	7.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	7.	9.333	40.	3.	99.879	9.994	3.	4.25	9.75	31.3
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.214	0.191	0.398	0.025	0.01	0.101	0.038	0.1	0.249	0.355
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.005	0.006	0.012	0.002	0.	0.003	0.002	0.004	0.008	0.011
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.24	0.223	0.4	0.04	0.014	0.12	0.043	0.11	0.32	0.397
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	11	0.08	0.083	0.14	0.03	0.001	0.031	0.034	0.06	0.11	0.134
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.06	0.065	0.128	0.028	0.001	0.028	0.032	0.044	0.085	0.116

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Annual Analysis for 1995 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	12	5.05	4.942	7.2	2.8	2.064	1.437	2.92	3.6	6.25	7.05
00900 HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	12	58.	63.5	110.	40.	365.364	19.114	42.1	53.25	65.75	104.
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	12	10.	12.417	33.	6.	76.992	8.775	6.	6.5	11.75	31.5
00945 SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	12	14.5	17.5	43.	12.	76.636	8.754	12.	13.	16.75	37.6
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	12	8.6	7.9	10.7	3.8	5.233	2.288	4.01	5.675	9.775	10.55
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	12	240.	1601.167	16000.	9.	20638880.879	4543.004	12.3	68.75	607.5	11485.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	12	2.379	2.35	4.204	0.954	0.701	0.837	1.058	1.776	2.763	3.836
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		223.795									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	10	0.027	0.114	0.873	0.016	0.071	0.267	0.017	0.022	0.045	0.791
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	9	0.47	0.545	1.062	0.038	0.109	0.33	0.038	0.288	0.81	1.062
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	10	0.064	0.065	0.148	0.018	0.002	0.042	0.018	0.026	0.094	0.144
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	10	0.596	0.543	0.715	0.066	0.036	0.19	0.103	0.478	0.659	0.712
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	10	0.08	0.138	0.605	0.055	0.028	0.166	0.056	0.067	0.115	0.558

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Annual Analysis for 1996 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	48	16.75	15.233	28.1	4.	81.729	9.04	4.36	5.2	24.975	27.52
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	11.65	28.983	213.	4.9	3414.425	58.433	5.05	6.425	17.85	158.7
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	12	0.95	0.983	1.9	0.1	0.249	0.499	0.22	0.7	1.45	1.78
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	47	132.	156.234	275.	110.	1825.227	42.723	116.8	130.	167.	214.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	12	148.5	154.833	261.	107.	1899.424	43.582	108.5	122.	178.25	243.3
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	48	9.75	10.223	13.3	7.	5.334	2.31	7.3	8.	12.775	13.3
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	12##	0.75	0.917	2.	0.5	0.311	0.557	0.5	0.5	1.	2.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	12	11.5	11.458	23.	2.5	32.521	5.703	3.25	8.	14.5	21.8
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.46	7.557	8.44	7.19	0.103	0.321	7.242	7.35	7.73	8.176
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	13	7.46	7.479	8.44	7.19	0.109	0.331	7.242	7.35	7.73	8.176
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	13	0.035	0.033	0.065	0.004	0.	0.016	0.009	0.019	0.045	0.058
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	12	7.45	7.5	8.	7.1	0.091	0.302	7.1	7.225	7.8	7.94
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	12	7.447	7.411	8.	7.1	0.1	0.316	7.1	7.225	7.8	7.94
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	12	0.036	0.039	0.079	0.01	0.001	0.025	0.012	0.016	0.06	0.079
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	12	42.	44.5	65.	33.	86.455	9.298	33.3	38.	52.	61.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	10.	30.417	238.	3.	4331.72	65.816	3.3	6.	23.	174.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	12##	1.5	4.333	22.	1.5	37.152	6.095	1.5	1.5	4.	18.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	12	7.5	26.417	216.	3.	3596.447	59.97	3.3	5.	15.	157.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.045	0.055	0.14	0.013	0.002	0.043	0.014	0.021	0.08	0.137
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.003	0.004	0.013	0.001	0.	0.003	0.001	0.002	0.006	0.011
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	12	0.36	0.32	0.46	0.04	0.015	0.122	0.085	0.24	0.408	0.451
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	12	0.033	0.032	0.048	0.009	0.	0.012	0.012	0.024	0.042	0.048
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	8	3.9	4.05	6.2	2.5	1.369	1.17	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	12	56.	56.25	86.	26.	273.477	16.537	30.5	49.25	59.	85.7
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	12	7.5	7.792	17.	2.5	21.475	4.634	2.5	3.125	10.5	16.1
00945 SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	12	12.	13.833	29.	8.	36.515	6.043	8.3	9.25	17.5	26.3
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	12	7.9	7.6	10.2	2.5	4.058	2.014	3.49	6.825	8.9	9.87
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	12	140.	1271.667	9200.	9.	7211979.152	2685.513	19.8	50.75	1022.5	7490.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	12	2.136	2.344	3.964	0.954	0.741	0.861	1.164	1.698	2.982	3.838
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		220.853									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	12	0.026	0.045	0.254	0.012	0.004	0.066	0.014	0.018	0.041	0.19
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	12	0.624	1.093	5.606	0.08	2.192	1.481	0.134	0.301	1.181	4.35
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	11	0.113	0.157	0.601	0.029	0.026	0.16	0.033	0.066	0.201	0.528
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	12	0.53	0.568	1.084	0.33	0.035	0.188	0.349	0.484	0.623	0.962
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	12	0.043	0.039	0.057	0.017	0.	0.012	0.018	0.029	0.047	0.055

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Annual Analysis for 1997 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	27	14.	15.556	30.9	5.7	82.06	9.059	5.7	6.1	22.	30.3
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	11	6.	7.264	20.	3.	21.677	4.656	3.22	4.4	8.3	17.82
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	10	1.6	1.51	2.6	0.7	0.263	0.513	0.73	1.075	1.7	2.51
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	26	178.5	187.462	307.	127.	2612.098	51.109	127.7	134.	222.75	257.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	11	180.	205.182	284.	132.	2901.564	53.866	133.8	172.	254.	283.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	26	9.9	10.246	13.7	6.6	5.521	2.35	7.17	7.875	12.3	13.7
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	11##	1.	0.818	1.	0.5	0.064	0.252	0.5	0.5	1.	1.
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	11	5.	6.227	13.	2.5	18.068	4.251	2.5	2.5	10.	13.
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.7	7.865	8.61	7.28	0.185	0.43	7.336	7.63	8.31	8.598
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.7	7.716	8.61	7.28	0.21	0.458	7.336	7.63	8.31	8.598
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	11	0.02	0.019	0.052	0.002	0.	0.014	0.003	0.005	0.023	0.047
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	11	7.5	7.536	8.	7.2	0.065	0.254	7.22	7.3	7.7	7.98
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	11	7.5	7.476	8.	7.2	0.069	0.262	7.22	7.3	7.7	7.98
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	11	0.032	0.033	0.063	0.01	0.	0.017	0.011	0.02	0.05	0.061
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	11	56.	53.909	72.	27.	177.291	13.315	28.8	46.	63.	71.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	8.	8.909	17.	3.	18.091	4.253	3.4	5.	12.	16.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11##	1.5	1.636	3.	1.5	0.205	0.452	1.5	1.5	1.5	2.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	6.	7.045	15.	1.5	15.623	3.953	2.	4.	10.	14.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	10	0.033	0.037	0.08	0.002	0.001	0.031	0.002	0.007	0.065	0.079
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.003	0.003	0.004	0.001	0.	0.001	0.001	0.002	0.003	0.004
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.25	0.289	0.51	0.08	0.015	0.123	0.094	0.22	0.37	0.488
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.03	0.031	0.069	0.014	0.	0.015	0.015	0.021	0.039	0.063
00900 HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	11	62.	62.273	76.	38.	101.818	10.09	41.6	58.	70.	75.
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	11	11.	12.818	24.	7.	31.164	5.582	7.	8.	17.	23.
00945 SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	11	19.	19.727	31.	10.	65.818	8.113	10.	13.	29.	31.
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	11	6.	6.127	9.7	3.1	5.01	2.238	3.22	4.1	8.7	9.54
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	11	170.	215.545	700.	20.	38511.473	196.243	29.6	93.	220.	652.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	11	2.23	2.181	2.845	1.301	0.165	0.407	1.407	1.968	2.342	2.809
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		151.611									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	11	0.008	0.008	0.018	0.003	0.	0.005	0.003	0.005	0.01	0.017
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	11	0.43	0.489	1.167	0.16	0.065	0.254	0.194	0.335	0.565	1.047
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	11	0.05	0.057	0.156	0.024	0.001	0.036	0.025	0.03	0.066	0.14
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	11	0.513	0.534	0.894	0.227	0.033	0.181	0.264	0.427	0.654	0.865
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	13	0.052	0.047	0.094	0.018	0.	0.019	0.021	0.034	0.055	0.08

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Annual Analysis for 1998 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	42	19.2	18.274	31.4	5.5	81.095	9.005	5.98	8.8	27.725	28.59
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	11	5.	9.964	33.	2.3	126.727	11.257	2.38	3.7	9.4	32.72
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	10	1.2	1.23	2.7	0.3	0.427	0.653	0.33	0.825	1.475	2.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	42	231.	229.286	377.	101.	8923.429	94.464	106.6	120.75	316.	368.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	11	254.	244.273	523.	92.	16253.018	127.487	96.8	129.	332.	489.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	6	0.2	0.133	0.2	0.	0.011	0.103	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	42	8.75	9.533	13.	6.6	4.553	2.134	6.9	7.475	10.9	12.82
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	11##	1.	1.091	2.	1.	0.091	0.302	1.	1.	1.	1.8
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	11	8.	9.636	19.	5.	23.455	4.843	5.2	7.	10.	19.
00400 PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.86	7.802	8.26	7.28	0.07	0.265	7.322	7.64	7.91	8.218
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	11	7.86	7.724	8.26	7.28	0.077	0.278	7.322	7.64	7.91	8.218
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	11	0.014	0.019	0.052	0.005	0.	0.013	0.006	0.012	0.023	0.048
00403 PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	11	7.1	7.1	7.6	6.6	0.122	0.349	6.62	6.7	7.4	7.58
00403 CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	11	7.1	6.979	7.6	6.6	0.138	0.372	6.62	6.7	7.4	7.58
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	11	0.079	0.105	0.251	0.025	0.006	0.079	0.026	0.04	0.2	0.241
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	11	61.	57.091	80.	31.	236.691	15.385	32.4	44.	70.	78.6

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Annual Analysis for 1998 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	9.	16.682	105.	1.5	878.914	29.646	1.8	4.	11.	87.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	11##	1.5	2.864	15.	1.5	16.405	4.05	1.5	1.5	1.5	12.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	11	7.	13.727	90.	1.5	655.568	25.604	1.5	3.	9.	75.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	9	0.018	0.023	0.051	0.002	0.	0.017	0.002	0.009	0.038	0.051
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.003	0.003	0.005	0.001	0.	0.001	0.001	0.002	0.004	0.005
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	11	0.28	0.328	0.62	0.19	0.017	0.129	0.192	0.22	0.41	0.588
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	11	0.026	0.032	0.082	0.016	0.	0.018	0.016	0.021	0.035	0.074
00900 HARDNESS, TOTAL (MG/L AS CACO3)	02/17/94-12/15/98	11	71.	69.273	134.	34.	812.218	28.499	35.6	44.	83.	124.8
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	11	14.	13.227	30.	2.5	89.818	9.477	2.5	2.5	21.	28.6
00945 SULFATE, TOTAL (MG/L AS SO4)	09/08/94-12/15/98	11	27.	30.091	62.	9.	349.291	18.689	9.2	10.	45.	60.8
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	11	7.1	6.745	9.1	3.8	3.833	1.958	3.8	4.7	8.6	9.02
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	11	93.	806.636	3500.	9.	1853177.855	1361.315	10.8	20.	950.	3500.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	02/17/94-12/15/98	11	1.968	2.183	3.544	0.954	0.816	0.903	1.014	1.301	2.978	3.544
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		152.336									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	03/23/95-12/15/98	11	0.019	0.027	0.11	0.01	0.001	0.028	0.01	0.014	0.023	0.095
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	03/23/95-12/15/98	11	0.454	0.786	3.312	0.192	0.756	0.87	0.206	0.425	0.798	2.848
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	03/23/95-12/15/98	11	0.055	0.082	0.301	0.026	0.006	0.078	0.026	0.035	0.103	0.262
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	03/23/95-12/15/98	11	0.58	0.522	0.707	0.32	0.019	0.138	0.328	0.36	0.628	0.696
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	03/23/95-12/15/98	11	0.036	0.041	0.1	0.018	0.	0.022	0.019	0.03	0.043	0.091

** - Less 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 10/14 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	194	27.25	26.364	31.9	15.9	14.162	3.763	20.6	24.075	29.2	30.6
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	18	5.	6.033	17.6	0.5	16.664	4.082	1.85	3.45	7.775	13.73
00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	50	1.3	1.231	2.9	0.185	0.381	0.617	0.236	0.775	1.6	1.99
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	161	265.	260.304	408.	103.	4283.788	65.451	147.	221.	306.	345.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	21	254.	254.905	377.	150.	3505.79	59.21	160.6	207.	302.5	329.8
00096	SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	142	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	154	7.3	7.466	9.6	5.1	0.773	0.879	6.5	6.8	8.	8.8
00300	OXYGEN, DISSOLVED MG/L	07/22/68-09/27/83	40	6.9	6.293	9.2	1.	3.801	1.95	2.82	5.7	7.55	7.8
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	31	1.	3.952	74.	0.5	171.131	13.082	0.5	1.	2.	4.02
00340	COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	20	11.	10.6	25.	2.5	20.963	4.579	2.95	8.25	12.	13.9
00400p	PH (STANDARD UNITS)	07/22/68-12/15/98	84	7.6	7.664	8.61	6.7	0.156	0.395	7.2	7.5	7.883	8.28
00400p	CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	84	7.6	7.499	8.61	6.7	0.184	0.428	7.2	7.5	7.882	8.28
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	84	0.025	0.032	0.2	0.002	0.001	0.032	0.005	0.013	0.032	0.063
00403p	PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	15	7.6	7.513	8.	6.8	0.147	0.383	6.92	7.1	7.9	8.
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	15	7.6	7.351	8.	6.8	0.175	0.418	6.92	7.1	7.9	8.
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	15	0.025	0.045	0.158	0.01	0.002	0.042	0.01	0.013	0.079	0.123
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	18	62.	59.789	79.	0.2	309.132	17.582	42.32	52.5	71.5	78.1
00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	10	140.5	169.3	368.	89.	6559.567	80.991	92.2	121.75	206.5	354.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	10	30.	34.1	53.	16.	183.878	13.56	16.4	23.	49.75	52.9
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	10	106.5	135.2	352.	69.	6881.289	82.954	71.	89.75	155.25	335.4
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	72	7.	11.729	81.	0.5	207.105	14.391	2.5	4.	11.75	31.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	72	2.	3.826	32.	0.	26.135	5.112	1.	1.5	4.	9.7
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	68	5.	8.434	72.	0.5	132.134	11.495	1.5	3.	8.	21.
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	43	0.242	0.256	0.94	0.007	0.04	0.2	0.016	0.092	0.37	0.53
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	35	0.2	0.301	1.099	0.03	0.06	0.246	0.096	0.1	0.4	0.72
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	46	0.01	0.032	0.15	0.001	0.002	0.043	0.003	0.005	0.053	0.11
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	36	0.01	0.016	0.06	0.	0.	0.015	0.004	0.005	0.02	0.05
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	46	0.2	0.22	0.51	0.05	0.012	0.108	0.094	0.15	0.28	0.41
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	34	0.365	0.506	1.549	0.005	0.137	0.37	0.085	0.3	0.692	1.045
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	66	0.6	0.696	2.	0.1	0.153	0.391	0.3	0.4	0.818	1.3
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-12/15/98	12	0.3	0.383	1.	0.2	0.049	0.221	0.2	0.225	0.475	0.85
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	38	0.12	0.169	0.5	0.05	0.014	0.118	0.069	0.1	0.2	0.364
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	36	0.08	0.108	0.41	0.02	0.009	0.093	0.04	0.06	0.1	0.277
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	53	0.06	0.1	0.4	0.01	0.009	0.096	0.025	0.04	0.124	0.276
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	54	4.2	5.867	57.1	2.2	54.017	7.35	3.25	3.575	5.8	8.95
00940p	CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	31	13.	14.645	37.	4.	68.703	8.289	5.	8.	20.	27.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	40	7.15	6.98	10.2	3.8	2.763	1.662	4.6	5.8	8.3	9.29
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	35	500.	1774.	8000.	50.	6345407.059	2519.009	50.	50.	2600.	6800.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	35	2.699	2.693	3.903	1.699	0.628	0.792	1.699	1.699	3.415	3.828
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	493.569								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	28	0.1	0.139	0.35	0.05	0.007	0.085	0.05	0.063	0.2	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	28	0.095	0.118	0.35	0.01	0.008	0.087	0.038	0.05	0.145	0.264

** - Less 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: 10/15 to 3/15 - Station RICH0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	184	7.85	9.265	19.5	2.6	20.231	4.498	4.7	5.7	13.9	15.95
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	26	9.65	20.192	213.	2.3	1643.528	40.54	3.42	5.375	17.075	33.5
00078	TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	48	1.	1.217	3.	0.1	0.582	0.763	0.38	0.6	1.85	2.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	180	170.	199.994	397.	12.	6431.693	80.198	120.	133.	275.75	306.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	32	161.	187.594	523.	107.	7427.475	86.183	109.8	133.	235.75	281.
00096	SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	154	0.	0.005	0.2	0.	0.001	0.032	0.	0.	0.	0.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	176	12.	11.573	14.3	8.3	2.479	1.574	9.3	10.425	12.9	13.46
00300	OXYGEN, DISSOLVED MG/L	07/22/68-09/27/83	8	10.55	10.238	12.8	6.	4.454	2.11	**	**	**	**
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	29	1.	1.224	2.4	0.5	0.352	0.593	0.5	1.	2.	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: 10/15 to 3/15 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	27	10.	11.63	27.	2.5	51.742	7.193	2.5	6.	16.	23.6
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	58	7.43	7.485	8.42	7.	0.092	0.303	7.127	7.28	7.655	7.883
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	58	7.43	7.399	8.42	7.	0.099	0.315	7.127	7.28	7.655	7.883
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	58	0.037	0.04	0.1	0.004	0.001	0.023	0.013	0.022	0.052	0.075
00403p PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	22	7.25	7.255	7.6	6.8	0.04	0.199	6.93	7.175	7.4	7.5
00403p CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	22	7.247	7.208	7.6	6.8	0.042	0.205	6.93	7.175	7.4	7.5
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	22	0.057	0.062	0.158	0.025	0.001	0.032	0.032	0.04	0.067	0.118
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	22	45.	49.955	80.	33.	192.331	13.868	33.9	39.5	61.25	71.4
00500 RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	7	123.	132.429	211.	95.	1437.952	37.92	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	7	34.	34.714	48.	26.	54.905	7.41	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	7	94.	97.714	173.	47.	1595.238	39.94	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	57	8.	23.509	261.	0.5	2520.54	50.205	1.9	4.	18.	41.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	57	1.5	3.842	30.	0.	30.35	5.509	1.	1.5	4.	8.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	57	6.	19.851	231.	0.	2031.214	45.069	0.9	2.5	15.	37.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	49	0.09	0.178	0.83	0.005	0.04	0.199	0.025	0.048	0.237	0.46
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	9	0.1	0.18	0.4	0.05	0.019	0.137	0.05	0.06	0.325	0.4
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	49	0.005	0.01	0.08	0.001	0.	0.015	0.002	0.004	0.01	0.02
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	9	0.01	0.012	0.03	0.005	0.	0.008	0.005	0.005	0.015	0.03
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	49	0.33	0.301	0.62	0.02	0.014	0.119	0.13	0.205	0.385	0.42
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	9	0.44	0.429	0.84	0.08	0.063	0.251	0.08	0.22	0.65	0.84
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	35	0.5	0.546	1.1	0.1	0.069	0.263	0.2	0.4	0.7	0.94
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-12/15/98	12	0.4	0.383	0.6	0.2	0.012	0.111	0.2	0.325	0.4	0.57
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	32	0.13	0.173	0.55	0.03	0.016	0.126	0.05	0.07	0.23	0.387
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	36	0.05	0.106	0.6	0.02	0.019	0.138	0.03	0.04	0.108	0.305
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	53	0.04	0.079	0.51	0.01	0.009	0.096	0.02	0.03	0.076	0.23
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	45	3.9	4.396	10.	1.2	3.554	1.885	2.36	3.1	5.1	7.4
00940p CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	25	10.	11.86	30.	2.5	46.99	6.855	5.6	7.	16.5	22.8
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	42	7.4	7.219	10.7	3.2	3.497	1.87	4.19	5.95	8.825	9.34
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	10	250.	1210.	7700.	0.	5538222.222	2353.343	5.	50.	1450.	7090.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	10	2.301	1.704	3.886	-6.046	7.937	2.817	-5.271	1.699	3.161	3.818
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	50.537								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	5	0.1	0.1	0.2	0.05	0.004	0.061	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	5	0.04	0.094	0.2	0.03	0.006	0.08	**	**	**	**

** - Less 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: 3/16 to 6/30 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-12/15/98	198	19.4	18.998	30.2	7.1	38.879	6.235	10.5	13.675	24.5	26.9
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	26	6.75	8.158	33.	0.6	42.401	6.512	2.83	4.25	9.45	16.2
00078 TRANSPARENCY, SECCHI DISC (METERS)	11/18/82-12/15/98	47	1.3	1.294	2.2	0.3	0.194	0.441	0.7	0.9	1.6	1.9
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-12/15/98	175	151.	154.469	226.	17.	979.906	31.303	120.	134.	171.	203.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/20/88-12/15/98	35	141.	147.2	252.	92.	1061.341	32.578	108.8	129.	162.	191.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	06/29/88-11/18/98	154	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/29/88-12/15/98	170	8.9	9.209	13.	6.3	2.611	1.616	7.2	7.8	10.6	11.2
00300 OXYGEN, DISSOLVED MG/L	07/22/68-09/27/83	29	8.	7.628	10.4	1.3	3.752	1.937	4.7	7.15	8.9	9.6
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-12/15/98	38	1.	1.724	8.6	0.5	2.58	1.606	0.5	1.	2.	3.63
00340 COD, .25N K2CR2O7 MG/L	05/19/80-12/15/98	25	8.	8.72	19.	2.5	18.523	4.304	3.4	6.	12.	14.8
00400p PH (STANDARD UNITS)	07/22/68-12/15/98	79	7.46	7.581	9.09	6.7	0.232	0.482	7.1	7.3	7.78	8.44
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-12/15/98	79	7.46	7.398	9.09	6.7	0.266	0.516	7.1	7.3	7.78	8.44
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-12/15/98	79	0.035	0.04	0.2	0.001	0.001	0.034	0.004	0.017	0.05	0.079
00403p PH, LAB, STANDARD UNITS SU	03/20/69-12/15/98	27	7.4	7.278	8.	6.	0.186	0.432	6.68	7.1	7.6	7.8
00403p CONVERTED PH, LAB, STANDARD UNITS	03/20/69-12/15/98	27	7.4	6.998	8.	6.	0.268	0.517	6.68	7.1	7.6	7.8
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/69-12/15/98	27	0.04	0.1	1.	0.01	0.036	0.19	0.016	0.025	0.079	0.21
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	03/20/69-12/15/98	27	43.	42.333	62.	8.	121.615	11.028	29.4	38.	51.	56.2
00500 RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	19	114.	113.368	168.	57.	662.023	25.73	86.	95.	132.	155.

** - Less 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

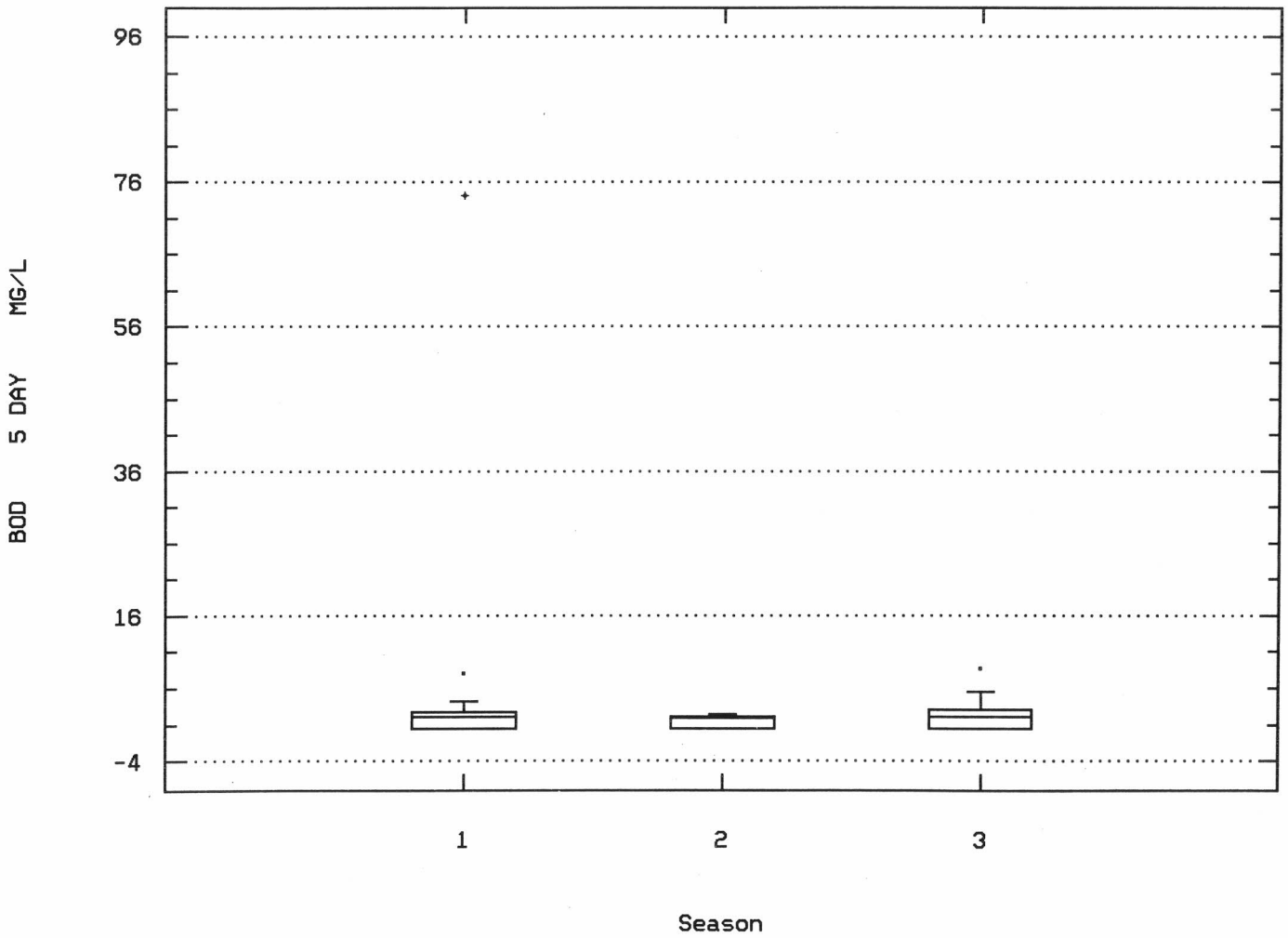
Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	19	38.	41.579	88.	11.	416.924	20.419	14.	29.	57.	79.
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	19	78.	71.789	121.	32.	494.62	22.24	38.	57.	89.	96.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-12/15/98	73	9.	13.26	105.	0.5	278.23	16.68	4.	5.5	14.5	23.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-12/15/98	73	2.	3.288	16.	0.	11.236	3.352	1.	1.5	4.	8.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-12/15/98	73	6.	9.952	90.	0.	205.494	14.335	1.7	4.	11.	17.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	48	0.083	0.109	0.398	0.002	0.008	0.091	0.013	0.04	0.158	0.25
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/27/83	27	0.18	0.204	0.8	0.05	0.029	0.171	0.05	0.1	0.3	0.436
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	49	0.005	0.006	0.04	0.001	0.	0.006	0.002	0.003	0.007	0.01
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	27##	0.005	0.01	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/29/88-12/15/98	49	0.27	0.23	0.44	0.002	0.014	0.12	0.04	0.11	0.325	0.36
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/27/83	27	0.33	0.293	0.68	0.01	0.042	0.204	0.045	0.09	0.45	0.58
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-12/02/93	56	0.4	0.409	1.699	0.1	0.06	0.244	0.2	0.3	0.4	0.7
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-12/15/98	12	0.25	0.244	0.4	0.04	0.012	0.11	0.055	0.2	0.3	0.4
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/19/80-12/14/95	34	0.07	0.089	0.22	0.04	0.002	0.049	0.05	0.05	0.1	0.2
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	06/29/88-01/29/96	33	0.04	0.05	0.15	0.01	0.001	0.028	0.024	0.03	0.06	0.08
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/19/80-12/15/98	54	0.031	0.041	0.16	0.002	0.001	0.031	0.011	0.021	0.048	0.08
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/01/75-08/20/96	54	3.5	3.767	10.8	1.4	2.94	1.715	2.05	2.575	4.925	6.
00940p CHLORIDE,TOTAL IN WATER MG/L	07/08/72-12/15/98	31	7.	7.242	20.	2.5	14.915	3.862	2.5	4.	9.	11.
00955 SILICA, DISSOLVED (MG/L AS SI02)	02/13/90-12/15/98	46	7.5	6.502	10.2	2.3	4.255	2.063	2.78	5.275	7.825	8.63
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	23	300.	4426.087	80000.	50.	276393152.174	16625.076	50.	50.	700.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-12/02/93	23	2.477	2.506	4.903	1.699	0.684	0.827	1.699	1.699	2.845	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	320.657								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	22##	0.05	0.079	0.2	0.05	0.003	0.051	0.05	0.05	0.1	0.194
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	22	0.05	0.065	0.14	0.03	0.001	0.032	0.03	0.05	0.085	0.128

** - 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

Station: RICH0069 Parameter Code: 00310

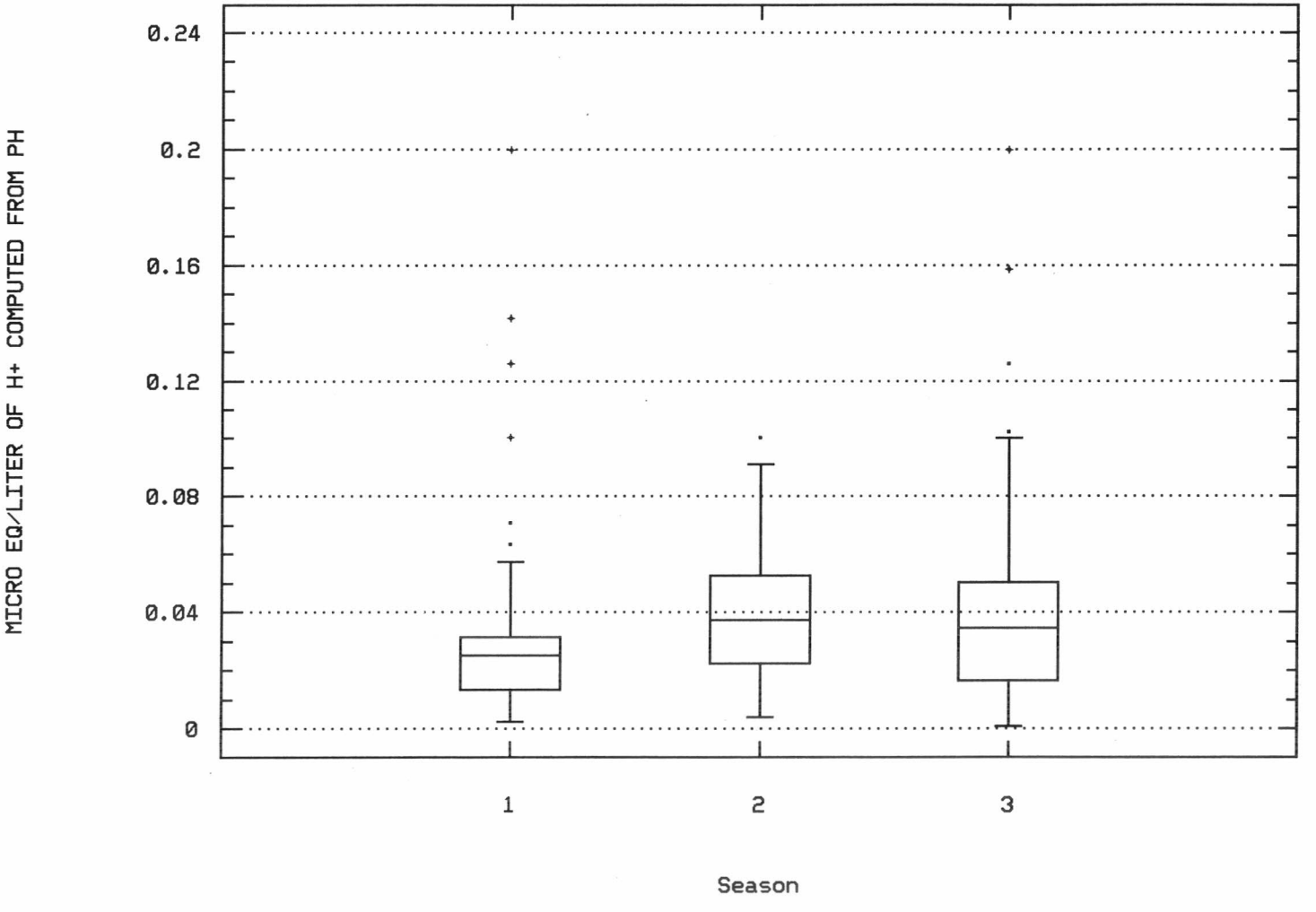
BOD, 5 DAY, 20 DEG C



BUOY 166

Station: RICH0069 Parameter Code: 00400

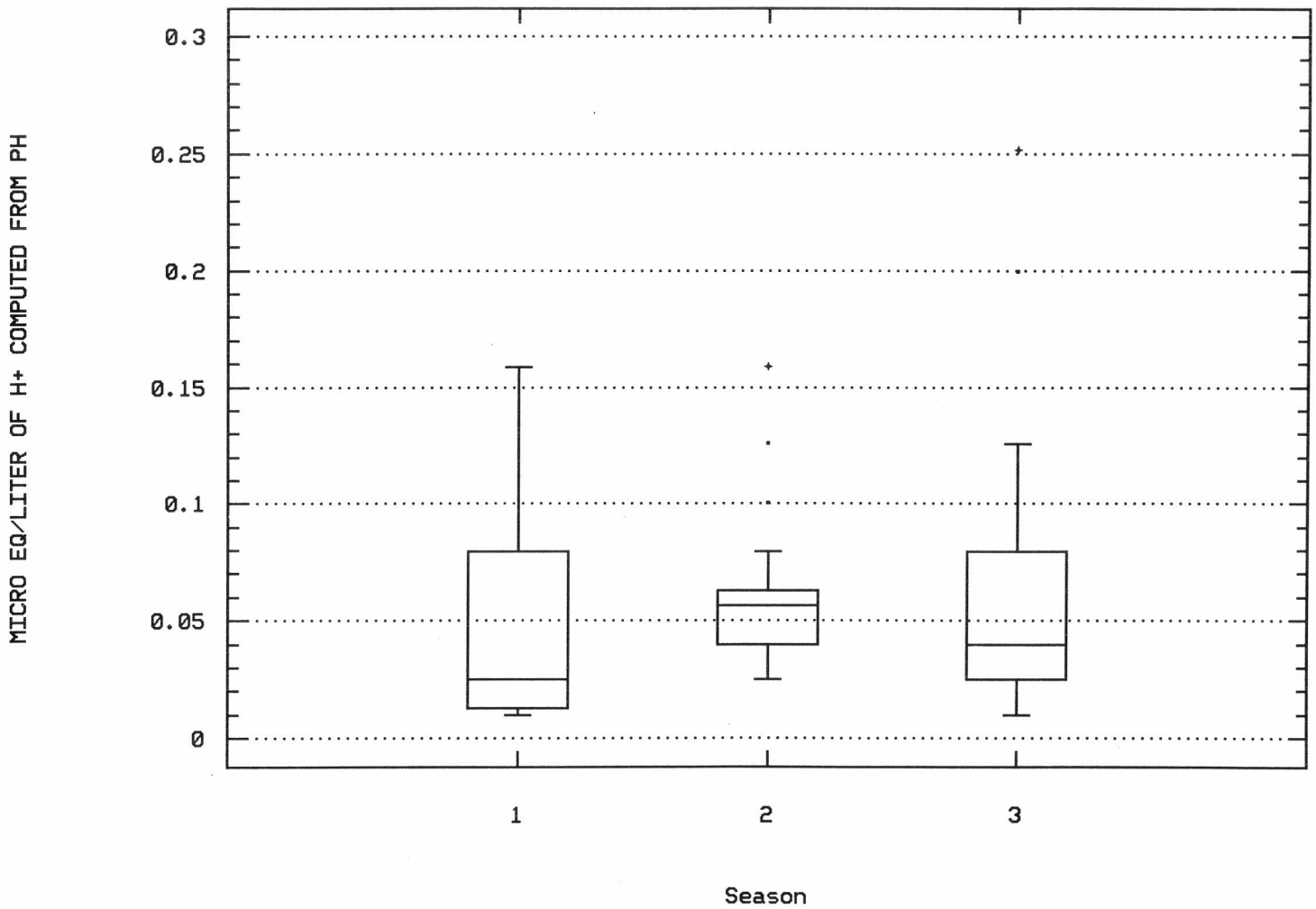
MICRO EQ/LITER OF H+ COMPUTED FROM PH



BUOY 166

Station: RICH0069 Parameter Code: 00403

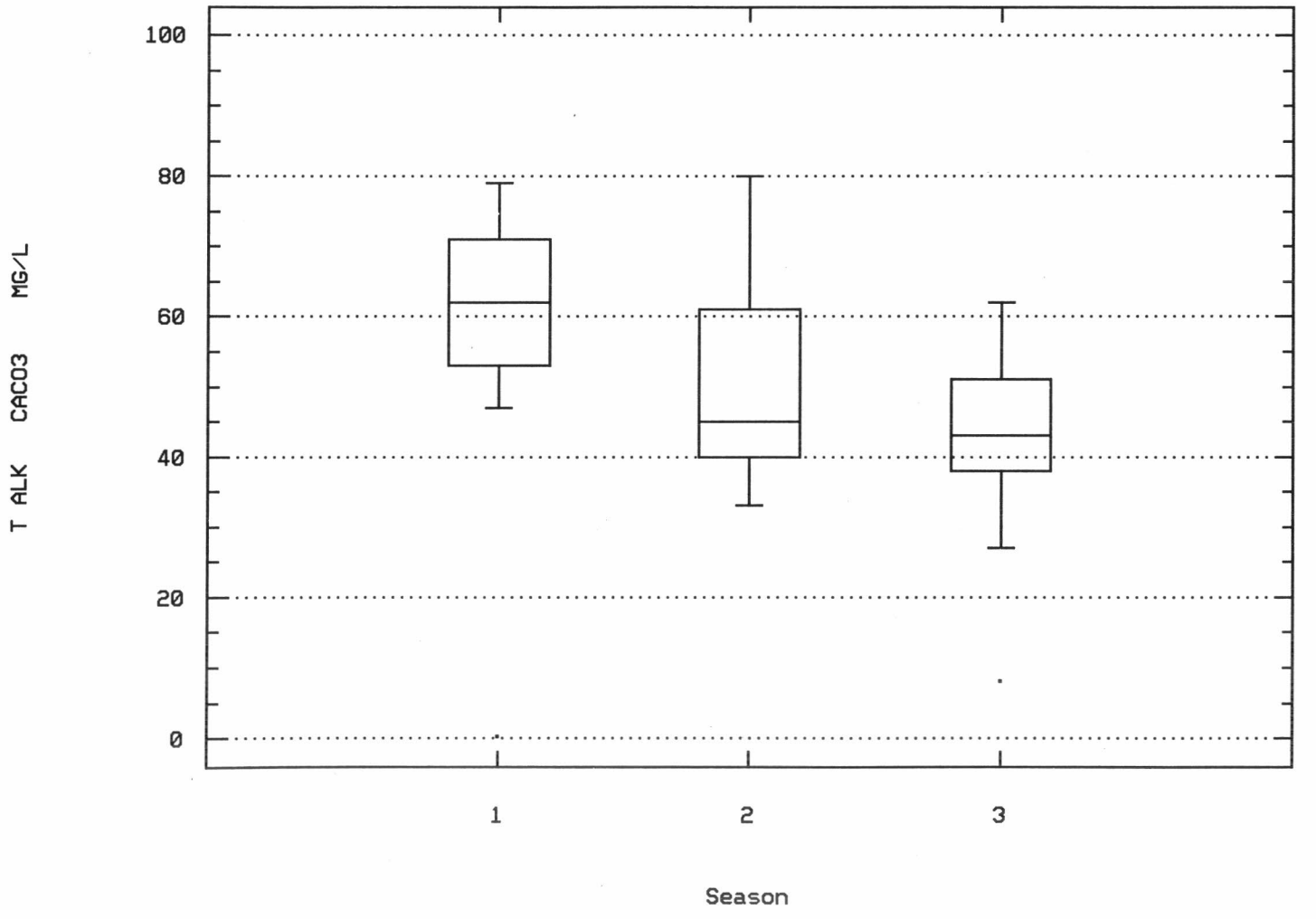
MICRO EQ/LITER OF H+ COMPUTED FROM PH



BUOY 166

Station: RICH0069 Parameter Code: 00410

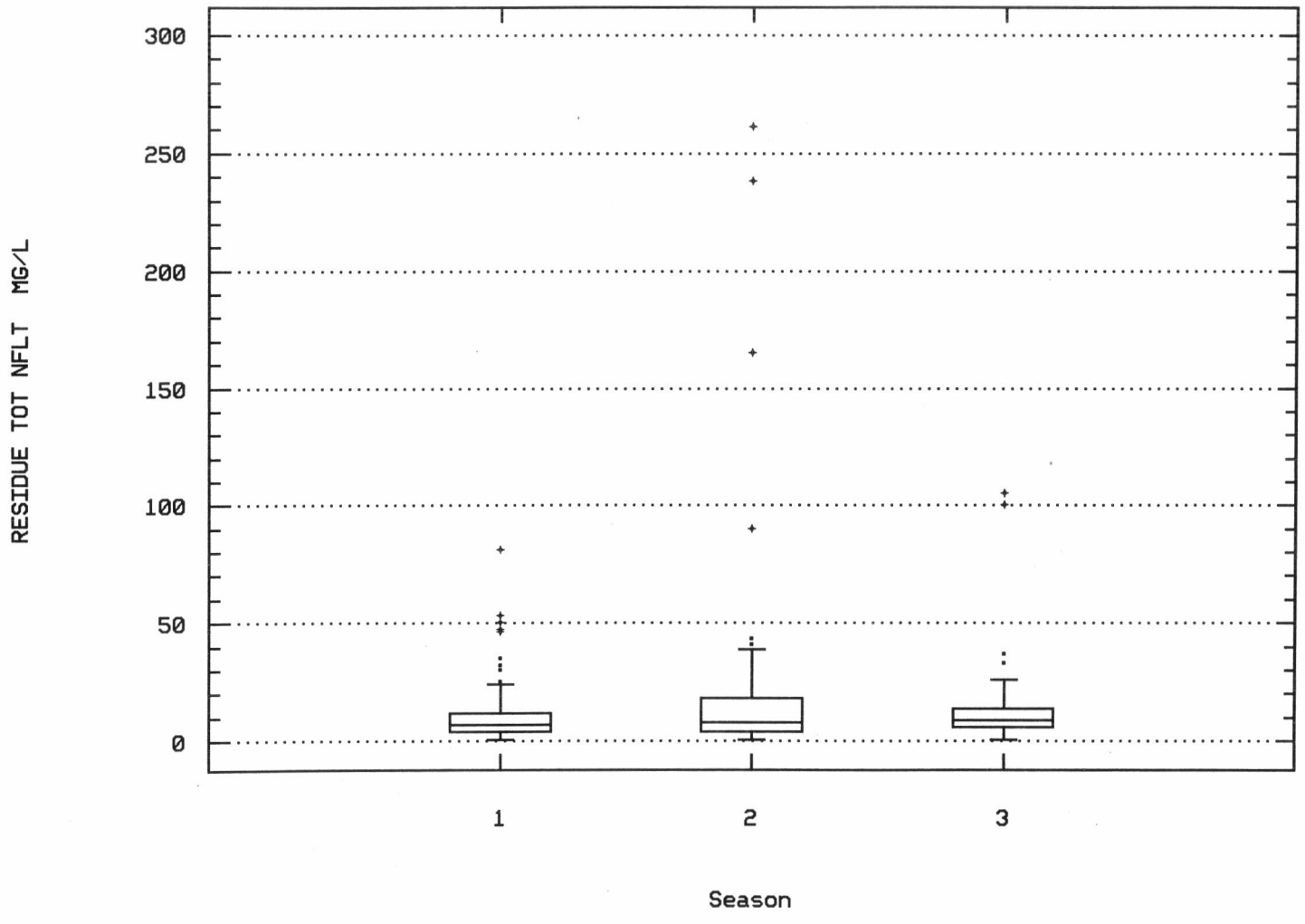
ALKALINITY, TOTAL (MG/L AS CACO3)



BUOY 166

Station: RICH0069 Parameter Code: 00530

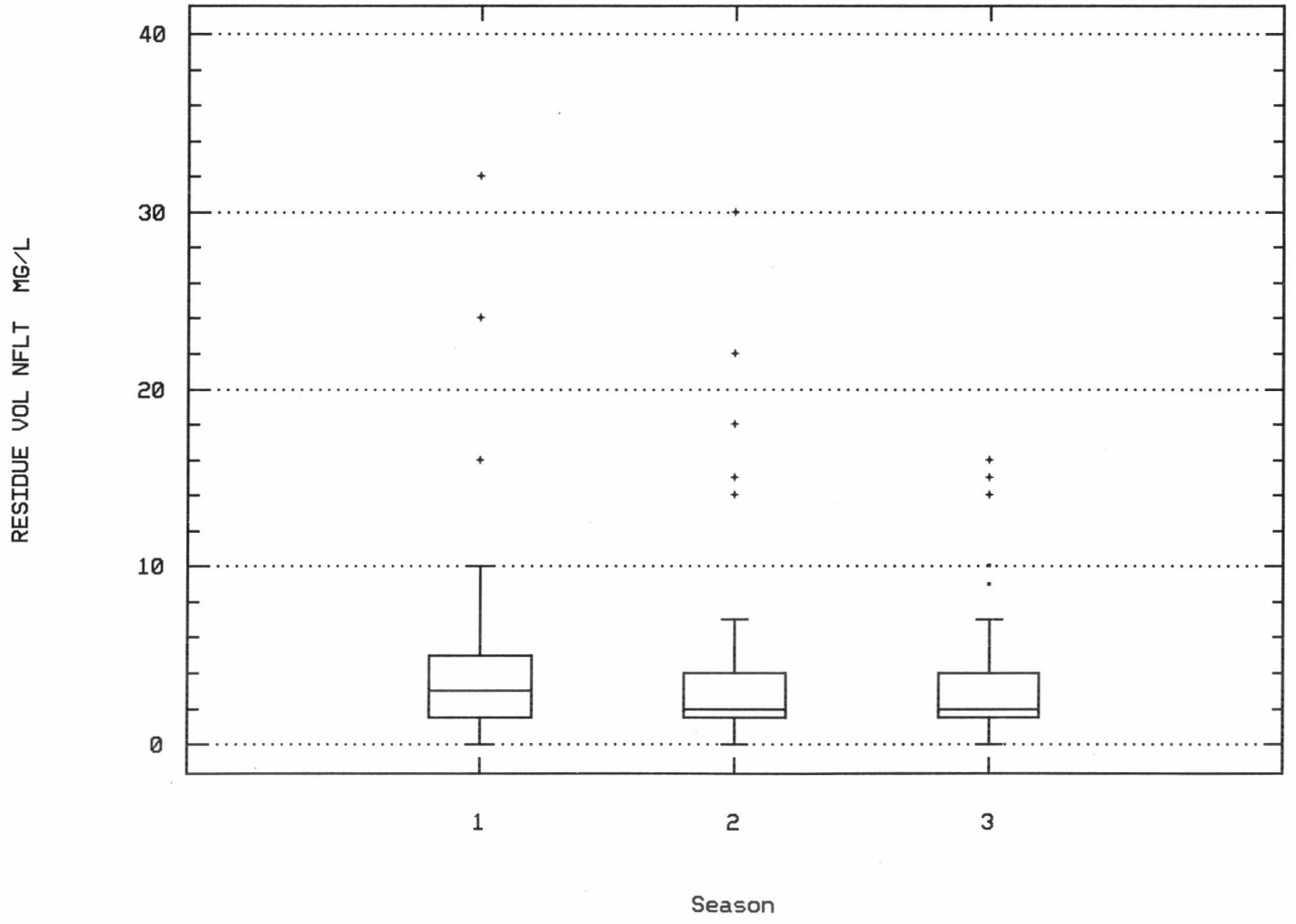
RESIDUE, TOTAL NONFILTRABLE (MG/L)



BUOY 166

Station: RICH0069 Parameter Code: 00535

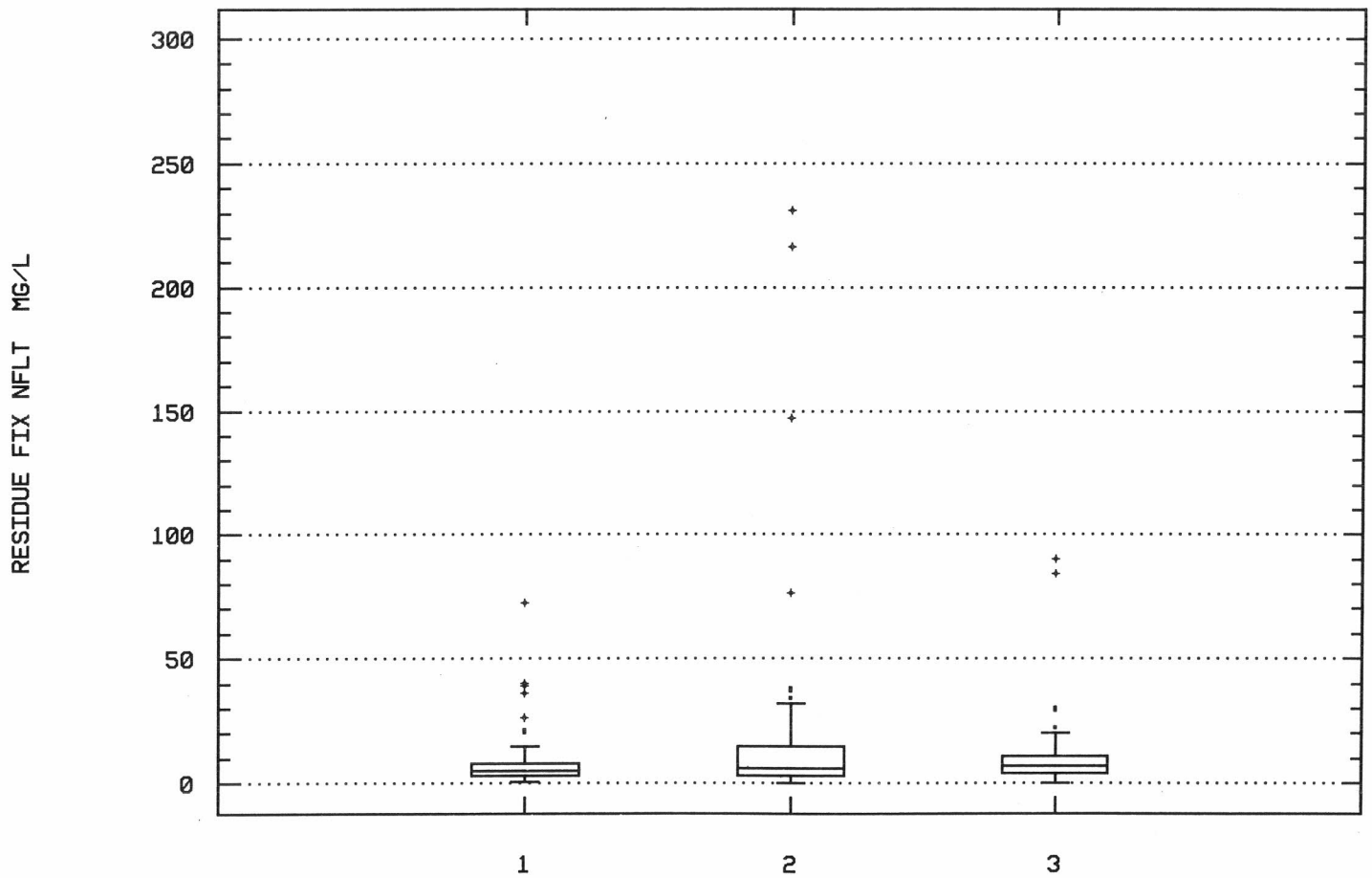
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



BUOY 166

Station: RICH0069 Parameter Code: 00540

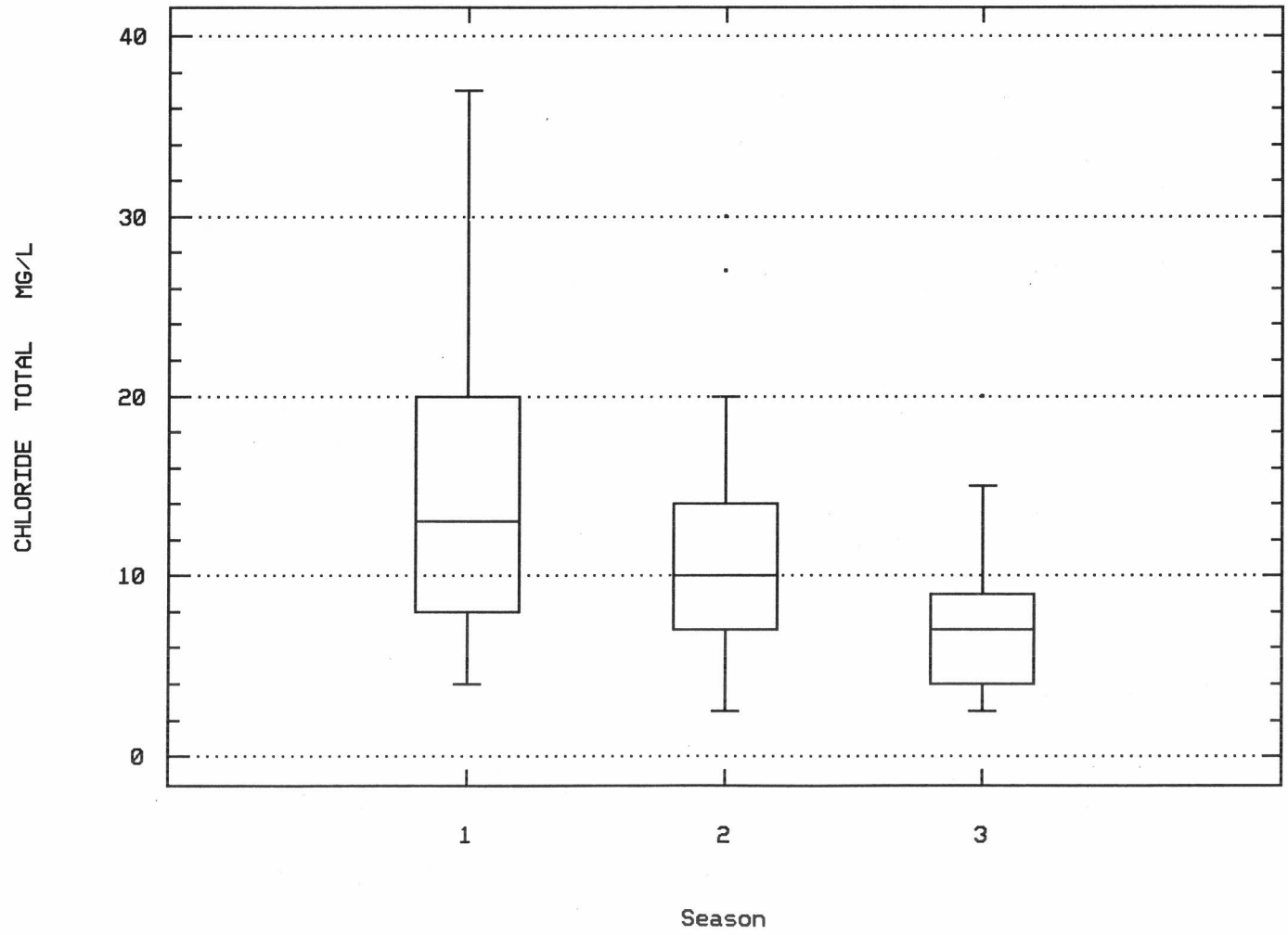
RESIDUE, FIXED NONFILTRABLE (MG/L)



BUOY 166

Station: RICH0069 Parameter Code: 00940

CHLORIDE,TOTAL IN WATER



BUOY 166

Station Inventory for Station: RICH0070

NPS Station ID: RICH0070 LAT/LON: 37.450004/ -77.420837 Agency: 1113JAWQ Date Created: / /
Location: BELOW DEEPWATER TERM R"166" J04 FIPS State/County: 51000 VIRGINIA/
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): JAMES J04 /J04 /J4
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 1 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 0.990 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206004603.50 RF3 Mile Point: 4.19 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0070

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/04/71	20	25.	22.11	27.2	7.2	27.702	5.263	13.64	19.125	25.6	26.64
00077 TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	4	23.5	24.75	36.	16.	76.917	8.77	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/04/71	20	7.4	7.685	12.5	3.4	4.57	2.138	4.4	6.625	8.8	11.62
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-11/04/71	11	1.8	2.091	3.7	0.8	1.015	1.007	0.88	1.2	3.2	3.66
00400 PH (STANDARD UNITS)	07/22/68-11/02/71	18	8.45	8.367	9.3	6.5	0.545	0.738	6.68	8.2	8.925	9.03
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-11/02/71	18	8.447	7.497	9.3	6.5	1.345	1.16	6.68	8.2	8.925	9.03
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-11/02/71	18	0.004	0.032	0.316	0.001	0.007	0.085	0.001	0.001	0.006	0.211
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-11/04/71	13	0.6	0.796	2.	0.03	0.465	0.682	0.033	0.18	1.35	1.92
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-11/04/71	14	0.76	1.031	2.5	0.3	0.543	0.737	0.305	0.49	1.7	2.35
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/21/70-11/04/71	15	0.15	0.261	1.1	0.01	0.087	0.295	0.016	0.06	0.45	0.8
00650 PHOSPHATE, TOTAL (MG/L AS PO4)	04/21/70-11/04/71	14	0.125	0.188	0.67	0.05	0.028	0.166	0.05	0.1	0.228	0.52
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	04/21/70-11/04/71	15	0.05	0.089	0.35	0.01	0.008	0.089	0.016	0.03	0.13	0.248
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	4	5.15	6.55	12.5	3.4	17.15	4.141	**	**	**	**
00690 CARBON, TOTAL (MG/L AS C)	10/21/71-11/04/71	4	12.15	13.625	19.4	10.8	15.962	3.995	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	05/05/70-05/05/70	1	7905.	7905.	7905.	7905.	0.	0.	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-11/04/71	23	430.	27682.304	240000.	0.	4652896789.585	68212.145	30.	30.	24000.	157920.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-11/04/71	23	2.633	2.76	5.38	0.	2.271	1.507	1.477	1.477	4.38	5.045
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	575.824								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/71-11/04/71	8	3115.	33966.25	240000.	100.	6965750483.929	83461.072	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/71-11/04/71	8	3.321	3.27	5.38	2.	1.567	1.252	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1862.792								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-10/19/71	1	240000.	240000.	240000.	240000.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-10/19/71	1	5.38	5.38	5.38	5.38	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	240000.								
32210 CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	3	9.	7.267	9.8	3.	13.813	3.717	**	**	**	**

** - Less 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: RICH0070

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	20	1	0.05	10	1	0.10	4	0	0.00	6	0	0.00			
00400 PH	Fresh Chronic	9.	18	4	0.22	10	4	0.40	2	0	0.00	6	0	0.00			
	Other-Lo Lim.	6.5	18	1	0.06	10	0	0.00	2	1	0.50	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: RICH0070

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	15	0	0.00	7	0	0.00	4	0	0.00	4	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	1	1.00							1	1	1.00			
	Drinking Water	250.	1	1	1.00							1	1	1.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	23	8	0.35	10	1	0.10	7	7	1.00	6	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	8	5	0.63	3	1	0.33	4	4	1.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	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: RICH0071

NPS Station ID: RICH0071 LAT/LON: 37.452504/ -77.417226 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION A55 -JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL2546
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 1.340 Distance from RF1: 20.20 On/Off RF1: ON
RF3 Index: 02080205013100.00 RF3 Mile Point: 0.00 Distance from RF3: 0.31 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0071

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0072

NPS Station ID: RICH0072 LAT/LON: 37.452504/ -77.417226 Agency: CHESBAY Date Created: 01/29/83
Location: VIMS STATION J89 - JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XOL1050
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 1.340 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206004512.50 RF3 Mile Point: 14.72 Distance from RF3: 0.05 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0072

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0073

NPS Station ID: RICH0073 LAT/LON: 37.452504/ -77.417226 Agency: CHESBAY Date Created: 06/11/83
Location: VIMS STATION A55-JAMES RIVER FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL2546
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 1.340 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206138300.00 RF3 Mile Point: 0.24 Distance from RF3: 0.00 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0073

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/71-08/11/71	121	27.2	26.521	29.4	21.9	3.346	1.829	22.9	26.3	27.7	28.1
00077 TRANSPARENCY, SECCHI DISC (INCHES)		08/20/64-08/20/64	2	24.	24.	24.	24.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/71-08/11/71	132	6.85	6.867	9.	4.9	0.514	0.717	5.9	6.4	7.4	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 time series plot

EPA Water Quality Criteria Analysis for Station: RICH0073

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	132	0	0.00	105	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

Station Inventory for Station: RICH0074

NPS Station ID: RICH0074 LAT/LON: 37.454726/ -77.331670 Agency: 21VASWCB Date Created: 05/06/95
Location: FOURMILE CREEK, DORAN RD
FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-FOM005.49
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE RUN SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0074

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-06/04/97	3	13.6	13.2	14.1	11.9	1.33	1.153	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-06/04/97	3	60.	60.333	63.	58.	6.333	2.517	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/07/94-06/04/97	3	9.5	9.833	10.7	9.3	0.573	0.757	**	**	**	**
00400 PH (STANDARD UNITS)	12/07/94-06/04/97	3	5.54	5.583	5.72	5.49	0.015	0.121	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	12/07/94-06/04/97	3	5.54	5.573	5.72	5.49	0.015	0.122	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/07/94-06/04/97	3	2.884	2.675	3.236	1.905	0.475	0.689	**	**	**	**

** - Less 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: RICH0074

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00				1	1	1.00	2	2	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: RICH0075

NPS Station ID: RICH0075 LAT/LON: 37.455003/ -77.333059 Agency: 21VASWCB Date Created: 05/06/95
Location: UNNAMED TRIB TO FOURMILE CR. BELOW DOREY PARK FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-XPZ000.02
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: UNNAMED TRIB TO FOUR MILE CR. SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCHGAP, VA

Parameter Inventory for Station: RICH0075

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/07/94-12/07/94	1	13.8	13.8	13.8	13.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/07/94-12/07/94	1	58.	58.	58.	58.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-12/07/94	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		12/07/94-12/07/94	1	5.59	5.59	5.59	5.59	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		12/07/94-12/07/94	1	5.59	5.59	5.59	5.59	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/07/94-12/07/94	1	2.57	2.57	2.57	2.57	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

EPA Water Quality Criteria Analysis for Station: RICH0075

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0076

NPS Station ID: RICH0076 LAT/LON: 37.455281/ -77.332781 Agency: 21VASWCB Date Created: 05/06/95
Location: ABOVE UT CONFLUENCE, 160M ABOVE DORAN RD. FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM005.61
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0076

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/07/94-12/07/94	1	13.2	13.2	13.2	13.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/07/94-12/07/94	1	76.	76.	76.	76.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-12/07/94	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		12/07/94-12/07/94	1	5.06	5.06	5.06	5.06	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		12/07/94-12/07/94	1	5.06	5.06	5.06	5.06	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/07/94-12/07/94	1	8.71	8.71	8.71	8.71	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: RICH0076

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	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						

& - 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: RICH0077

NPS Station ID: RICH0077 LAT/LON: 37.456116/ -77.419448 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, OFF DEEPWATER TERMINAL
FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-JMS104.58
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0077

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	51	24.6	23.947	31.5	14.9	20.801	4.561	16.1	20.9	28.1	28.88
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	11	3.8	4.209	8.	2.3	3.691	1.921	2.34	2.6	5.6	7.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	47	214.	221.128	400.	108.	4351.722	65.968	136.	171.	286.	299.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	11	214.	198.727	270.	122.	2630.618	51.29	122.2	139.	238.	266.6
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	50	8.05	8.248	10.1	6.7	0.799	0.894	7.2	7.575	8.825	9.69
00310 BOD, 5 DAY, 20 DEG C MG/L	06/28/94-06/01/95	12	1.15	1.042	1.9	0.5	0.275	0.525	0.5	0.5	1.475	1.84
00400 PH (STANDARD UNITS)	06/28/94-10/26/98	51	7.75	7.774	8.63	6.8	0.142	0.377	7.262	7.55	8.01	8.302
00400 CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	51	7.75	7.611	8.63	6.8	0.17	0.412	7.262	7.55	8.01	8.302
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	51	0.018	0.025	0.158	0.002	0.001	0.026	0.005	0.01	0.028	0.055
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	10	7.45	7.32	7.8	6.7	0.151	0.388	6.72	6.9	7.625	7.79
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	10	7.447	7.162	7.8	6.7	0.178	0.422	6.72	6.9	7.625	7.79
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	10	0.036	0.069	0.2	0.016	0.004	0.062	0.016	0.024	0.126	0.192
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	10	55.	51.9	71.	23.	218.989	14.798	23.9	42.5	63.5	70.4
00500 RESIDUE, TOTAL (MG/L)	07/28/94-05/18/95	9	139.	135.222	169.	76.	921.194	30.351	76.	116.5	158.	169.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-05/18/95	9	36.	31.667	51.	9.	154.5	12.43	9.	23.5	40.	51.
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-05/18/95	9	101.	103.556	152.	54.	939.528	30.652	54.	79.	129.	152.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	4.	5.864	12.	1.5	11.505	3.392	1.8	4.	8.	11.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	11##	1.5	1.591	2.	1.	0.091	0.302	1.1	1.5	2.	2.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	3.	4.545	10.	1.5	9.023	3.004	1.5	2.	7.	9.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/94-06/01/95	12	0.195	0.214	0.34	0.09	0.007	0.083	0.102	0.145	0.298	0.334
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11##	0.005	0.013	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.17	0.178	0.34	0.02	0.01	0.102	0.024	0.09	0.23	0.336
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	11	0.4	0.445	0.6	0.3	0.013	0.113	0.3	0.4	0.6	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	11	0.08	0.086	0.14	0.05	0.001	0.028	0.052	0.06	0.1	0.138
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	10	15.	13.8	21.	6.	35.511	5.959	6.	6.	20.	20.9
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	10	22.	21.3	34.	11.	71.789	8.473	11.	11.75	29.25	33.6
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	790.	3103.509	16000.	20.	28133430.101	5304.096	45.	170.	2300.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	2.898	2.859	4.204	1.301	0.668	0.818	1.653	2.23	3.361	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	722.777								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	11	0.06	0.066	0.1	0.04	0.	0.022	0.04	0.05	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

EPA Water Quality Criteria Analysis for Station: RICH0077

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400 PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	53	39	0.74	32	22	0.69	5	3	0.60	16	14	0.88			

& - 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 1994 - Station RICH0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	9	25.8	24.867	30.6	17.8	20.373	4.514	17.8	20.25	28.15	30.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	9	8.1	8.111	9.7	6.7	0.919	0.958	6.7	7.35	8.85	9.7
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.73	7.836	8.34	7.59	0.077	0.277	7.59	7.605	8.1	8.34
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.73	7.771	8.34	7.59	0.081	0.285	7.59	7.605	8.1	8.34
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	9	0.019	0.017	0.026	0.005	0.	0.008	0.005	0.008	0.025	0.026
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	1700.	4471.111	16000.	220.	43201736.111	6572.803	220.	560.	9200.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	3.23	3.228	4.204	2.342	0.42	0.648	2.342	2.708	3.792	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1689.276									

** - Less 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 RICH0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	8	23.5	23.213	31.5	14.9	32.496	5.7	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	8	8.	8.262	10.1	6.8	1.094	1.046	**	**	**	**
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.54	7.653	8.52	7.23	0.221	0.47	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.518	7.49	8.52	7.23	0.252	0.502	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	8	0.03	0.032	0.059	0.003	0.001	0.023	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	330.	1551.111	9200.	20.	8651261.111	2941.303	20.	150.	1700.	9200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	2.519	2.625	3.964	1.301	0.599	0.774	1.301	2.172	3.23	3.964
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		421.291									

** - Less 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 RICH0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	12	21.45	22.35	28.8	15.4	18.628	4.316	15.85	19.45	26.85	28.59
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	12	8.5	8.533	9.9	7.3	0.661	0.813	7.36	7.775	9.05	9.84
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.74	7.798	8.63	6.8	0.249	0.499	6.962	7.48	8.255	8.534
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.74	7.527	8.63	6.8	0.329	0.574	6.962	7.48	8.255	8.534
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	12	0.018	0.03	0.158	0.002	0.002	0.043	0.003	0.006	0.034	0.125
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	1045.	3671.5	16000.	40.	35328976.091	5943.818	51.4	180.	4600.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	3.006	2.952	4.204	1.602	0.714	0.845	1.689	2.215	3.635	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		895.602									

** - Less 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 RICH0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	10	24.6	24.03	28.9	15.6	19.645	4.432	16.07	21.125	28.1	28.88
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	9	7.9	8.078	9.6	7.2	0.692	0.832	7.2	7.5	8.7	9.6
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	10	7.595	7.635	8.15	7.27	0.06	0.244	7.288	7.48	7.783	8.117
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	10	7.593	7.58	8.15	7.27	0.063	0.251	7.288	7.48	7.783	8.117
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	10	0.026	0.026	0.054	0.007	0.	0.013	0.008	0.017	0.033	0.052
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	11	1700.	2730.727	16000.	78.	20602829.818	4539.034	84.4	460.	2800.	13500.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	11	3.23	3.031	4.204	1.892	0.445	0.667	1.922	2.663	3.447	4.072
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1073.234									

** - Less 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 1998 - Station RICH0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	12	25.75	25.275	30.4	15.9	18.558	4.308	17.19	22.05	28.7	30.01
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	7.9	8.183	10.1	7.2	0.9	0.949	7.2	7.4	8.8	9.89
00400	PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.985	7.901	8.31	7.02	0.103	0.321	7.203	7.85	8.055	8.25
00400	CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.985	7.739	8.31	7.02	0.132	0.363	7.203	7.85	8.055	8.25
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	12	0.01	0.018	0.095	0.005	0.001	0.025	0.006	0.009	0.014	0.074
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	190.	3015.833	16000.	20.	37222967.424	6101.063	26.	45.	1997.5	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	2.276	2.508	4.204	1.301	0.97	0.985	1.391	1.653	3.26	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		321.964									

** - Less 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: RICH0078

NPS Station ID: RICH0078 LAT/LON: 37.457226/ -77.309170 Agency: 21VASWCB Date Created: 05/06/95
Location: DEERLICK BRANCH, DARBYTOWN ROAD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-DLK001.19
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: DEERLICK CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0078

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/09/94-06/04/97	3	12.1	10.967	13.6	7.2	11.203	3.347	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/09/94-06/04/97	3	54.	55.	61.	50.	31.	5.568	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/09/94-06/04/97	3	9.8	9.9	10.8	9.1	0.73	0.854	**	**	**	**
00400 PH (STANDARD UNITS)		12/09/94-06/04/97	3	5.	5.137	5.45	4.96	0.074	0.272	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		12/09/94-06/04/97	3	5.	5.088	5.45	4.96	0.078	0.279	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/09/94-06/04/97	3	10.	8.171	10.965	3.548	16.261	4.032	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: RICH0078

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00				1	1	1.00	2	2	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: RICH0079

NPS Station ID: RICH0079 LAT/LON: 37.458448/ -77.486032 Agency: 21VASWCB Date Created: / /
Location: RT. 10 BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FAC005.78 /VA2-07AX0081/VA2-4X0081
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004701.77 RF3 Mile Point: 5.07 Distance from RF3: 0.02 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: FALLING CREEK SECTION: 07A TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	64	18.9	17.419	34.4	0.8	83.598	9.143	3.7	8.9	25.575	28.05
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	65	9.4	9.414	15.6	1.2	4.612	2.148	7.72	8.4	10.4	12.
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	64	7.2	7.298	9.	6.5	0.315	0.561	6.75	7.	7.5	8.
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	64	7.2	7.069	9.	6.5	0.368	0.607	6.75	7.	7.5	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	64	0.063	0.085	0.316	0.001	0.006	0.077	0.01	0.032	0.1	0.179
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	62##	0.05	0.063	0.2	0.05	0.001	0.027	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	63##	0.005	0.01	0.28	0.005	0.001	0.035	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-03/07/79	48	0.1	0.126	0.36	0.005	0.009	0.097	0.024	0.043	0.208	0.281
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	62	0.4	0.388	0.7	0.05	0.027	0.164	0.2	0.3	0.5	0.6
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	14	0.085	0.118	0.31	0.025	0.009	0.096	0.025	0.025	0.2	0.28
01002 ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3##	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4##	5.	3.875	5.	0.5	5.063	2.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	7##	5.	5.714	10.	5.	3.571	1.89	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	7##	5.	11.429	50.	5.	289.286	17.008	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	08/04/73-11/17/77	6	5.5	8.667	20.	4.	39.067	6.25	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	6##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	7	10.	13.571	30.	5.	97.619	9.88	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	61##	50.	231.148	6000.	50.	593346.995	770.29	50.	50.	100.	480.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	61##	1.699	1.969	3.778	1.699	0.181	0.425	1.699	1.699	2.	2.68
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	93.077								
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	62##	0.05	0.059	0.2	0.005	0.001	0.026	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	62##	0.02	0.03	0.1	0.005	0.001	0.026	0.005	0.005	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	7##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0079

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	65	2	0.03	20	2	0.10	22	0	0.00	23	0	0.00			
00400 PH	Fresh Chronic	9.	64	3	0.05	20	2	0.10	22	0	0.00	22	1	0.05			
	Other-Lo Lim.	6.5	64	3	0.05	20	0	0.00	22	2	0.09	22	1	0.05			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	63	0	0.00	20	0	0.00	21	0	0.00	22	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	48	0	0.00	17	0	0.00	16	0	0.00	15	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	3	0	0.00	4	0	0.00	7	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	50.	3	0	0.00	1	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									
01034 CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	1	0.14	1	0	0.00	2	0	0.00	4	1	0.25			
	Drinking Water	1300.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	15.	6	1	0.17	1	1	1.00	2	0	0.00	3	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
	Drinking Water	100.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	5000.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	61	14	0.23	19	4	0.21	21	5	0.24	21	5	0.24			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	2.	7	0	0.00	1	0	0.00	2	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

Annual Analysis for 1973 - Station RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	10	19.7	19.34	27.8	5.6	58.587	7.654	6.15	12.75	26.825	27.74
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	10	9.3	9.58	12.	7.6	1.88	1.371	7.68	8.4	10.85	11.9
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	10	7.	7.12	8.5	6.8	0.26	0.509	6.8	6.8	7.15	8.38
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	10	7.	6.985	8.5	6.8	0.28	0.529	6.8	6.8	7.15	8.38
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	10	0.1	0.103	0.158	0.003	0.003	0.051	0.008	0.072	0.158	0.158
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	10	0.6	0.53	0.7	0.1	0.038	0.195	0.12	0.45	0.7	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	75.	165.	500.	50.	33361.111	182.65	50.	50.	275.	500.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	1.849	2.019	2.699	1.699	0.169	0.411	1.699	1.699	2.401	2.699
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		104.564									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	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

Annual Analysis for 1974 - Station RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	11	14.4	16.009	28.3	6.7	73.619	8.58	6.92	8.9	27.2	28.08
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	11	9.7	9.827	12.	8.	1.672	1.293	8.04	8.4	10.6	11.88
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.2	7.2	8.5	6.5	0.324	0.569	6.5	6.8	7.5	8.3
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.2	6.952	8.5	6.5	0.392	0.626	6.5	6.8	7.5	8.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	11	0.063	0.112	0.316	0.003	0.012	0.111	0.009	0.032	0.158	0.316
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	11##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	11##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	11	0.4	0.436	0.6	0.3	0.013	0.112	0.3	0.3	0.5	0.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	50.	190.	1000.	50.	92666.667	304.412	50.	50.	175.	940.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	1.699	1.98	3.	1.699	0.211	0.46	1.699	1.699	2.151	2.96
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		95.409									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09

** - Less 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 RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	12	20.	17.867	27.8	5.6	50.486	7.105	6.41	11.1	22.2	27.29
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	12	9.4	9.575	12.7	7.8	1.873	1.369	7.92	8.45	10.3	12.19
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	12	7.2	7.125	7.5	6.5	0.109	0.331	6.56	6.85	7.45	7.5
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	12	7.2	7.002	7.5	6.5	0.126	0.355	6.56	6.85	7.45	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	12	0.063	0.1	0.316	0.032	0.007	0.086	0.032	0.036	0.144	0.281
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	10	0.3	0.315	0.6	0.05	0.022	0.149	0.065	0.2	0.4	0.58
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	50.	113.636	500.	50.	18545.455	136.182	50.	50.	100.	440.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	1.699	1.899	2.699	1.699	0.11	0.332	1.699	1.699	2.	2.619
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		79.313									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10##	0.035	0.031	0.05	0.005	0.	0.021	0.006	0.01	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 1976 - Station RICH0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/30/73-06/21/79	7	21.1	21.186	34.4	4.4	91.435	9.562	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	03/30/73-06/21/79	8	8.8	8.925	10.8	7.2	1.256	1.121	**	**	**	**
00400 PH (STANDARD UNITS)		03/30/73-06/21/79	8	7.5	7.5	9.	7.	0.429	0.655	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		03/30/73-06/21/79	8	7.5	7.272	9.	7.	0.488	0.698	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/30/73-06/21/79	8	0.032	0.053	0.1	0.001	0.002	0.04	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/30/73-06/21/79	7##	0.05	0.057	0.1	0.05	0.	0.019	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/21/79	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/30/73-06/21/79	7	0.3	0.329	0.6	0.1	0.029	0.17	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	7##	50.	971.429	6000.	50.	4944047.619	2223.521	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	7##	1.699	2.182	3.778	1.699	0.63	0.794	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		152.005									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		03/30/73-06/21/79	7##	0.05	0.057	0.1	0.05	0.	0.019	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/30/73-06/21/79	7	0.01	0.011	0.02	0.005	0.	0.007	**	**	**	**

** - Less 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 RICH0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/30/73-06/21/79	11	15.	16.391	32.	1.	147.047	12.126	1.02	2.7	27.5	32.
00300 OXYGEN, DISSOLVED	MG/L	03/30/73-06/21/79	11	9.5	8.618	14.	1.2	14.912	3.862	1.3	8.4	10.3	13.52
00400 PH (STANDARD UNITS)		03/30/73-06/21/79	11	7.5	7.591	9.	6.8	0.343	0.586	6.84	7.4	8.	8.8
00400 CONVERTED PH (STANDARD UNITS)		03/30/73-06/21/79	11	7.5	7.348	9.	6.8	0.408	0.639	6.84	7.4	8.	8.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/30/73-06/21/79	11	0.032	0.045	0.158	0.001	0.002	0.046	0.003	0.01	0.04	0.147
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/30/73-06/21/79	11##	0.05	0.068	0.2	0.05	0.002	0.046	0.05	0.05	0.05	0.18
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/21/79	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/30/73-06/21/79	11	0.3	0.345	0.6	0.2	0.017	0.129	0.2	0.2	0.4	0.58
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	11##	50.	72.727	200.	50.	2181.818	46.71	50.	50.	100.	180.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	11##	1.699	1.808	2.301	1.699	0.041	0.203	1.699	1.699	2.	2.241
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		64.333									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		03/30/73-06/21/79	11##	0.05	0.05	0.1	0.005	0.	0.021	0.014	0.05	0.05	0.09
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/30/73-06/21/79	11##	0.005	0.006	0.02	0.005	0.	0.005	0.005	0.005	0.005	0.017

** - Less 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 RICH0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		03/30/73-06/21/79	8	17.75	17.663	30.	0.8	103.668	10.182	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	03/30/73-06/21/79	8	8.5	9.275	15.6	6.6	8.022	2.832	**	**	**	**
00400 PH (STANDARD UNITS)		03/30/73-06/21/79	7	7.2	7.486	9.	7.	0.521	0.722	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		03/30/73-06/21/79	7	7.2	7.226	9.	7.	0.6	0.775	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/30/73-06/21/79	7	0.063	0.059	0.1	0.001	0.002	0.042	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/30/73-06/21/79	8##	0.05	0.069	0.1	0.05	0.001	0.026	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/30/73-06/21/79	8##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/30/73-06/21/79	8	0.35	0.413	0.7	0.2	0.03	0.173	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	8	150.	181.25	400.	50.	19241.071	138.712	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		03/30/73-06/21/79	8	2.151	2.119	2.602	1.699	0.152	0.39	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		131.607									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		03/30/73-06/21/79	8##	0.05	0.056	0.1	0.05	0.	0.018	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/30/73-06/21/79	8	0.015	0.022	0.06	0.005	0.	0.022	**	**	**	**

** - Less 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 RICH0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	5	11.5	12.2	23.5	2.	98.575	9.928	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	5	9.8	10.54	12.3	9.	2.258	1.503	**	**	**	**
00400	PH (STANDARD UNITS)	03/30/73-06/21/79	5	7.	7.06	7.6	6.6	0.228	0.477	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	5	7.	6.88	7.6	6.6	0.268	0.518	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	5	0.1	0.132	0.251	0.025	0.013	0.113	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	5##	0.005	0.06	0.28	0.005	0.015	0.123	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	5	0.3	0.28	0.4	0.2	0.007	0.084	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	4##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	4##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	5	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**

** - Less 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 10/14 - Station RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	19	26.1	24.474	32.	2.7	45.215	6.724	16.7	21.1	28.3	32.
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	20	8.5	7.92	10.	1.2	5.647	2.376	2.19	7.65	9.35	9.69
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	20	7.5	7.65	9.	6.7	0.405	0.636	7.	7.3	7.925	8.95
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	20	7.5	7.36	9.	6.7	0.493	0.702	7.	7.3	7.925	8.95
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	20	0.032	0.044	0.2	0.001	0.002	0.046	0.001	0.012	0.05	0.1
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	19##	0.05	0.066	0.2	0.05	0.001	0.037	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	20##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	19	0.5	0.458	0.7	0.1	0.029	0.171	0.3	0.3	0.6	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	19##	50.	126.316	500.	50.	21491.228	146.599	50.	50.	100.	500.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	19##	1.699	1.924	2.699	1.699	0.126	0.355	1.699	1.699	2.	2.699
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	84.025								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	19##	0.05	0.061	0.1	0.05	0.	0.021	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	19##	0.02	0.026	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

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	22	8.15	8.577	19.4	0.8	29.239	5.407	1.03	4.05	13.35	15.57
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	22	10.9	11.064	15.6	8.4	2.805	1.675	9.12	9.9	12.	13.61
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	22	7.	6.995	7.5	6.5	0.104	0.323	6.53	6.8	7.25	7.5
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	22	7.	6.892	7.5	6.5	0.116	0.34	6.53	6.8	7.25	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	22	0.1	0.128	0.316	0.032	0.008	0.087	0.032	0.057	0.158	0.297
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	21##	0.05	0.062	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	21##	0.005	0.019	0.28	0.005	0.004	0.06	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	21	0.3	0.348	0.7	0.1	0.025	0.157	0.2	0.2	0.5	0.58
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	21##	50.	402.381	6000.	50.	1660869.048	1288.747	50.	50.	150.	480.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	21##	1.699	2.026	3.778	1.699	0.266	0.515	1.699	1.699	2.151	2.68
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	106.17								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	21##	0.05	0.062	0.2	0.005	0.001	0.038	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	21##	0.02	0.029	0.1	0.005	0.001	0.026	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

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	23	21.	20.048	34.4	7.	46.106	6.79	8.9	15.	25.	27.5
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	23	9.	9.135	10.8	7.	1.031	1.015	8.	8.4	10.	10.52
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	22	7.2	7.282	9.	6.5	0.26	0.51	6.8	7.	7.5	7.88
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	22	7.2	7.098	9.	6.5	0.295	0.543	6.8	7.	7.5	7.88
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	22	0.063	0.08	0.316	0.001	0.005	0.069	0.015	0.032	0.1	0.158
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	22##	0.05	0.061	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	22##	0.005	0.006	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	22	0.35	0.366	0.7	0.05	0.023	0.151	0.2	0.3	0.425	0.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	21##	50.	154.762	1000.	50.	52476.19	229.077	50.	50.	150.	480.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	21##	1.699	1.952	3.	1.699	0.158	0.398	1.699	1.699	2.151	2.68
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	89.514								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	22##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.085
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	22##	0.035	0.035	0.1	0.005	0.001	0.03	0.005	0.009	0.05	0.088

** - Less 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: RICH0080

NPS Station ID: RICH0080 LAT/LON: 37.460559/ -77.444642 Agency: 21VASWCB Date Created: / /
Location: WALMSLEY BLVD.
FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-GRK001.73 /VA2-07-X0089/VA2-4X0089
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206047 RF1 Mile Point: 2.780 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206138400.00 RF3 Mile Point: 0.62 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: GRINDALL CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0080

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/21/79	64	17.1	16.294	37.2	0.7	70.276	8.383	5.	9.625	22.65	26.85
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/21/79	66	11.2	11.133	16.2	6.4	5.564	2.359	7.54	9.6	12.6	14.06
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/29/76-07/26/76	2	6.	6.	9.	3.	18.	4.243	**	**	**	**
00400 PH (STANDARD UNITS)		09/26/72-06/21/79	64	7.5	7.952	10.39	6.3	1.258	1.122	6.7	7.	9.	9.625
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/21/79	64	7.5	7.182	10.39	6.3	1.86	1.364	6.7	7.	9.	9.625
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/21/79	64	0.032	0.066	0.501	0.	0.01	0.1	0.	0.001	0.1	0.2
00403 PH, LAB, STANDARD UNITS	SU	03/29/76-03/29/76	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/29/76-03/29/76	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/29/76-03/29/76	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00405 CARBON DIOXIDE (MG/L AS CO2)		05/17/78-05/17/78	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/29/76-03/29/76	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		09/26/72-04/23/79	60	114.	132.2	695.	60.	7233.756	85.051	83.1	92.5	142.5	181.9
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/26/72-04/23/79	60	47.	52.467	175.	4.	863.575	29.387	21.	32.	68.25	97.2
00510 RESIDUE, TOTAL FIXED (MG/L)		09/26/72-04/23/79	59	66.	79.966	611.	10.	6108.137	78.155	39.	52.	82.	111.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-04/23/79	61	5.	22.27	560.	0.	5639.038	75.094	0.5	2.	16.	32.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-04/23/79	61	2.	5.492	80.	0.	119.454	10.93	0.5	1.	6.	11.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-04/23/79	61	2.	16.844	480.	0.	4163.696	64.527	0.	0.5	10.5	24.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-04/23/79	62##	0.05	0.178	1.299	0.05	0.069	0.262	0.05	0.05	0.2	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-04/23/79	62##	0.005	0.038	1.2	0.005	0.025	0.157	0.005	0.005	0.02	0.037
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-03/07/79	50	0.505	0.558	1.399	0.005	0.158	0.398	0.025	0.195	0.9	1.089
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-04/23/79	62	0.5	0.689	5.099	0.05	0.548	0.74	0.2	0.3	0.8	1.27
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/23/77-04/23/79	12	0.375	0.488	1.1	0.025	0.158	0.398	0.025	0.118	0.925	1.07
00940 CHLORIDE,TOTAL IN WATER	MG/L	09/26/72-04/23/79	63	13.	14.508	44.	7.	47.125	6.865	10.	11.	15.	19.2
01002 ARSENIC, TOTAL (UG/L AS AS)		08/04/73-06/23/77	3##	1.	8.167	23.	0.5	165.083	12.848	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)		08/04/73-11/17/77	4##	5.	3.875	5.	0.5	5.063	2.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)		10/26/72-11/17/77	9##	5.	61.111	500.	5.	27092.361	164.598	5.	5.	10.	500.
01042 COPPER, TOTAL (UG/L AS CU)		10/26/72-11/17/77	9##	5.	6.667	20.	5.	25.	5.	5.	5.	5.	20.
01051 LEAD, TOTAL (UG/L AS PB)		10/26/72-11/17/77	9	16.	19.	48.	0.001	222.495	14.916	0.001	10.	28.5	48.
01065 NICKEL, DISSOLVED (UG/L AS NI)		01/29/73-11/17/77	7##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		10/26/72-11/17/77	9	50.	41.111	70.	5.	529.861	23.019	5.	17.5	55.	70.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/21/79	62	200.	1151.613	8000.	50.	4340489.159	2083.384	50.	50.	925.	5670.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/21/79	62	2.301	2.451	3.903	1.699	0.517	0.719	1.699	1.699	2.966	3.752
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	282.744								

** - Less 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: RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	62##	0.05	0.175	2.4	0.05	0.116	0.34	0.05	0.05	0.1	0.4
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	62	0.05	0.096	0.9	0.005	0.032	0.178	0.007	0.018	0.053	0.249
71900 MERCURY, TOTAL (UG/L AS HG)	10/26/72-11/17/77	9##	0.25	0.25	0.25	0.25	0.	0.	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: RICH0080

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	66	0	0.00	19	0	0.00	25	0	0.00	22	0	0.00			
00400 PH	Fresh Chronic	9.	64	19	0.30	19	7	0.37	24	3	0.13	21	9	0.43			
	Other-Lo Lim.	6.5	64	5	0.08	19	0	0.00	24	5	0.21	21	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			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	62	1	0.02	19	0	0.00	23	1	0.04	20	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	50	0	0.00	17	0	0.00	19	0	0.00	14	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	12	0	0.00	2	0	0.00	4	0	0.00	6	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	63	0	0.00	19	0	0.00	24	0	0.00	20	0	0.00			
	Drinking Water	250.	63	0	0.00	19	0	0.00	24	0	0.00	20	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	50.	3	0	0.00	1	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									
01034 CHROMIUM, TOTAL	Drinking Water	100.	8&	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	9	1	0.11	1	0	0.00	4	0	0.00	4	1	0.25			
	Drinking Water	1300.	9	0	0.00	1	0	0.00	4	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	9	0	0.00	2	0	0.00	4	0	0.00	3	0	0.00			
	Drinking Water	15.	9	5	0.56	2	1	0.50	4	1	0.25	3	3	1.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	100.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	9	0	0.00	1	0	0.00	4	0	0.00	4	0	0.00			
	Drinking Water	5000.	9	0	0.00	1	0	0.00	4	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	62	35	0.56	18	14	0.78	24	13	0.54	20	8	0.40			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	9	0	0.00	1	0	0.00	4	0	0.00	4	0	0.00			
	Drinking Water	2.	9	0	0.00	1	0	0.00	4	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

Annual Analysis for 1972 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	3	12.2	14.067	22.2	7.8	54.453	7.379	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	3	9.8	9.	10.8	6.4	5.32	2.307	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	3	7.	7.333	8.	7.	0.333	0.577	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	3	7.	7.155	8.	7.	0.381	0.617	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	3	0.1	0.07	0.1	0.01	0.003	0.052	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	3	111.	113.667	144.	86.	846.333	29.092	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	3	35.	31.333	45.	14.	250.333	15.822	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	3	97.	82.333	99.	51.	737.333	27.154	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	3	5.	5.667	12.	0.	36.333	6.028	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	3	4.	3.	5.	0.	7.	2.646	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	3	1.	2.667	7.	0.	14.333	3.786	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	1	5.099	5.099	5.099	5.099	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	3	11.	12.	15.	10.	7.	2.646	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	3	200.	883.333	2400.	50.	1730833.333	1315.611	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	3	2.301	2.46	3.38	1.699	0.726	0.852	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		288.45									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	1	0.04	0.04	0.04	0.04	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 1973 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	9	17.8	16.489	25.6	5.6	55.619	7.458	5.6	9.2	23.3	25.6
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	10	10.9	10.3	13.4	6.6	5.7	2.387	6.7	7.9	12.45	13.32
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	10	6.85	7.14	9.2	6.3	0.725	0.851	6.32	6.5	7.5	9.03
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	10	6.847	6.766	9.2	6.3	0.88	0.938	6.32	6.5	7.5	9.03
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	10	0.142	0.171	0.501	0.001	0.027	0.164	0.004	0.032	0.316	0.483
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	9	114.	181.222	695.	60.	38365.194	195.87	60.	93.	164.	695.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	9	32.	49.556	99.	4.	1229.028	35.057	4.	26.	91.	99.
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	9	82.	131.667	611.	10.	33310.75	182.512	10.	50.5	109.5	611.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	8.	72.	560.	1.	33593.	183.284	1.	3.5	26.5	560.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	2.	12.	80.	0.	661.5	25.72	0.	1.	8.5	80.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	8.	60.	480.	0.	24859.	157.667	0.	2.	18.	480.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	10	0.16	0.412	1.299	0.05	0.245	0.495	0.05	0.088	0.775	1.299
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	10##	0.008	0.023	0.13	0.005	0.001	0.038	0.005	0.005	0.02	0.119
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	10	0.9	1.17	2.599	0.3	0.566	0.753	0.32	0.575	1.924	2.539
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	9	14.	12.889	16.	7.	8.611	2.934	7.	10.5	15.	16.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	900.	2250.	6000.	50.	6084444.444	2466.667	50.	237.5	4950.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	2.952	2.92	3.778	1.699	0.622	0.789	1.699	2.283	3.692	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		832.019									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	10##	0.075	0.285	1.1	0.05	0.122	0.35	0.05	0.05	0.45	1.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	10	0.075	0.244	0.9	0.04	0.086	0.294	0.041	0.05	0.5	0.86

** - Less 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 RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	10	13.3	16.22	27.8	7.8	66.8	8.173	7.85	8.75	26.25	27.69
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	10	11.	10.95	14.	6.8	4.114	2.028	7.04	10.175	12.35	13.94
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	10	7.4	7.78	9.3	6.5	1.068	1.034	6.55	7.	9.1	9.28

** - Less 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 RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	10	7.389	7.149	9.3	6.5	1.511	1.229	6.55	7.	9.1	9.28
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	10	0.041	0.071	0.316	0.001	0.009	0.096	0.001	0.001	0.1	0.295
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	10	128.	152.2	306.	79.	4798.622	69.272	80.7	108.	195.	298.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	10	57.	57.7	98.	30.	466.456	21.598	30.5	35.75	74.	95.9
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	10	78.5	94.5	233.	44.	3172.944	56.329	44.5	55.	121.	223.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	10	12.	31.5	197.	1.	3528.722	59.403	1.	1.75	29.	180.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	10	6.5	8.3	29.	1.	80.233	8.957	1.	1.	12.25	27.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	10	4.	23.2	168.	0.	2654.4	51.521	0.	0.75	18.75	153.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	10	0.1	0.14	0.3	0.05	0.01	0.102	0.05	0.05	0.225	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	10##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	10	0.7	0.68	1.	0.4	0.035	0.187	0.41	0.5	0.825	0.99
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	10	12.5	16.	44.	8.	106.889	10.339	8.2	11.5	16.25	41.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	250.	965.	6000.	50.	3351694.444	1830.763	50.	50.	1175.	5540.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	2.389	2.444	3.778	1.699	0.504	0.71	1.699	1.699	3.068	3.715
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		278.15									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	10##	0.05	0.07	0.2	0.05	0.002	0.048	0.05	0.05	0.063	0.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	10##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185

** - Less 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 RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	12	18.35	17.458	26.1	6.1	45.932	6.777	7.27	10.55	23.625	25.95
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	12	11.1	11.125	14.6	7.4	4.795	2.19	7.82	9.05	12.55	14.48
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	12	7.35	7.725	10.	6.5	1.177	1.085	6.65	7.	8.375	9.85
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	12	7.347	7.149	10.	6.5	1.538	1.24	6.65	7.	8.375	9.85
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	12	0.045	0.071	0.316	0.	0.008	0.088	0.	0.005	0.1	0.251
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	9	114.	123.111	216.	73.	1811.611	42.563	73.	95.	142.	216.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	9	57.	70.333	175.	18.	2394.75	48.936	18.	32.	98.5	175.
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	9	54.	52.778	66.	35.	103.444	10.171	35.	45.	61.5	66.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	10.	15.111	48.	2.	238.361	15.439	2.	4.	24.	48.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	6.	6.333	14.	2.	23.5	4.848	2.	2.	11.5	14.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	9	4.	8.778	34.	0.	126.944	11.267	0.	2.	15.	34.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	10##	0.075	0.135	0.5	0.05	0.02	0.142	0.05	0.05	0.2	0.47
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	10##	0.005	0.01	0.03	0.005	0.	0.009	0.005	0.005	0.013	0.029
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	10	0.35	0.4	0.8	0.2	0.031	0.176	0.21	0.3	0.45	0.78
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	11	12.	13.545	32.	7.	44.073	6.639	7.4	11.	14.	29.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	11	200.	1186.364	6000.	50.	4569545.455	2137.65	50.	50.	900.	5780.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	11	2.301	2.438	3.778	1.699	0.576	0.759	1.699	1.699	2.954	3.761
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		274.303									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	10##	0.05	0.09	0.3	0.05	0.006	0.077	0.05	0.05	0.1	0.28
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	10##	0.05	0.041	0.1	0.005	0.001	0.028	0.006	0.01	0.05	0.095

** - Less 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 RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	5	18.9	19.22	37.2	3.9	144.857	12.036	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	6	12.2	12.317	15.6	10.3	3.242	1.8	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	5	9.5	9.	10.	7.5	1.375	1.173	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	5	9.5	8.074	10.	7.5	2.446	1.564	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	5	0.	0.008	0.032	0.	0.	0.014	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	7	129.	123.286	144.	97.	279.905	16.73	**	**	**	**

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Annual Analysis for 1976 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	7	53.	54.286	75.	38.	144.905	12.038	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	7	69.	69.	87.	49.	171.667	13.102	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	7##	0.5	1.929	10.	0.5	12.702	3.564	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	7##	0.5	0.429	0.5	0.	0.036	0.189	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	7##	0.5	1.857	10.	0.5	12.893	3.591	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	7##	0.05	0.057	0.1	0.05	0.	0.019	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	7##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	7	0.5	0.407	0.7	0.05	0.054	0.232	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	7	14.	14.286	25.	10.	25.905	5.09	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	6##	75.	141.667	400.	50.	19416.667	139.344	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	6##	1.849	2.	2.602	1.699	0.145	0.381	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		100.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	7##	0.05	0.064	0.1	0.05	0.001	0.024	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	7	0.02	0.02	0.03	0.01	0.	0.008	**	**	**	**

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Annual Analysis for 1977 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	11	17.5	15.473	32.	1.1	114.81	10.715	1.42	3.4	24.	31.3
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	11	12.9	12.555	16.2	8.4	4.879	2.209	8.64	11.4	14.	15.8
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	11	9.	8.722	10.39	7.	1.346	1.16	7.1	7.5	9.75	10.292
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	11	9.	7.743	10.39	7.	2.4	1.549	7.1	7.5	9.75	10.292
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	11	0.001	0.018	0.1	0.	0.001	0.031	0.	0.	0.032	0.086
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	10	121.	122.3	163.	85.	843.344	29.04	85.2	90.	151.	161.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	10	46.	56.	100.	21.	737.778	27.162	22.1	32.75	81.75	99.
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	10	68.	66.3	107.	24.	678.678	26.051	25.5	47.25	82.75	106.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	11	5.	10.545	49.	2.	193.873	13.924	2.2	4.	15.	43.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	11	3.	3.818	8.	2.	3.564	1.888	2.	2.	5.	7.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	11	2.	6.727	43.	0.	163.418	12.784	0.	0.	11.	36.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	11##	0.05	0.2	0.9	0.05	0.074	0.273	0.05	0.05	0.3	0.82
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	11	0.01	0.042	0.34	0.005	0.01	0.099	0.005	0.005	0.02	0.278
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	11	0.3	0.536	1.799	0.2	0.21	0.459	0.22	0.3	0.7	1.599
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	10	13.5	17.6	41.	10.	111.822	10.575	10.	11.5	20.25	40.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	100.	420.	1900.	50.	469555.556	685.241	50.	50.	600.	1860.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	10	2.	2.173	3.279	1.699	0.368	0.606	1.699	1.699	2.652	3.268
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		148.862									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	11	0.1	0.186	0.6	0.05	0.039	0.198	0.05	0.05	0.3	0.58
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	11	0.06	0.178	0.8	0.005	0.068	0.26	0.005	0.01	0.27	0.746

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Annual Analysis for 1978 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	9	17.5	17.078	31.	0.7	82.267	9.07	0.7	11.25	24.	31.
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	9	10.2	10.5	16.	6.8	7.465	2.732	6.8	8.35	12.1	16.
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.5	8.	9.2	7.	0.685	0.828	7.	7.5	9.	9.2
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	9	7.5	7.565	9.2	7.	0.898	0.947	7.	7.5	9.	9.2
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	9	0.032	0.027	0.1	0.001	0.001	0.031	0.001	0.001	0.032	0.1
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	8	99.	112.875	203.	87.	1481.839	38.495	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	8	37.5	40.75	69.	26.	208.5	14.44	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	7	67.	73.	151.	20.	1555.667	39.442	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	8	4.5	13.125	60.	2.	387.554	19.686	**	**	**	**

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Annual Analysis for 1978 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	8	2.5	3.375	12.	0.	15.982	3.998	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	8	3.	9.813	48.	0.	259.996	16.124	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	9##	0.05	0.122	0.5	0.05	0.023	0.15	0.05	0.05	0.15	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	9	0.01	0.024	0.06	0.005	0.	0.022	0.005	0.005	0.045	0.06
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	9	0.4	0.567	1.3	0.2	0.153	0.391	0.2	0.2	0.85	1.3
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	9	14.	13.556	17.	10.	7.028	2.651	10.	11.	16.	17.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	8	300.	1268.75	8000.	50.	7430669.643	2725.925	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	8	2.477	2.564	3.903	1.699	0.421	0.649	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		366.284									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	9	0.1	0.144	0.3	0.05	0.01	0.098	0.05	0.075	0.25	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	9	0.02	0.033	0.1	0.005	0.001	0.033	0.005	0.008	0.06	0.1

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Annual Analysis for 1979 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	5	12.	12.1	20.5	5.	51.55	7.18	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	5	11.6	11.06	14.	6.8	7.508	2.74	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	4	7.95	8.025	9.5	6.7	1.449	1.204	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	4	7.75	7.23	9.5	6.7	2.292	1.514	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	4	0.018	0.059	0.2	0.	0.009	0.095	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	4	85.5	85.25	92.	78.	36.917	6.076	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	4	26.	33.	59.	21.	322.667	17.963	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	4	61.5	52.25	67.	19.	498.25	22.322	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	4##	1.25	2.	5.	0.5	4.5	2.121	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	4##	0.75	1.5	4.	0.5	2.833	1.683	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	4##	0.75	0.75	1.	0.5	0.083	0.289	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	4##	0.008	0.305	1.2	0.005	0.356	0.597	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	4	0.35	0.325	0.4	0.2	0.009	0.096	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	4	13.5	13.75	18.	10.	12.25	3.5	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	4	150.	2087.5	8000.	50.	15540625.	3942.16	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	4	2.151	2.476	3.903	1.699	0.966	0.983	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		299.07									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	4	0.01	0.011	0.02	0.005	0.	0.006	**	**	**	**

** - Less 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 10/14 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	19	22.8	22.358	32.	2.7	40.163	6.337	14.4	20.	26.1	31.
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	19	9.2	9.595	14.6	6.4	6.201	2.49	6.6	7.4	11.	14.
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	19	8.	8.257	10.39	6.7	1.415	1.189	6.9	7.	9.2	10.
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	19	8.	7.4	10.39	6.7	2.19	1.48	6.9	7.	9.2	10.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	19	0.01	0.04	0.2	0.	0.003	0.057	0.	0.001	0.1	0.126
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	18	111.	116.	203.	60.	1605.529	40.069	71.7	82.75	145.75	185.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	18	35.5	40.944	107.	4.	573.114	23.94	16.6	25.75	52.25	78.2
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	18	68.	75.056	151.	45.	770.644	27.76	48.6	51.75	88.25	120.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	18	4.	8.722	60.	0.5	186.889	13.671	0.5	2.5	9.5	20.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	18	2.	3.028	12.	0.	12.514	3.537	0.	0.5	4.25	11.1
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	18	2.	5.75	48.	0.	120.331	10.97	0.45	0.875	5.75	14.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	19##	0.05	0.116	0.6	0.05	0.025	0.158	0.05	0.05	0.1	0.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	19##	0.005	0.011	0.05	0.005	0.	0.012	0.005	0.005	0.01	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	17	0.26	0.291	0.98	0.01	0.084	0.291	0.022	0.028	0.455	0.876
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	19	0.5	0.618	2.599	0.05	0.33	0.575	0.2	0.3	0.8	1.3
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	19	13.	12.947	20.	9.	8.164	2.857	10.	10.	15.	16.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	18	450.	1986.111	8000.	50.	7053472.222	2655.837	95.	175.	3900.	6200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	18	2.651	2.807	3.903	1.699	0.526	0.725	1.97	2.226	3.573	3.791
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	641.071								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	19##	0.05	0.126	0.6	0.05	0.02	0.143	0.05	0.05	0.2	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	19	0.03	0.069	0.5	0.005	0.013	0.115	0.005	0.01	0.05	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 box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	25	9.	9.444	20.	0.7	27.853	5.278	2.48	5.3	12.2	17.62
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	25	11.4	11.456	16.	6.8	4.053	2.013	8.26	10.6	12.6	14.08
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	24	7.35	7.35	9.2	6.3	0.63	0.793	6.5	6.775	7.5	9.
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	24	7.347	6.935	9.2	6.3	0.81	0.9	6.5	6.775	7.5	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	24	0.045	0.116	0.501	0.001	0.019	0.136	0.001	0.032	0.175	0.316
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	22	120.	160.818	695.	83.	17244.346	131.318	85.6	95.75	157.75	283.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	22	45.	54.	175.	14.	1277.238	35.738	21.	31.75	72.25	95.6
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	22	72.	106.818	611.	41.	14308.442	119.618	49.	61.75	101.	203.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	23	5.	41.978	560.	0.	14429.488	120.123	0.5	1.	17.	137.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	23	3.	7.935	80.	0.	285.166	16.887	0.2	1.	6.	22.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	23	1.	34.109	480.	0.	10692.431	103.404	0.	0.	12.	118.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	23	0.12	0.271	1.299	0.05	0.124	0.351	0.05	0.05	0.3	0.979
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	23	0.01	0.068	1.2	0.005	0.062	0.248	0.005	0.005	0.02	0.102
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	19	0.9	0.861	1.399	0.005	0.102	0.32	0.42	0.69	1.089	1.289
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	23	0.6	0.865	5.099	0.2	1.072	1.035	0.3	0.3	0.8	1.96
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	24	14.	16.25	44.	7.	89.065	9.437	9.	11.25	15.75	37.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	24	250.	1014.583	6000.	50.	2875104.167	1695.613	50.	50.	1075.	4750.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	24	2.389	2.438	3.778	1.699	0.545	0.738	1.699	1.699	3.031	3.676
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	274.047								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	23##	0.05	0.274	2.4	0.05	0.277	0.526	0.05	0.05	0.3	0.9
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	23	0.05	0.157	0.9	0.005	0.068	0.261	0.007	0.01	0.1	0.692

** - 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

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/21/79	20	18.5	19.095	37.2	8.9	53.022	7.282	9.55	13.5	23.975	28.43
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/21/79	22	12.	12.095	16.2	8.8	4.039	2.01	9.04	10.825	13.55	15.18
00400 PH (STANDARD UNITS)	09/26/72-06/21/79	21	8.4	8.364	10.	6.8	1.263	1.124	7.	7.4	9.5	9.87
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/21/79	21	8.4	7.503	10.	6.8	2.043	1.429	7.	7.4	9.5	9.87
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/21/79	21	0.004	0.031	0.158	0.	0.002	0.045	0.	0.	0.041	0.1
00500 RESIDUE, TOTAL (MG/L)	09/26/72-04/23/79	20	116.	115.3	172.	78.	469.063	21.658	87.2	98.	128.75	137.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-04/23/79	20	57.5	61.15	100.	26.	549.292	23.437	30.3	42.	78.5	98.9
00510 RESIDUE, TOTAL FIXED (MG/L)	09/26/72-04/23/79	19	57.	53.526	108.	10.	617.485	24.849	19.	35.	74.	80.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-04/23/79	20	5.	11.8	48.	0.5	172.984	13.152	0.65	2.25	20.	30.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-04/23/79	20	3.	4.9	16.	0.	22.489	4.742	0.5	1.	8.	13.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-04/23/79	20	2.	6.975	34.	0.	80.197	8.955	0.05	0.625	12.	19.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-04/23/79	20##	0.05	0.13	0.9	0.05	0.037	0.194	0.05	0.05	0.1	0.29
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-04/23/79	20	0.01	0.029	0.34	0.005	0.005	0.074	0.005	0.005	0.02	0.039
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-03/07/79	14	0.49	0.469	1.089	0.025	0.115	0.338	0.025	0.17	0.745	0.994
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-04/23/79	20	0.5	0.555	1.799	0.2	0.145	0.38	0.2	0.3	0.7	1.149
00940 CHLORIDE,TOTAL IN WATER MG/L	09/26/72-04/23/79	20	12.	13.9	32.	7.	31.568	5.619	10.	11.	15.	24.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	20	100.	565.	8000.	50.	3098184.211	1760.166	50.	50.	275.	770.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/21/79	20	2.	2.148	3.903	1.699	0.313	0.559	1.699	1.699	2.433	2.883
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	140.512								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-04/23/79	20##	0.05	0.108	0.5	0.05	0.012	0.112	0.05	0.05	0.1	0.29
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-04/23/79	20##	0.05	0.054	0.27	0.005	0.003	0.057	0.01	0.02	0.05	0.115

** - Less 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: RICH0081

NPS Station ID: RICH0081 LAT/LON: 37.460892/ -77.466254 Agency: 21VASWCB Date Created: / /
Location: HOPKINS ROAD BRIDGE FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FAC003.67 /VA2-07AX0080/VA2-4X0080
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206047 RF1 Mile Point: 3.470 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206004700.19 RF3 Mile Point: 0.53 Distance from RF3: 0.04 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: FALLING CREEK SECTION: 07A TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	65	16.5	16.151	32.2	0.8	73.493	8.573	3.78	8.05	24.4	26.7
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	65	9.	9.331	16.	1.	5.49	2.343	7.24	7.95	10.6	12.08
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	65	7.2	7.208	9.5	6.4	0.246	0.496	6.66	6.95	7.5	7.58
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	65	7.2	7.018	9.5	6.4	0.283	0.532	6.66	6.95	7.5	7.58
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	65	0.063	0.096	0.398	0.	0.007	0.086	0.027	0.032	0.113	0.22
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	62##	0.05	0.099	0.4	0.05	0.008	0.087	0.05	0.05	0.1	0.27
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	62##	0.005	0.01	0.28	0.005	0.001	0.035	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/30/73-03/07/79	50	0.135	0.205	3.1	0.005	0.187	0.432	0.025	0.048	0.23	0.349
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	63	0.4	0.478	1.599	0.05	0.09	0.299	0.2	0.3	0.6	0.8
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/23/77-06/21/79	13	0.12	0.125	0.39	0.01	0.015	0.121	0.016	0.025	0.145	0.374
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/77-10/20/77	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	08/04/73-06/23/77	3##	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	08/04/73-11/17/77	4##	5.	3.875	5.	0.5	5.063	2.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/29/73-11/17/77	7##	5.	5.714	10.	5.	3.571	1.89	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/29/73-11/17/77	7##	5.	15.714	80.	5.	803.571	28.347	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	08/04/73-11/17/77	6##	5.5	6.25	14.	1.	25.175	5.017	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/29/73-11/17/77	6##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/29/73-11/17/77	7	10.	14.286	40.	5.	153.571	12.392	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	62##	50.	175.	2200.	50.	135963.115	368.732	50.	50.	100.	300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	62##	1.699	1.914	3.342	1.699	0.173	0.415	1.699	1.699	2.	2.477
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	82.039								
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/11/74-07/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	63##	0.05	0.062	0.2	0.01	0.001	0.039	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	62##	0.02	0.037	0.4	0.005	0.003	0.053	0.005	0.009	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	05/29/73-11/17/77	7##	0.25	0.25	0.25	0.25	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

EPA Water Quality Criteria Analysis for Station: RICH0081

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	65	1	0.02	19	0	0.00	23	1	0.04	23	0	0.00			
00400	PH	Fresh Chronic	9.	65	1	0.02	19	0	0.00	23	0	0.00	23	1	0.04			
		Other-Lo Lim.	6.5	65	5	0.08	19	1	0.05	23	3	0.13	23	1	0.04			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	62	0	0.00	19	0	0.00	21	0	0.00	22	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	50	0	0.00	17	0	0.00	18	0	0.00	15	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	13	0	0.00	2	0	0.00	4	0	0.00	7	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	50.	3	0	0.00	1	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									
01034	CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	7	1	0.14	1	0	0.00	2	0	0.00	4	1	0.25			
		Drinking Water	1300.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
		Drinking Water	15.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
		Drinking Water	100.	6	0	0.00	1	0	0.00	1	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
		Drinking Water	5000.	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	62	13	0.21	18	4	0.22	22	6	0.27	22	3	0.14			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	1	0	0.00	2	0	0.00	4	0	0.00			
		Drinking Water	2.	7	0	0.00	1	0	0.00	2	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

Annual Analysis for 1973 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	10	18.35	18.39	26.7	3.3	58.121	7.624	4.19	13.025	25.425	26.7
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	10	8.5	9.24	14.	7.6	3.883	1.97	7.6	7.9	10.15	13.66
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	10	6.95	7.01	8.	6.5	0.148	0.384	6.53	6.875	7.025	7.91
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	10	6.947	6.906	8.	6.5	0.16	0.4	6.53	6.875	7.025	7.91
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	10	0.113	0.124	0.316	0.01	0.006	0.078	0.017	0.095	0.134	0.3
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.05	0.1	0.3	0.05	0.007	0.085	0.05	0.05	0.125	0.29
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	10	0.55	0.66	1.599	0.3	0.149	0.386	0.3	0.45	0.775	1.539
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	50.	330.	1600.	50.	287333.333	536.035	50.	50.	475.	1540.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	10##	1.699	2.088	3.204	1.699	0.349	0.591	1.699	1.699	2.608	3.184
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		122.322									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	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

Annual Analysis for 1974 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	11	10.	14.7	27.2	6.7	75.634	8.697	6.7	7.2	25.6	27.1
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	11	9.6	9.2	12.	5.8	4.4	2.098	6.	7.	10.6	12.
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.2	7.1	7.5	6.5	0.11	0.332	6.54	6.8	7.4	7.5
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.2	6.979	7.5	6.5	0.126	0.355	6.54	6.8	7.4	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	11	0.063	0.105	0.316	0.032	0.008	0.088	0.032	0.04	0.158	0.293
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	11##	0.05	0.109	0.3	0.05	0.009	0.097	0.05	0.05	0.1	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	11##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	11	0.5	0.491	0.8	0.3	0.025	0.158	0.3	0.4	0.6	0.78
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	50.	131.818	900.	50.	65136.364	255.218	50.	50.	50.	740.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	1.699	1.84	2.954	1.699	0.145	0.38	1.699	1.699	1.699	2.763
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		69.255									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.05	0.05	0.05	0.	0.	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 1975 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	12	20.55	17.742	26.1	6.7	51.824	7.199	6.7	10.275	24.475	25.95
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	12	9.	9.517	12.8	7.6	3.08	1.755	7.66	7.85	10.9	12.56
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	12	7.05	7.042	7.5	6.5	0.086	0.294	6.53	6.85	7.275	7.44
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	12	7.047	6.945	7.5	6.5	0.097	0.311	6.53	6.85	7.275	7.44
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	12	0.09	0.114	0.316	0.032	0.008	0.087	0.037	0.053	0.144	0.297
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	10	0.1	0.085	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	10	0.4	0.42	0.8	0.2	0.042	0.204	0.2	0.2	0.6	0.78
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	50.	263.636	2200.	50.	414545.455	643.852	50.	50.	100.	1800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	1.699	1.93	3.342	1.699	0.256	0.506	1.699	1.699	2.	3.134
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		85.207									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	10##	0.075	0.095	0.2	0.05	0.004	0.06	0.05	0.05	0.125	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	10##	0.04	0.034	0.05	0.01	0.	0.018	0.01	0.018	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 1976 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	8	23.3	21.163	32.2	3.9	76.557	8.75	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	8	8.85	9.012	10.8	7.4	1.544	1.243	**	**	**	**
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	8	7.4	7.45	8.5	7.	0.266	0.515	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	8	7.389	7.267	8.5	7.	0.304	0.551	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	8	0.041	0.054	0.1	0.003	0.002	0.04	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	7##	0.05	0.1	0.4	0.05	0.018	0.132	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	8	0.45	0.519	1.399	0.05	0.171	0.414	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	7##	50.	171.429	600.	50.	40714.286	201.778	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	7##	1.699	2.025	2.778	1.699	0.191	0.437	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		105.963									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	7##	0.005	0.013	0.04	0.005	0.	0.013	**	**	**	**

** - Less 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 RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	11	10.	11.518	25.	1.1	79.554	8.919	1.16	2.6	20.	24.2
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	11	9.8	8.918	14.4	1.	14.146	3.761	1.68	7.4	11.	14.04
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.5	7.345	8.3	6.5	0.225	0.474	6.56	6.9	7.5	8.14
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	11	7.5	7.115	8.3	6.5	0.283	0.532	6.56	6.9	7.5	8.14
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	11	0.032	0.077	0.316	0.005	0.008	0.092	0.01	0.032	0.126	0.285
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	11##	0.05	0.115	0.4	0.05	0.012	0.111	0.05	0.05	0.2	0.36
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	11	0.3	0.404	1.299	0.05	0.128	0.358	0.06	0.2	0.4	1.199
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	50.	86.364	300.	50.	7045.455	83.937	50.	50.	50.	280.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	11##	1.699	1.824	2.477	1.699	0.079	0.282	1.699	1.699	1.699	2.442
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		66.749									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	11##	0.05	0.065	0.2	0.01	0.002	0.049	0.018	0.05	0.05	0.18
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	11##	0.005	0.045	0.4	0.005	0.014	0.118	0.005	0.005	0.01	0.328

** - Less 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 RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	8	17.	16.85	28.	0.8	86.251	9.287	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	8	8.25	9.4	16.	6.8	9.534	3.088	**	**	**	**
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	8	7.3	7.538	9.5	7.	0.697	0.835	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	8	7.289	7.245	9.5	7.	0.795	0.891	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	8	0.051	0.057	0.1	0.	0.002	0.04	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	8##	0.075	0.1	0.3	0.05	0.007	0.085	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	8	0.4	0.463	0.9	0.2	0.071	0.267	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	8##	50.	87.5	300.	50.	7678.571	87.627	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	8##	1.699	1.834	2.477	1.699	0.079	0.28	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		68.213									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	8##	0.008	0.011	0.02	0.005	0.	0.007	**	**	**	**

** - Less 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 RICH0081

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	5	12.	12.1	24.	4.	73.05	8.547	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	5	10.	10.66	12.2	9.2	1.828	1.352	**	**	**	**
00400	PH (STANDARD UNITS)	03/30/73-06/21/79	5	7.2	7.02	7.5	6.4	0.207	0.455	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	5	7.2	6.828	7.5	6.4	0.253	0.503	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	5	0.063	0.148	0.398	0.032	0.024	0.155	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	5##	0.005	0.06	0.28	0.005	0.015	0.123	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	5	0.3	0.32	0.5	0.2	0.012	0.11	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	4##	50.	87.5	200.	50.	5625.	75.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	4##	1.699	1.849	2.301	1.699	0.091	0.301	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		70.711									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	5	0.01	0.012	0.02	0.01	0.	0.004	**	**	**	**

** - Less 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 10/14 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	19	24.4	22.489	28.3	2.6	35.794	5.983	14.4	21.	26.7	28.
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	19	8.	7.847	10.6	4.4	1.958	1.399	5.8	7.4	8.6	10.4
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	19	7.2	7.279	8.5	6.5	0.224	0.473	6.8	7.	7.5	8.
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	19	7.2	7.094	8.5	6.5	0.26	0.51	6.8	7.	7.5	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	19	0.063	0.08	0.316	0.003	0.005	0.072	0.01	0.032	0.1	0.158
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	18	0.1	0.139	0.4	0.05	0.015	0.124	0.05	0.05	0.225	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	19##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	19	0.6	0.608	1.599	0.05	0.157	0.396	0.2	0.3	0.8	1.399
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	18##	50.	155.556	1000.	50.	62026.144	249.05	50.	50.	125.	640.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	18##	1.699	1.932	3.	1.699	0.164	0.405	1.699	1.699	2.075	2.8
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	85.418								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	19##	0.05	0.066	0.2	0.05	0.001	0.037	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	18##	0.04	0.034	0.1	0.005	0.001	0.025	0.005	0.009	0.05	0.055

** - Less 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: 10/15 to 3/15 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	23	6.7	7.643	16.7	0.8	23.215	4.818	1.22	3.9	12.	15.84
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	23	11.	10.843	16.	1.	8.367	2.893	8.	9.6	12.2	14.24
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	23	7.	7.083	8.3	6.4	0.197	0.444	6.5	6.7	7.4	7.5
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	23	7.	6.904	8.3	6.4	0.23	0.48	6.5	6.7	7.4	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	23	0.1	0.125	0.398	0.005	0.012	0.109	0.032	0.04	0.2	0.316
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	22	0.085	0.099	0.3	0.05	0.006	0.074	0.05	0.05	0.1	0.27
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	21##	0.005	0.019	0.28	0.005	0.004	0.06	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	22	0.35	0.393	0.9	0.05	0.038	0.195	0.2	0.275	0.5	0.67
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	22##	50.	259.091	2200.	50.	297056.277	545.029	50.	50.	200.	1210.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	22##	1.699	1.995	3.342	1.699	0.246	0.496	1.699	1.699	2.301	2.986
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	98.839								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	22##	0.05	0.064	0.2	0.01	0.002	0.046	0.05	0.05	0.05	0.17
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	22##	0.015	0.045	0.4	0.005	0.007	0.083	0.005	0.009	0.05	0.085

** - Less 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: 3/16 to 6/30 - Station RICH0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/73-06/21/79	23	20.	19.422	32.2	8.9	39.745	6.304	9.4	15.	25.	26.92
00300 OXYGEN, DISSOLVED MG/L	03/30/73-06/21/79	23	8.8	9.043	12.	7.	1.623	1.274	7.48	7.9	10.	10.6
00400 PH (STANDARD UNITS)	03/30/73-06/21/79	23	7.2	7.274	9.5	6.5	0.311	0.558	6.84	7.	7.5	7.5
00400 CONVERTED PH (STANDARD UNITS)	03/30/73-06/21/79	23	7.2	7.099	9.5	6.5	0.343	0.586	6.84	7.	7.5	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/30/73-06/21/79	23	0.063	0.08	0.316	0.	0.004	0.065	0.032	0.032	0.1	0.145
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/30/73-06/21/79	22##	0.05	0.066	0.2	0.05	0.001	0.036	0.05	0.05	0.063	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/30/73-06/21/79	22##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/30/73-06/21/79	22	0.4	0.45	1.299	0.1	0.068	0.261	0.2	0.3	0.5	0.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	22##	50.	106.818	900.	50.	35070.346	187.271	50.	50.	50.	270.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/30/73-06/21/79	22##	1.699	1.819	2.954	1.699	0.106	0.326	1.699	1.699	1.699	2.424
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	65.882								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/30/73-06/21/79	22##	0.05	0.057	0.2	0.05	0.001	0.032	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/30/73-06/21/79	22##	0.02	0.03	0.1	0.005	0.001	0.026	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