Baseline Water Quality Data

Inventory and Analysis

Zion National Park



Water Resources Division and Servicewide Inventory and Monitoring Program

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

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BASELINE WATER QUALITY DATA

INVENTORY AND ANALYSIS

ZION NATIONAL PARK

National Park Service
Water Resources Division
Fort Collins, CO 80525

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EXECUTIVE SUMMARY

This document presents the results of surface-water-quality data retrievals for Zion National Park (ZION) 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 three industrial/municipal dischargers; four drinking water intakes; 38 active or inactive U. S. Geological Survey (USGS) water gages (including climate, stream, and well); and 11 water impoundments. The results of the STORET retrieval for the study area yielded 61,631 observations for 393 separate parameters collected by the NPS, USGS, EPA, U.S. Forest Service, and Utah Department of Health (UDH) at 375 monitoring stations from 1962 through 1996. Approximately 62 percent of the 61,631 observations collected within the study area were reported by the UDH from 1967 through 1996. Of the 375 stations, 48 stations were located within the park boundary (see Station Period of Record Tabulation). Sixteen stations within the study area (three within the park boundary) 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. Thirty-two stations within the study area (two within the park boundary) yielded longer-term records consisting of multiple observations for several important water quality parameters (see Station Period of Record Tabulation). The stations yielding the longer-term records within the park boundary are: (1) North Fork Virgin River below Zion National Park Wastewater Treatment Plant (ZION 0141); and (2) Virgin River-Zion National Park Narrows (ZION 0137). The stations yielding the longest-term records within the study area, but outside of the park boundary, are: (1) North Fork Virgin River just above Confluence with East Fork Virgin River (ZION 0192); (2) La Verkin Creek at the U17 Crossing north of La Verkin (ZION 0276); (3) Virgin River near Hurricane, Utah (ZION 0331); (4) Virgin River at Virgin, Utah (ZION 0258); and (5) Virgin River at the U-15 Crossing west of Hurricane (ZION 0330)[†].

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 ZION water quality criteria screen found 24 groups of parameters that exceeded screening criteria at least once within the study area. Dissolved oxygen, pH, chloride, chlorine, arsenic, cadmium, chromium, copper, mercury, selenium, silver, and zinc exceeded their respective EPA

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

criteria for the protection of freshwater aquatic life. Chloride, fluoride, nitrate, nitrite, nitrite plus nitrate, sulfate, antimony, arsenic, cadmium, lead, mercury, nickel, selenium, and uranium exceeded their respective EPA drinking water criteria. Fecal-indicator bacteria concentrations (total coliform and fecal coliform) and turbidity exceeded the WRD screening limits for freshwater bathing and aquatic life, respectively.

Dissolved oxygen concentrations were measured 1,474 times at 142 monitoring stations from 1973 through 1996. Forty-five observations at 13 stations were less than or equal to the 4 milligrams per liter (mg/L) EPA criterion for the protection of freshwater aquatic life from 1974 through 1996. All but three of the observations exceeding this criterion were collected from reservoir/lakes and hot springs.

The pH was measured 2,698 times at 329 monitoring stations from 1962 through 1996. One-hundred-fifteen observations at 30 stations were outside the pH range of 6.5 to 9.0 standard units (SU) (EPA chronic criteria for freshwater aquatic life). Ninety-two observations were greater than or equal to pH 9.0 and 23 observations were less than or equal to pH 6.5. Approximately 63 percent of the observations greater than or equal to pH 9.0 were reported at nine stations in Navajo Lake (ZION 0045, ZION 0047, ZION 0055, ZION 0056, ZION 0059, ZION 0061, ZION 0072, ZION 0074, ZION 0084) from 1975 through 1994. The highest reported pH of 10.2 SU occurred at Hurricane Lagoons Effluent (ZION 0308) in May 1978. The lowest pH of 6.1 SU was reported at five stations (ZION 0032, ZION 0192, ZION 0272, ZION 0273, ZION 0277) from 1974 through 1994.

Turbidity was measured 986 times at 106 monitoring stations from 1973 through 1996. Of the 983 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 247 observations at 25 stations equaled or exceeded the WRD screening criterion of 50 Jackson Candle/Formazin/Nephelometric Turbidity Units (JTU/FTU/NTU) from 1974 through 1996. The highest reported value was 8,930 FTU in La Verkin Creek at the State Route 17 Bridge, north of La Verkin (ZION 0276), in April 1983.

Total coliform concentrations were measured 309 times at 46 monitoring stations from 1967 through 1996. One-hundred-forty-seven observations at 31 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 1984. Approximately half of the observations exceeding this criterion were collected from the North Fork of the Virgin River both inside and upstream of the park. The highest reported value was at least 2,400,000 MPN/100 ml at Hurricane Lagoons Effluent (ZION 0308) in April 1980. Fecal coliform concentrations were determined 353 times at 58 monitoring stations from 1971 through 1996. Of the 350 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 99 observations at 28 stations equaled or exceeded the WRD bathing water screening criterion of 200 CFU/MPN/100 ml from 1967 through 1984. Approximately 40 percent of the observations exceeding this criterion were collected from the North Fork of the Virgin River both inside and upstream of the park. The highest reported value was at least 2,400,000 MPN/100 ml at Hurricane Lagoons Effluent (ZION 0308) in April 1980.

Chloride concentrations (including dissolved and total) were measured 1,443 times at 265 monitoring stations from 1962 through 1996. One-hundred-twenty-four observations at 21 stations equaled or exceeded the secondary drinking water criterion of 250 mg/L. Twelve of these 124 concentrations also exceeded the acute freshwater criterion of 860 mg/L. Approximately 52 percent of the observations exceeding the secondary drinking water criterion were reported at one station in the Virgin River west of Hurricane (ZION 0330) from 1982 through 1996. The highest reported concentration was 4,100 mg/L in the Virgin River at La Verkin hot springs (ZION 0273) in August 1981.

Total residual chlorine concentrations were measured 12 times at three monitoring stations (ZION 0140, ZION 0308, ZION 0363) from 1977 through 1981. Seven observations, ranging from 0.10 mg/L to 3.00 mg/L, in the North Fork Virgin River above the Zion National Park Water Treatment Plant (ZION 0140), exceeded the acute freshwater criterion of 0.019 mg/L during 1977. The highest reported concentration of 3.00 mg/L was reported in August 1977.

Dissolved fluoride concentrations were measured 514 times at 223 monitoring stations from 1962 through 1990. One concentration of 111 mg/L in the Virgin River near Rockville (ZION 0205) exceeded the drinking water criterion of 4 mg/L in October 1980.

Sulfate concentrations (including dissolved and total) were measured 1,325 times at 262 monitoring stations from 1962 through 1996. Three-hundred-sixty-one observations at 74 stations equaled or exceeded the secondary drinking water criterion of 250 mg/L from 1964 through 1996. The highest reported concentration was 5,412 mg/L in South Creek below South Creek Reservoir (ZION 0177) in July 1994.

Nitrate concentrations (including dissolved and total as N and dissolved as NO_3) were measured 768 times at 106 monitoring stations from 1962 through 1990. Thirteen dissolved and total as N concentrations at ten stations, in the Virgin River (ZION 0277, ZION 0278, ZION 0330, ZION 0332), Zion Park Wastewater Treatment Plant (WWTP) Effluent Outfall (ZION 0180), East Fork Virgin River (ZION 0022, ZION 0035), North Fork Virgin River (ZION 0174), La Verkin Creek (ZION 0283), and Ash Creek (ZION 0303), exceeded the drinking water criterion of 10 mg/L for nitrate as N from 1973 through 1984. The highest reported concentration was 12,850 mg/L at Zion Park WWTP Effluent Outfall (ZION 0180) in October 1973.

Nitrite concentrations (including dissolved and total as N and dissolved as NO_2) were measured 614 times at 75 monitoring stations from 1973 through 1990. One dissolved as N concentration of 2.334 mg/L at Zion Park WWTP Effluent Outfall (ZION 0180) exceeded the drinking water criterion of 1.0 mg/L for nitrite as N in July 1974.

Nitrite plus nitrate concentrations (including dissolved and total) were measured 975 times at 168 monitoring stations from 1972 through 1996. One total concentration of 26.75 mg/L at Zion Park WWTP Influent (ZION 0139) exceeded the drinking water criterion of 10 mg/L in January 1978.

Dissolved antimony concentrations were measured five times at five monitoring stations (ZION 0183, ZION 0188, ZION 0193, ZION 0249, ZION 0255) in 1981. Three observations of 30 micrograms per liter (µg/L) at three stations, in the Virgin River (ZION 0183, ZION 0193) and North Creek (ZION 0249), exceeded the drinking water criterion of 6 µg/L during August 1981.

Arsenic concentrations (including dissolved and total) were measured 744 times at 99 monitoring stations from 1973 through 1996. Seven observations, ranging from 50 µg/L to 400 µg/L, at four stations, near La Verkin hot springs (ZION 0272, ZION 0279) and in the Virgin River (ZION 0278, ZION 0332), equaled or exceeded the drinking water criterion of 50 µg/L in 1974. The highest of these seven concentrations, 400 µg/L near La Verkin hot springs (ZION 0279), also exceeded the acute freshwater criterion of 360 µg/L in June 1983.

Cadmium concentrations (including dissolved and total) were measured 732 times at 99 monitoring stations from 1973 through 1996. Of the 731 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), ten observations at ten stations, in the Virgin River (ZION 0270, ZION 0278, ZION 0330, ZION 0332), East Fork Virgin River (ZION 0035), near La Verkin hot springs (ZION 0272), La Verkin Creek (ZION 0283), Quail Creek (ZION 0328), a spring near Glendale (ZION 0013), and North Creek (ZION 0244), exceeded the acute freshwater criterion of 3.9 µg/L from 1974 through 1987. Seven of these ten observations also equaled or exceeded the drinking water criterion of 5.0 µg/L. The highest reported concentration was 42 µg/L near La Verkin hot springs (ZION 0272) in May 1974.

Chromium concentrations (including dissolved, hexavalent, and total) were measured 827 times at 99 monitoring stations from 1973 through 1996. Two hexavalent concentrations, 52 µg/L in the North Fork Virgin River above the Zion National Park Water Treatment Plant (ZION 0140) and 20 µg/L in a lake near Springdale (ZION 0185), exceeded the acute freshwater criterion of 16 µg/L in May 1977 and August 1986, respectively.

Copper concentrations (including dissolved and total) were measured 747 times at 105 monitoring stations from 1962 through 1996. Forty-five observations at 20 stations equaled or exceeded the acute freshwater criterion of 18

µg/L from 1974 through 1991. The highest reported concentration was 150 µg/L in the Virgin River west of Hurricane (ZION 0330) in September 1990.

Lead concentrations (including dissolved and total) were measured 750 times at 105 monitoring stations from 1962 through 1996. Twenty-one observations at 14 stations equaled or exceeded the drinking water criterion of 15 µg/L from 1962 through 1991. The highest reported concentration was 70 µg/L in the Virgin River near La Verkin hot springs (ZION 0275) in March 1976.

Mercury concentrations (including dissolved and total) were measured 730 times at 99 monitoring stations from 1973 through 1996. Eleven observations at nine stations, in the Virgin River (ZION 0137, ZION 0253, ZION 0275), East Fork Virgin River (ZION 0186, ZION 0195), North Fork Virgin River (ZION 0196), North Creek (ZION 0243), La Verkin Creek (ZION 0286), and a spring near Hurricane (ZION 0291), equaled or exceeded the drinking water criterion of 2.0 µg/L from 1976 through 1988. Ten of these 11 concentrations also equaled or exceeded the acute freshwater criterion of 2.4 µg/L. The highest reported concentration was 11 µg/L in La Verkin Creek at the State Route 17 Bridge, north of La Verkin (ZION 0286), in March 1976.

Nickel concentrations (including dissolved and total) were measured 237 times at 63 monitoring stations from 1973 through 1989. Two concentrations, 130 µg/L in the East Fork Virgin River at Mt. Carmel Junction (ZION 0035) and 115 µg/L in the Virgin River above Washington Lagoons (ZION 0354), exceeded the drinking water criterion of 100 µg/L in September 1982 and July 1974, respectively.

Selenium concentrations (including dissolved, total, and acid soluble) were measured 791 times at 101 monitoring stations from 1973 through 1996. Three dissolved observations at two stations, in the North Fork Virgin River at Zion National Park Headquarters (ZION 0176) and South Creek below South Creek Reservoir (ZION 0177), exceeded the acute freshwater criterion of 20 µg/L and also equaled or exceeded the drinking water criterion of 50 µg/L from 1976 through 1995. The highest reported concentration was 77 µg/L in the North Fork Virgin River at Zion National Park Headquarters (ZION 0176) in July 1976.

Silver concentrations (including dissolved and total) were measured 717 times at 92 monitoring stations from 1973 through 1996. Eleven observations at ten stations, in the Virgin River (ZION 0137, ZION 0232, ZION 0255), springs near Glendale (ZION 0012, ZION 0013), East Fork Virgin River (ZION 0035, ZION 0186), La Verkin Creek (ZION 0246), a spring near Alton (ZION 0001), and North Fork Virgin River at Zion National Park Headquarters (ZION 0176), exceeded the acute freshwater criterion of 4.1 µg/L from 1974 through 1989. The highest reported concentration was 42 µg/L in the East Fork Virgin River just above the confluence with the North Fork Virgin River (ZION 0186) in December 1985.

Dissolved uranium concentrations were measured 54 times at 54 monitoring stations from 1975 through 1980. One reported concentration of 40.245 µg/L in a stream west of Zion National Park (ZION 0230) exceeded the drinking water criterion of 20 µg/L in July 1980.

Zinc concentrations (including dissolved and total) were measured 740 times at 105 monitoring stations from 1962 through 1996. Fifteen observations at 14 stations equaled or exceeded the acute freshwater criterion of 120 µg/L from 1964 through 1990. The highest reported concentration was 820 µg/L at a spring near St. George City (ZION 0356) in August 1989.

The IDEA conducted for ZION indicates that STORET data exist for all 13 Level I parameter groups in the study area. For the groups Alkalinity, Dissolved Oxygen, Clarity/Turbidity, Nitrate/Nitrogen, Phosphate/Phosphorus, Sulfates/Total Dissolved Solids/Hardness, and Toxic Elements, at least 60 percent of the observations were recorded since 1985. For the group Bacteria, only 8.3 percent of the observations were recorded since 1985. Data for the groups Dissolved Oxygen, Flow, Clarity/Turbidity, Phosphate/Phosphorus, Chlorophyll, Bacteria, and Toxic Elements were recorded at less than half of the 375 monitoring stations. Relative to other parameter groups, data were limited for the groups Chlorophyll and Bacteria. Results for 67 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 ZION study area include the Virgin, North Fork Virgin, East Fork Virgin, and Santa Clara Rivers; Navajo Lake, Quail Creek, Ash Creek, Kolob, Blue Springs, and other smaller reservoirs; La Verkin, Ash, North, Deep, and numerous other smaller creeks; La Verkin and other springs; and Coalpits Wash and many other intermittent streams. The data inventories and analyses contained in this report indicate that surface waters within the study area generally appear good with some impact from human activities. Potential anthropogenic sources of contaminants include municipal wastewater discharges; residential development; agricultural activities; stormwater runoff; recreational use; atmospheric deposition; and mining operations.

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INTRODUCTION

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

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

Goal

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

Purpose

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

Objectives

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

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

2. Develop a complete inventory of all retrieved data;

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

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

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

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

Document Overview

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

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

Caveats

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

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

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

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

Key Personnel

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

National Park Service, Water Resources Division:

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

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

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

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

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

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

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

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

Jacquie Nolan designed the cover.

Horizon Systems:

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

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

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

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

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

Other National Park Service:

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

METHODOLOGY

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

Delineation of Park Study Area

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

Data Sources

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

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

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

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

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

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

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

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

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

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

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

Data Retrieval and Analysis Procedures

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

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

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

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

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

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

Park Unit Databases

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

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

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

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

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

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

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

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

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

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

Screening Methodologies and Procedures

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

STORET Edit Criteria

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

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

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

Date Screen

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

Station Type Screen

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

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

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

Phase 0 Parameter Screen

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

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

Phase 1 Parameter Screen

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

Media Type Screen

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

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

Remark Code Screen

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

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

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

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

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

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

Composite Type Screen

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

Table D. Possible STORET Composite Type Codes

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

Phase 2 Parameter Screen

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

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

Observations/Period of Record Screen

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

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

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

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

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

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

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

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

Statistical Definitions

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

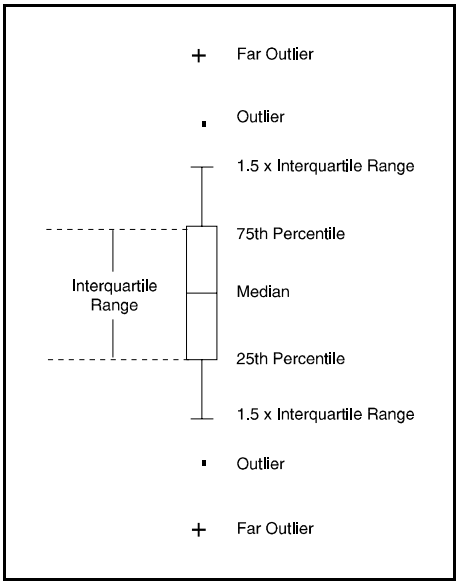
Table H. Definition of Descriptive Statistics Contained in Inventory, Annual, and Seasonal Tables

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

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

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

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



INTERPRETIVE GUIDE

TO WATER QUALITY RESULTS

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

Overview

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

Regional Location Map

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

Water Quality Monitoring Locations Map(s)

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

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

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

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

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

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

Representative Mean Annual Hydrograph for Seasonal Analysis

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

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

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

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

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

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

Contacts for Agency Codes Retrieved

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

Quantity of Data Retrieved by Agency Code

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

Station Period of Record Tabulation

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

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

Parameter Period of Record Tabulation

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

Station/Parameter Period of Record Tabulation

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

Station-By-Station Results

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

Station Inventory for Station

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

Parameter Inventory for Station

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

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

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

EPA Water Quality Criteria Analysis for Station

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

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

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

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

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

Time Series Plots for Station

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

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

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

Annual Analysis for Station

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

Annual Box-and-Whiskers Plots for Station

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

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

Seasonal Analysis for Station

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

Seasonal Box-and-Whiskers Plots for Station

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

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

EPA Water Quality Criteria Analysis for Entire Park Study Area

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

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

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

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

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

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

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

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

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

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

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

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

Water Quality Observations Outside STORET Edit Criteria for Park

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

WATER QUALITY RESULTS

OVERVIEW FOR ZION

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:	1087830	147453
# STORET Stations:	375	48
# Stations With No Data:	16	3
# Stations With No Stat. Analysis:	0	0
# Longer Term Stations:	32	2
Date of STORET Retrieval:	09/29/97	09/29/97
Period of Record:	07/14/62-12/11/96	06/08/64-11/10/93
# Parameters Measured:	393	161
# Water Quality Observations:	61631	5718
# Industrial/Municipal Facilities:	3	0
# Drinking Water Intakes:	4	0
# Water Gages:	38	6
# Water Impoundments:	11	2
# Total Plots:	103	4
# Time Series:	45	0
# Annual:	28	1
# Seasonal:	30	3

Hydrologic Definition of Seasons:

1. July 1 - March 19
2. March 20 - May 9
3. May 10 - June 30

Time Series Plot Criteria:

To be included in the time series plots, a station/parameter combination must have at least 15 years and at least 80 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 4 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.

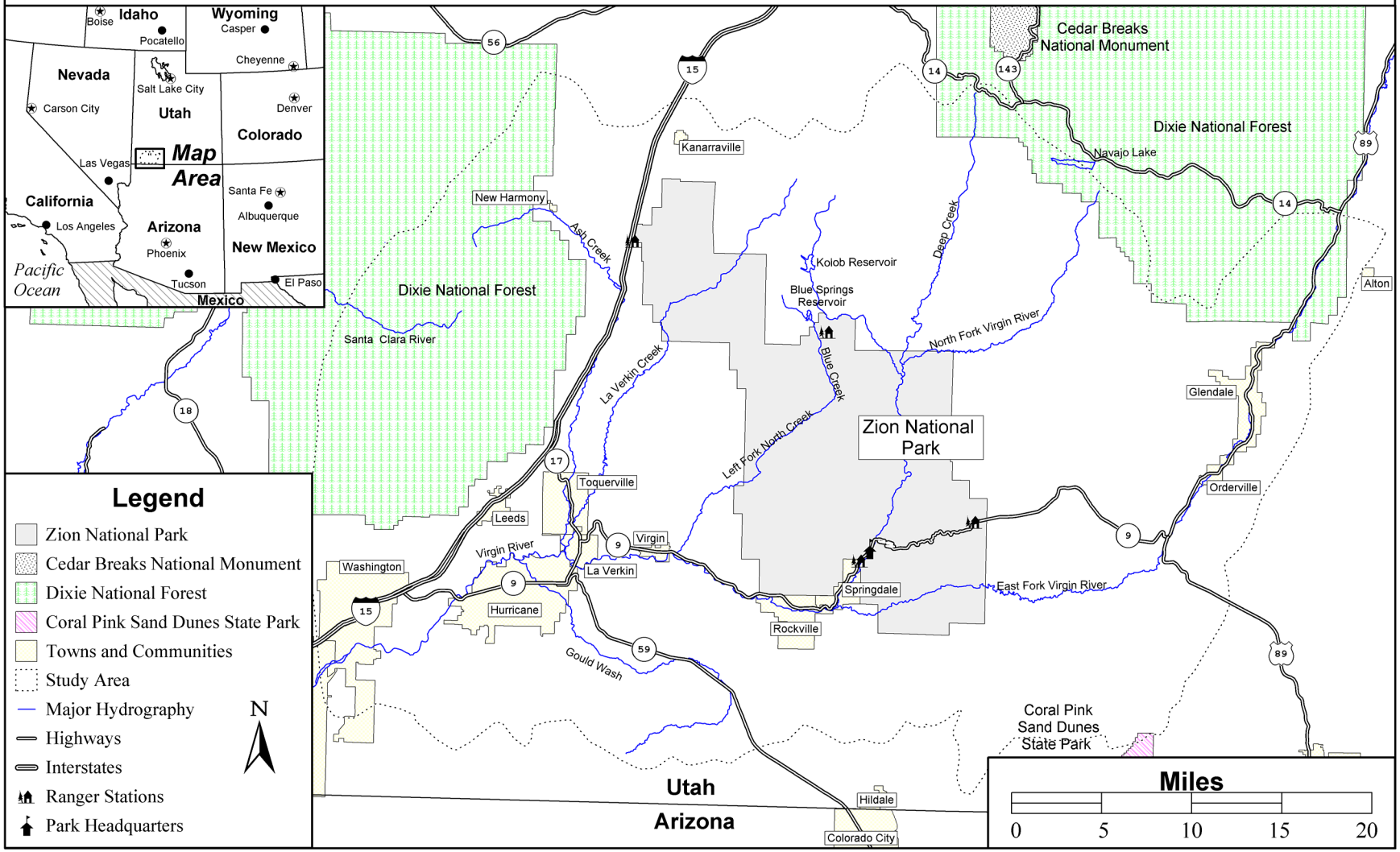
Seasonal Analysis Criteria:

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 17 years and observations in at least 4 of the 17 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.

Zion National Park

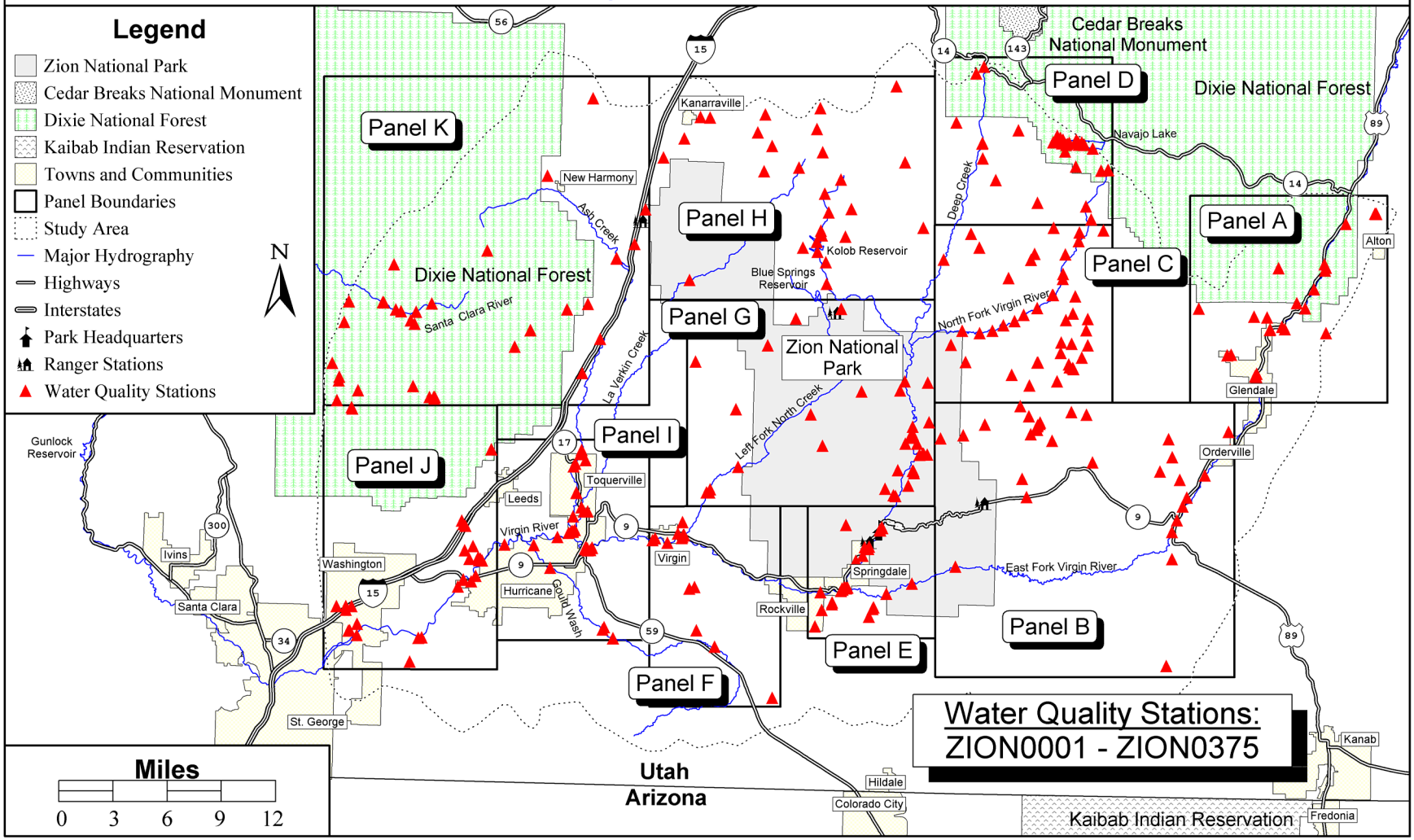
Regional Location Map



Zion National Park

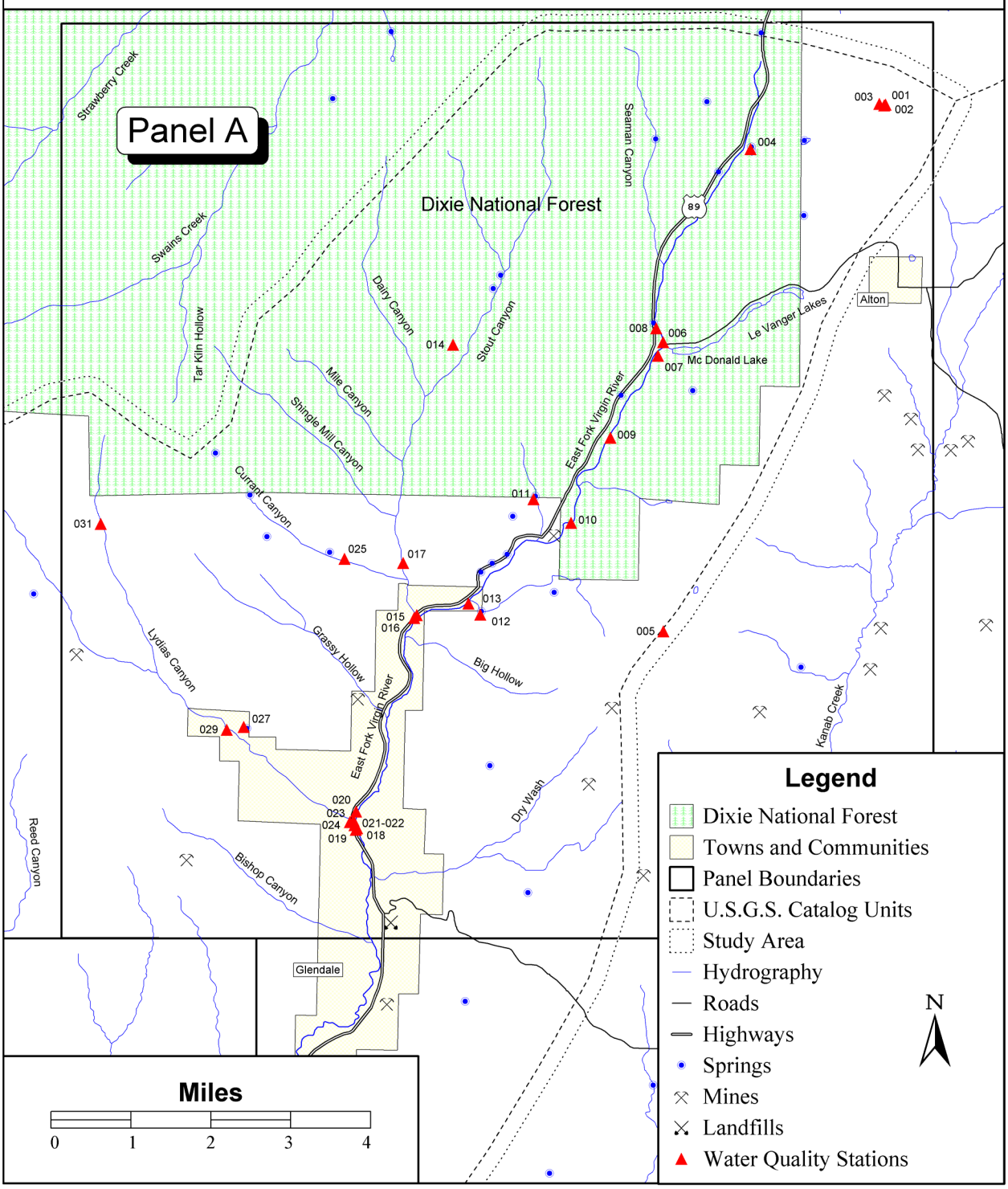
Water Quality Monitoring Locations

Graphic Panel Index



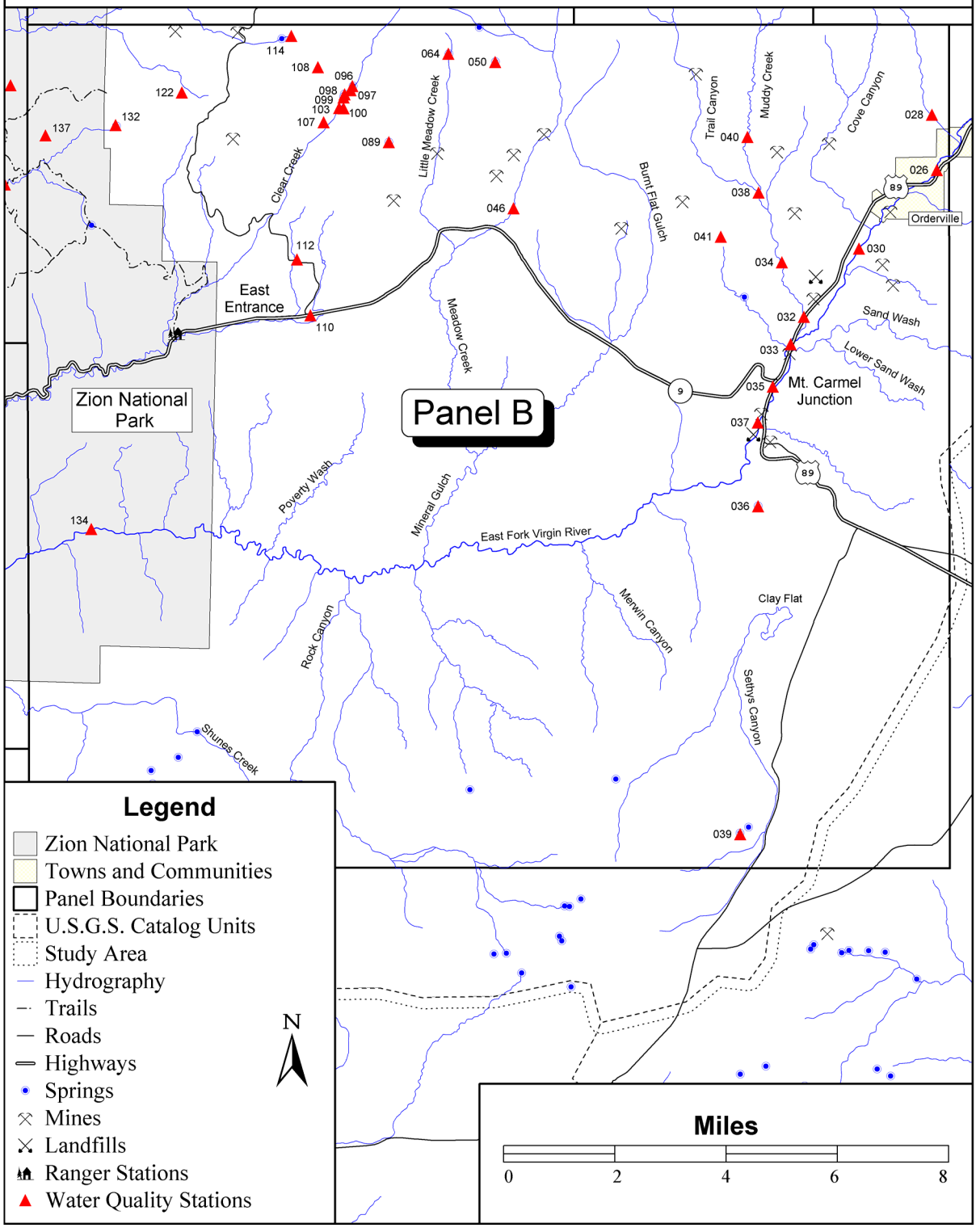
Zion National Park

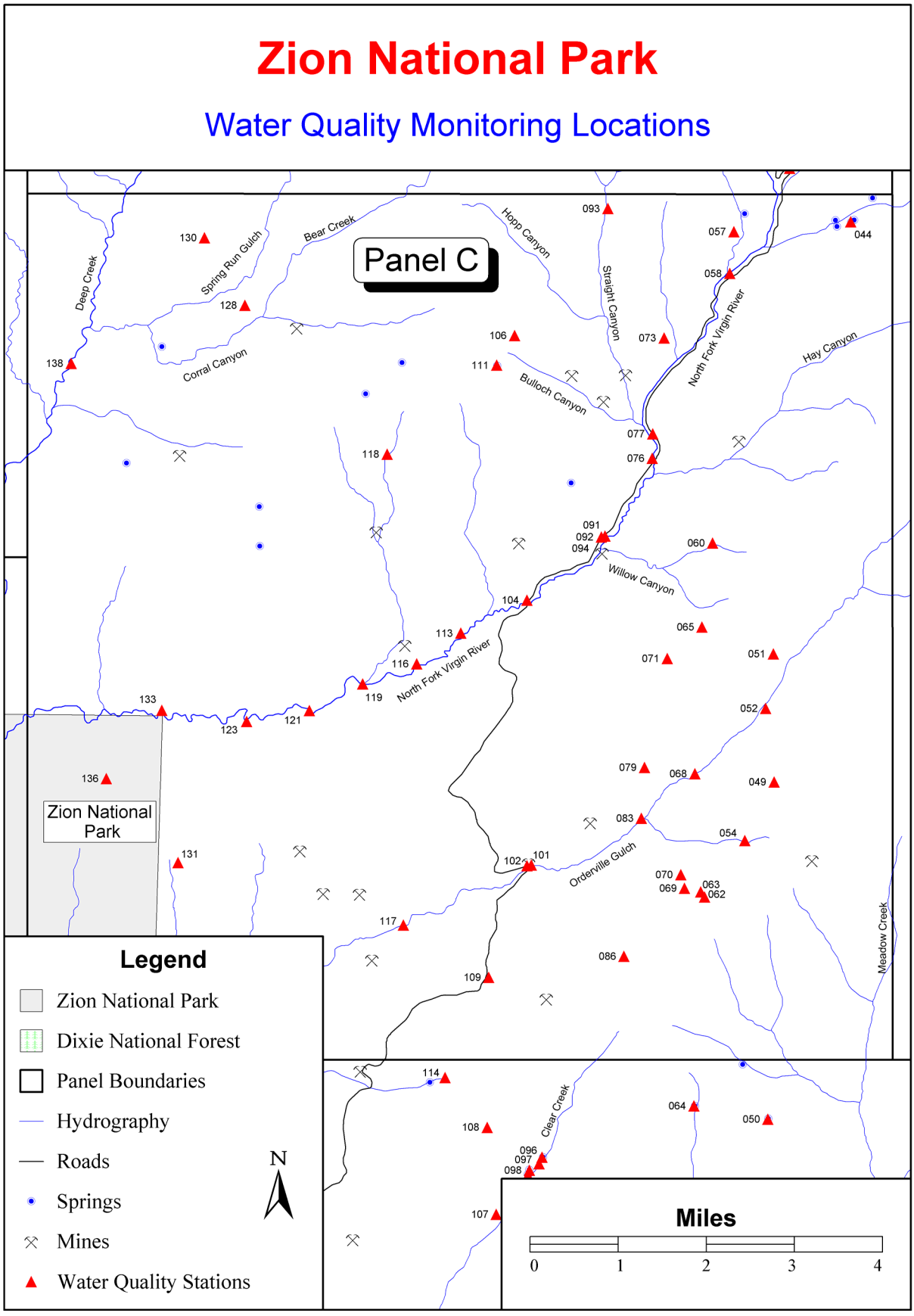
Water Quality Monitoring Locations



Zion National Park

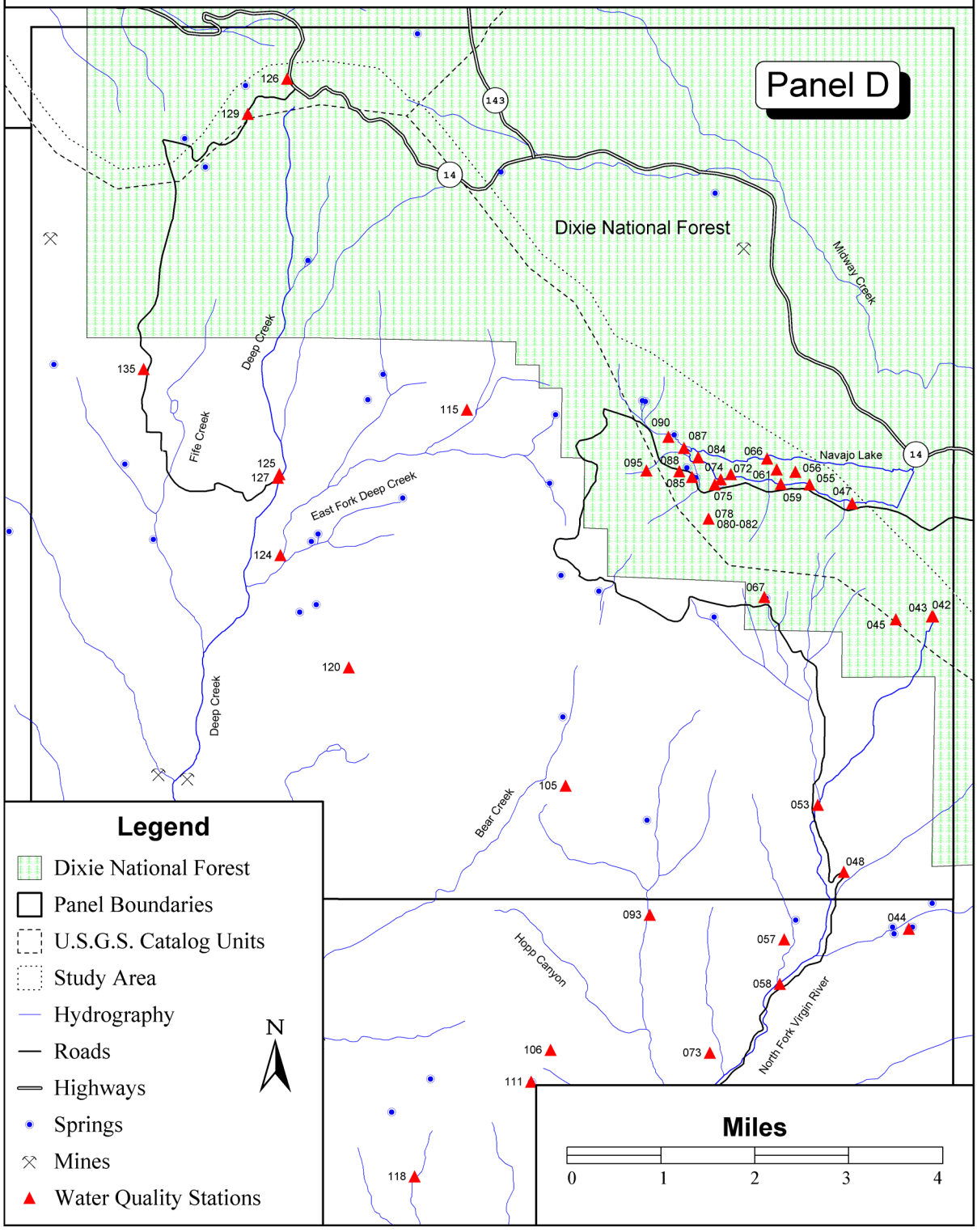
Water Quality Monitoring Locations

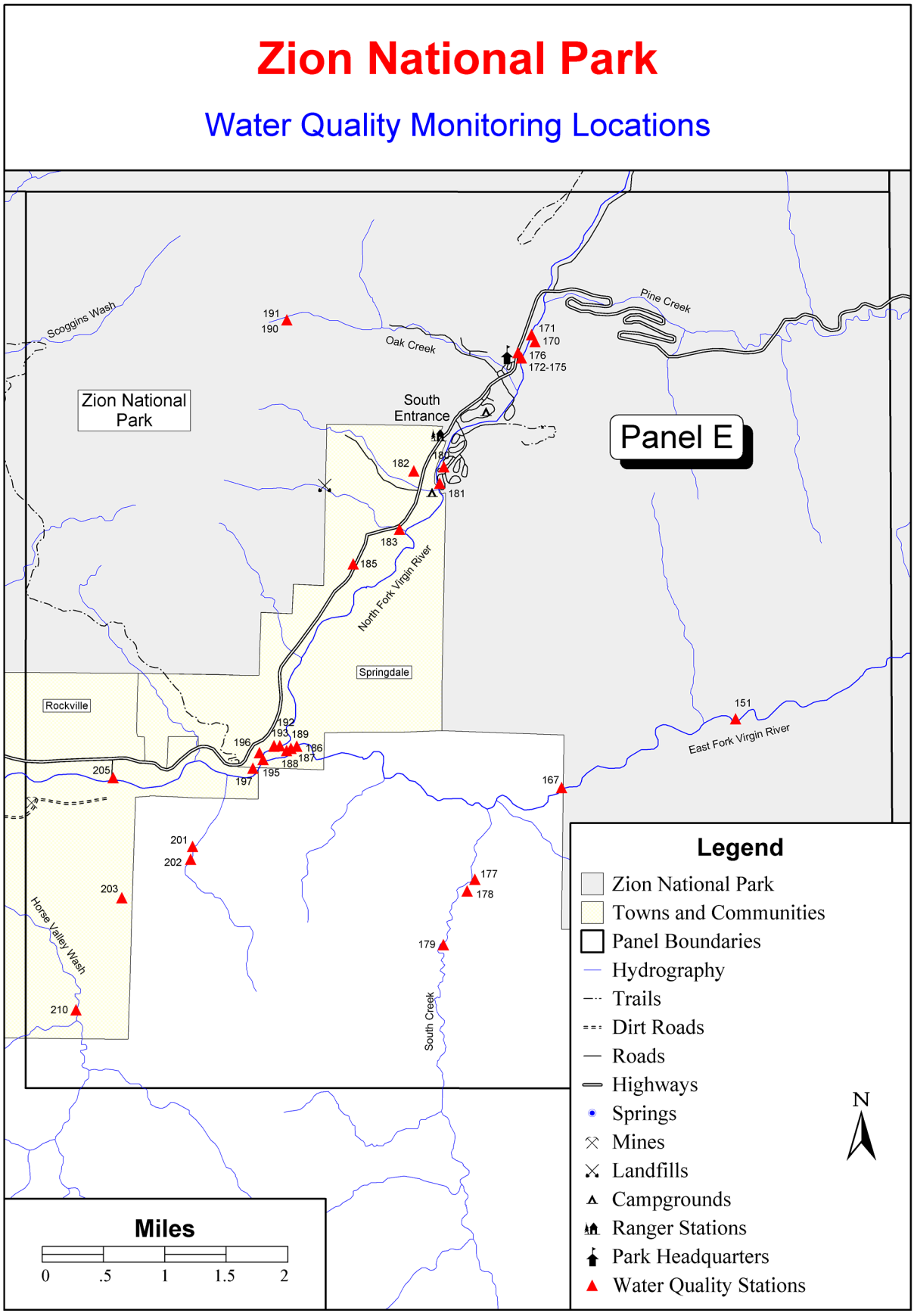


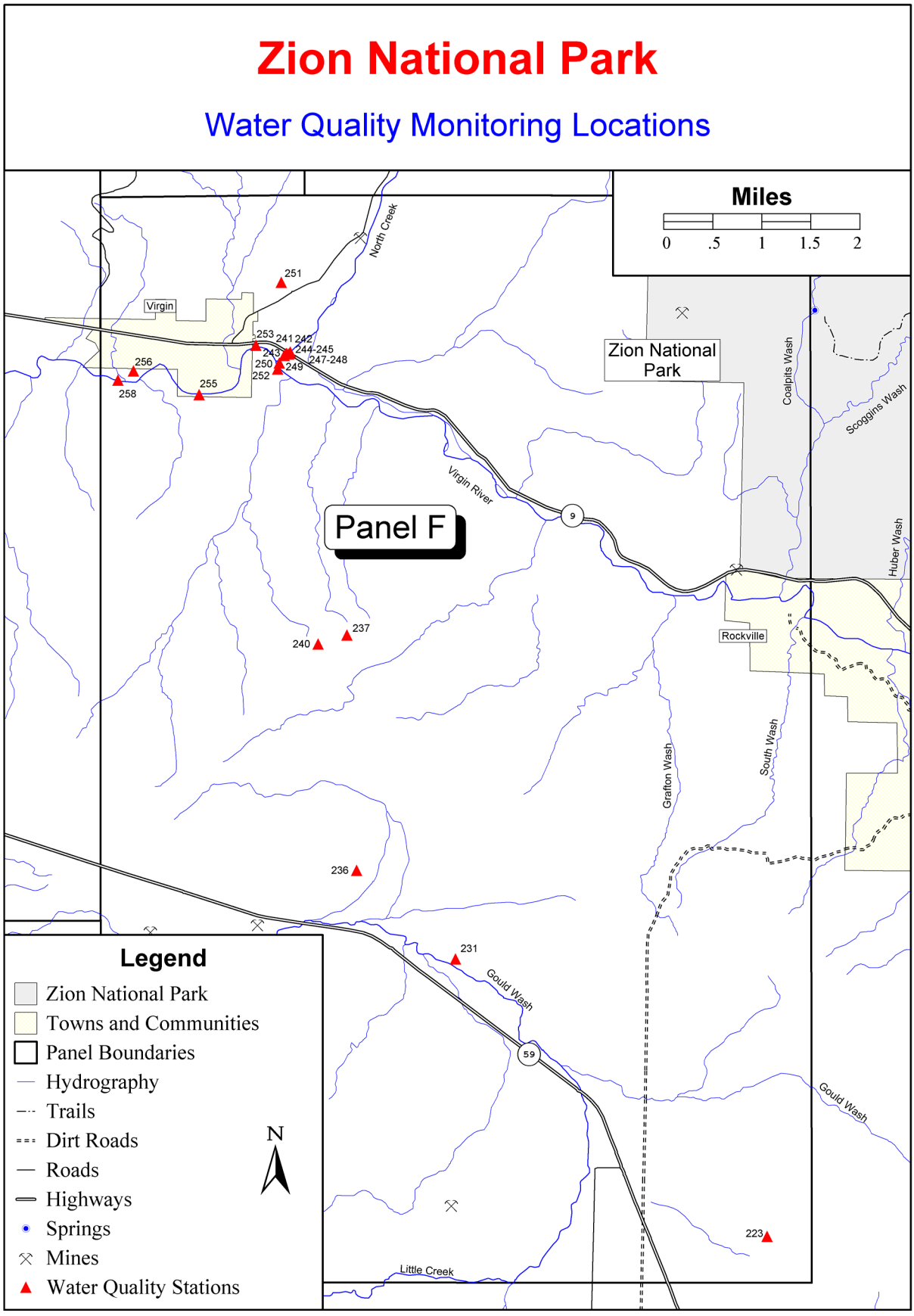

Zion National Park
Water Quality Monitoring Locations
Panel C
Deep Creek
Spring Run Gulch
Bear Creek
Hopp Canyon
Straight Canyon
North Fork Virgin River
Hay Canyon
Corral Canyon
Bulloch Canyon
Willow Canyon
North Fork Virgin River
Orderville Gulch
Meadow Creek
Clear Creek
Zion National Park
130
128
138
106
111
093
057
058
044
073
118
077
076
091
092
094
060
104
113
116
119
065
071
051
133
123
121
052
136
079
068
049
083
054
131
102
101
070
069
063
062
117
086
109
114
108
096
097
098
064
050
107
Legend
Zion National Park
Dixie National Forest
Panel Boundaries
Hydrography
Roads
Springs
Mines
Water Quality Stations
N
Miles
0
1
2
3
4

Zion National Park

Water Quality Monitoring Locations

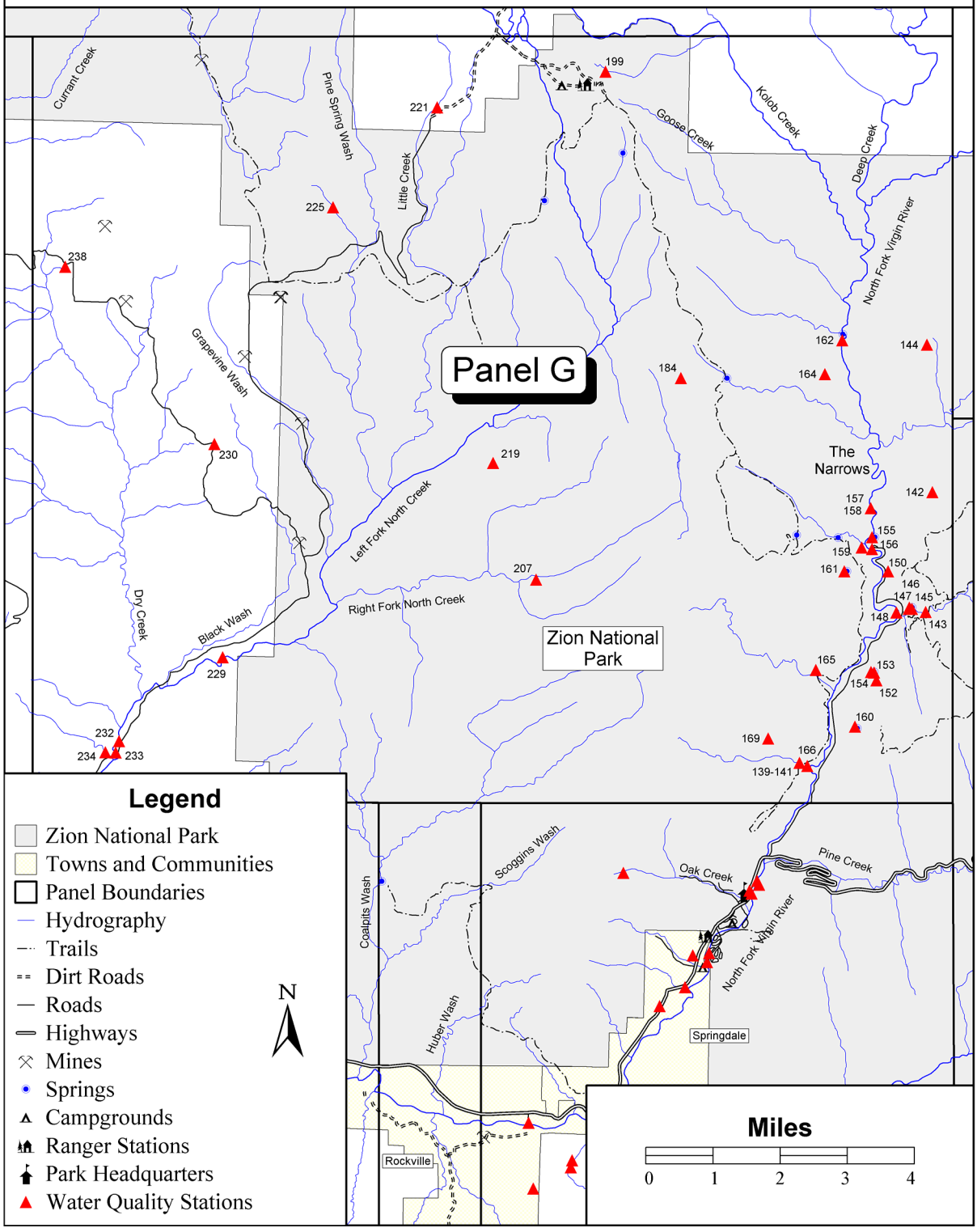


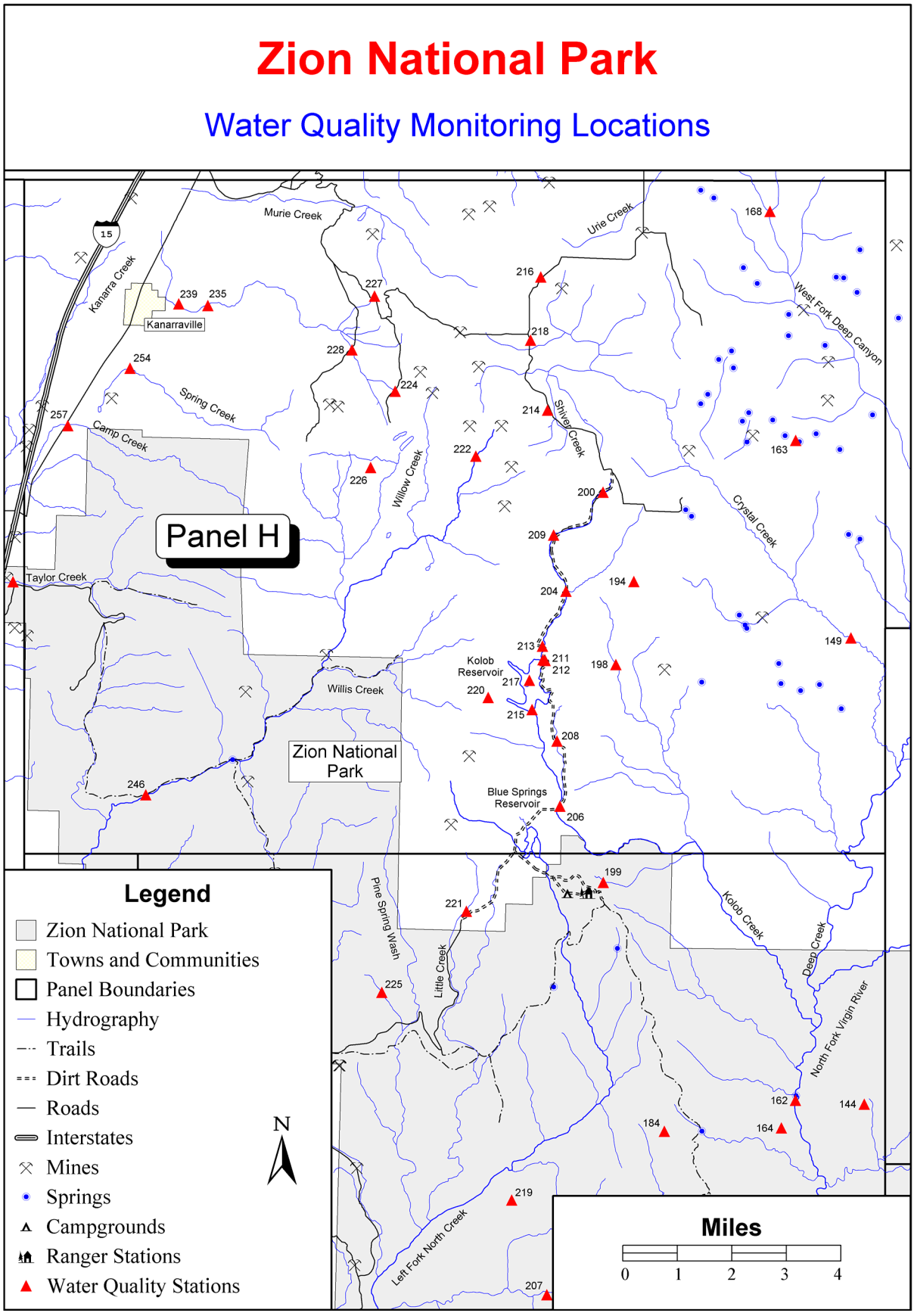

Zion National Park
Water Quality Monitoring Locations
Scoggins Wash
Oak Creek
Pine Creek
Zion National Park
South Entrance
Panel E
North Fork Virgin River
Springdale
Rockville
East Fork Virgin River
Horse Valley Wash
South Creek
191
190
171
170
176
172-175
182
180
181
183
185
192
193
189
196
186
187
188
195
197
205
201
202
203
210
177
178
179
151
167
Legend
Zion National Park
Towns and Communities
Panel Boundaries
Hydrography
Trails
Dirt Roads
Roads
Highways
Springs
Mines
Landfills
Campgrounds
Ranger Stations
Park Headquarters
Water Quality Stations
N
Miles
0
.5
1
1.5
2

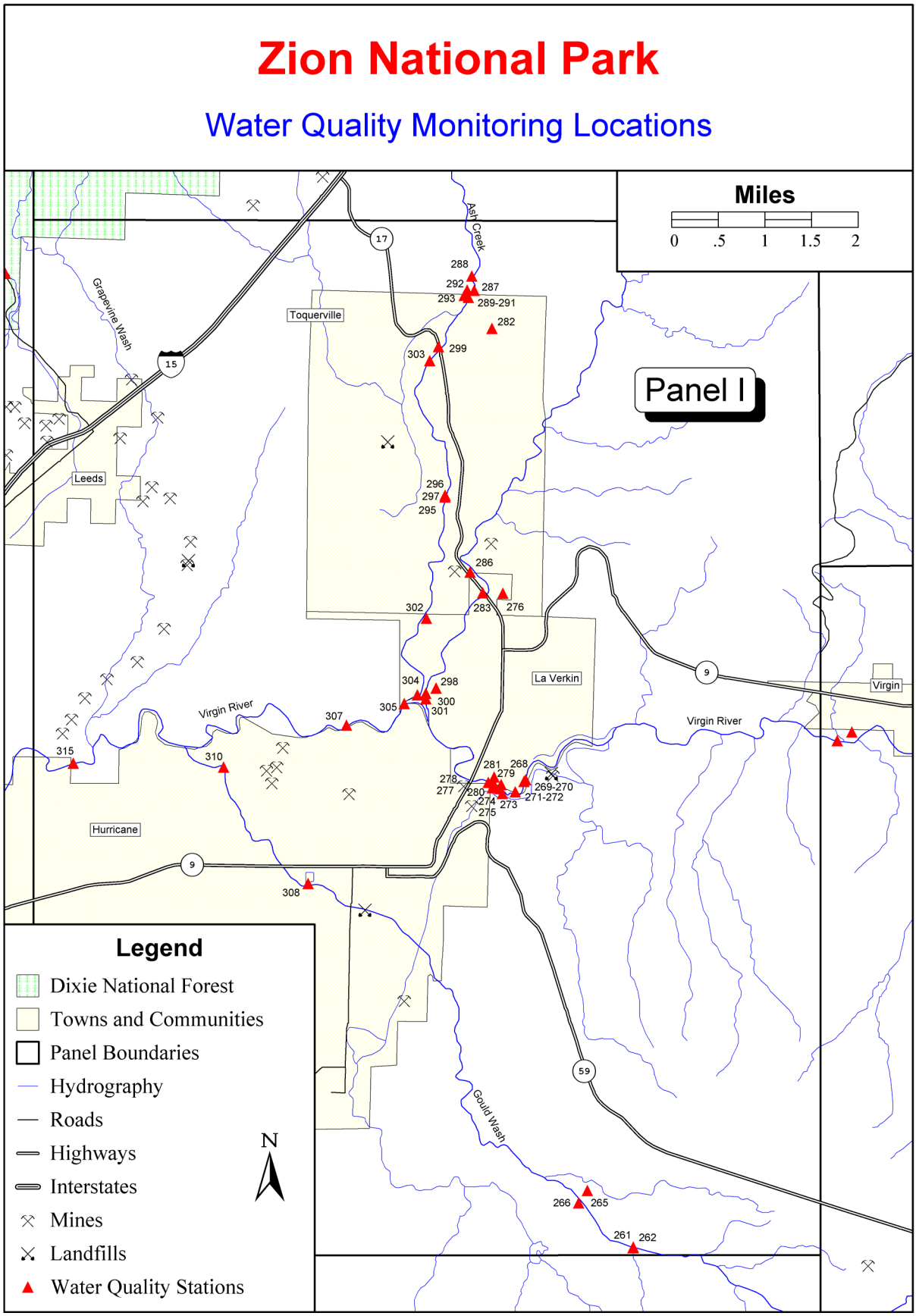

Zion National Park
Water Quality Monitoring Locations
Miles
0 .5 1 1.5 2
Panel F
Zion National Park
Virgin
Rockville
North Creek
Virgin River
Coalpits Wash
Scoggins Wash
Huber Wash
Grafton Wash
South Wash
Gould Wash
Little Creek
9
59
251
253
241 242
243
244-245
247-248
250
249
252
256
258
255
240
237
236
231
223
Legend
Zion National Park
Towns and Communities
Panel Boundaries
Hydrography
Trails
Dirt Roads
Roads
Highways
Springs
Mines
Water Quality Stations
N

Zion National Park

Water Quality Monitoring Locations

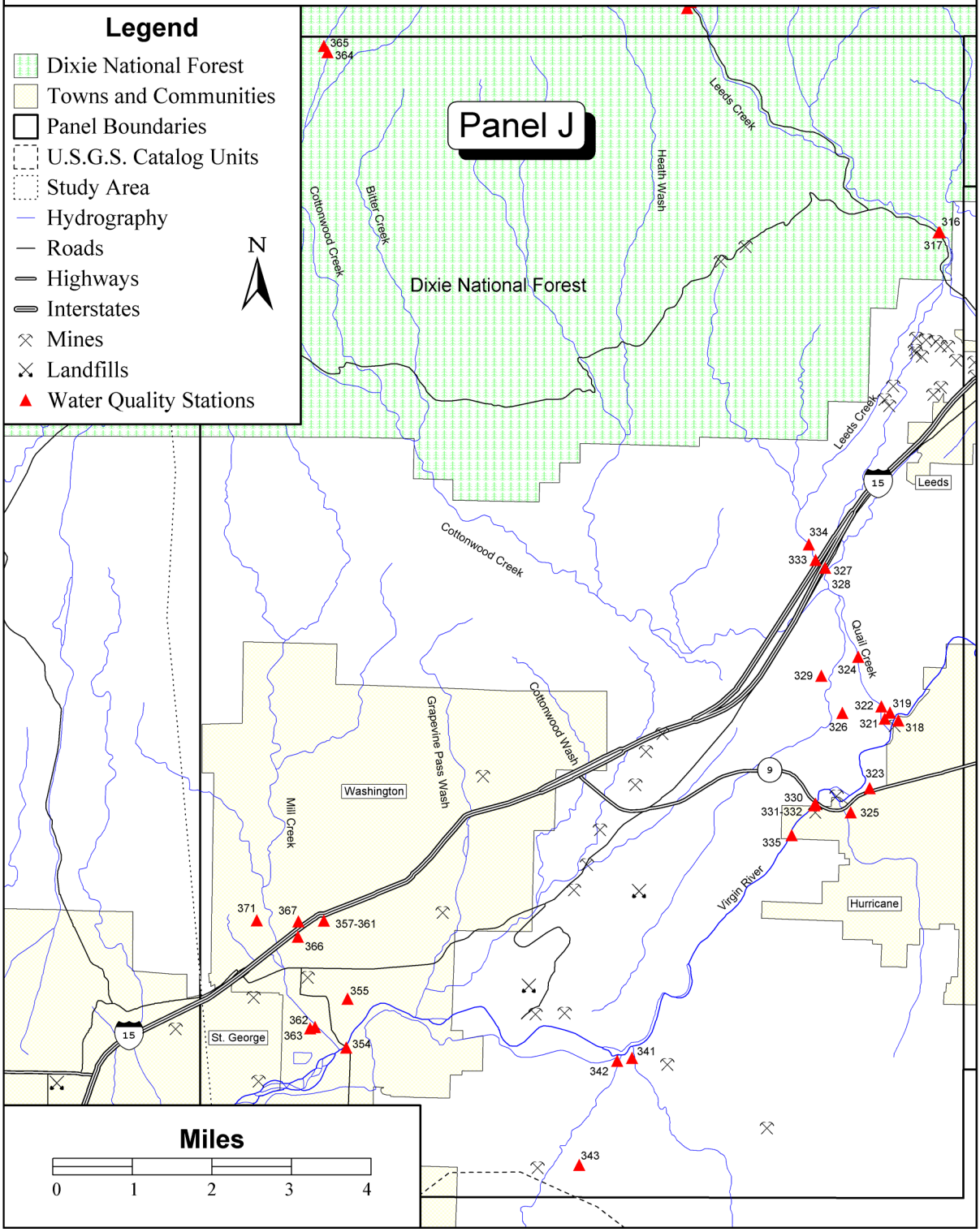



Zion National Park
Water Quality Monitoring Locations
Panel H
Zion National Park
Kanarraville
Kolob Reservoir
Blue Springs Reservoir
Murie Creek
Kanarra Creek
Spring Creek
Camp Creek
Taylor Creek
Willis Creek
Willow Creek
Shivers Creek
Crystal Creek
Urie Creek
West Fork Deep Canyon
Pine Spring Wash
Little Creek
Kolob Creek
Deep Creek
North Fork Virgin River
Left Fork North Creek
15
168
216
227
239
235
218
228
254
224
214
257
163
222
226
200
209
194
204
213
211
212
198
149
217
220
215
208
246
206
199
221
225
162
144
184
164
219
207
Legend
Zion National Park
Towns and Communities
Panel Boundaries
Hydrography
Trails
Dirt Roads
Roads
Interstates
Mines
Springs
Campgrounds
Ranger Stations
Water Quality Stations
N
Miles
0 1 2 3 4


Zion National Park
Water Quality Monitoring Locations
Miles
0 .5 1 1.5 2
Panel I
Toquerville
Leeds
Hurricane
La Verkin
Virgin
Virgin River
Grapevine Wash
Ash Creek
Gould Wash
288
292
287
293
289-291
282
303
299
296
297
295
286
283
276
302
304
298
300
301
305
307
315
310
281
268
279
278
277
280
269-270
271-272
274
273
275
308
266
265
261
262
Legend
Dixie National Forest
Towns and Communities
Panel Boundaries
Hydrography
Roads
Highways
Interstates
Mines
Landfills
Water Quality Stations
N

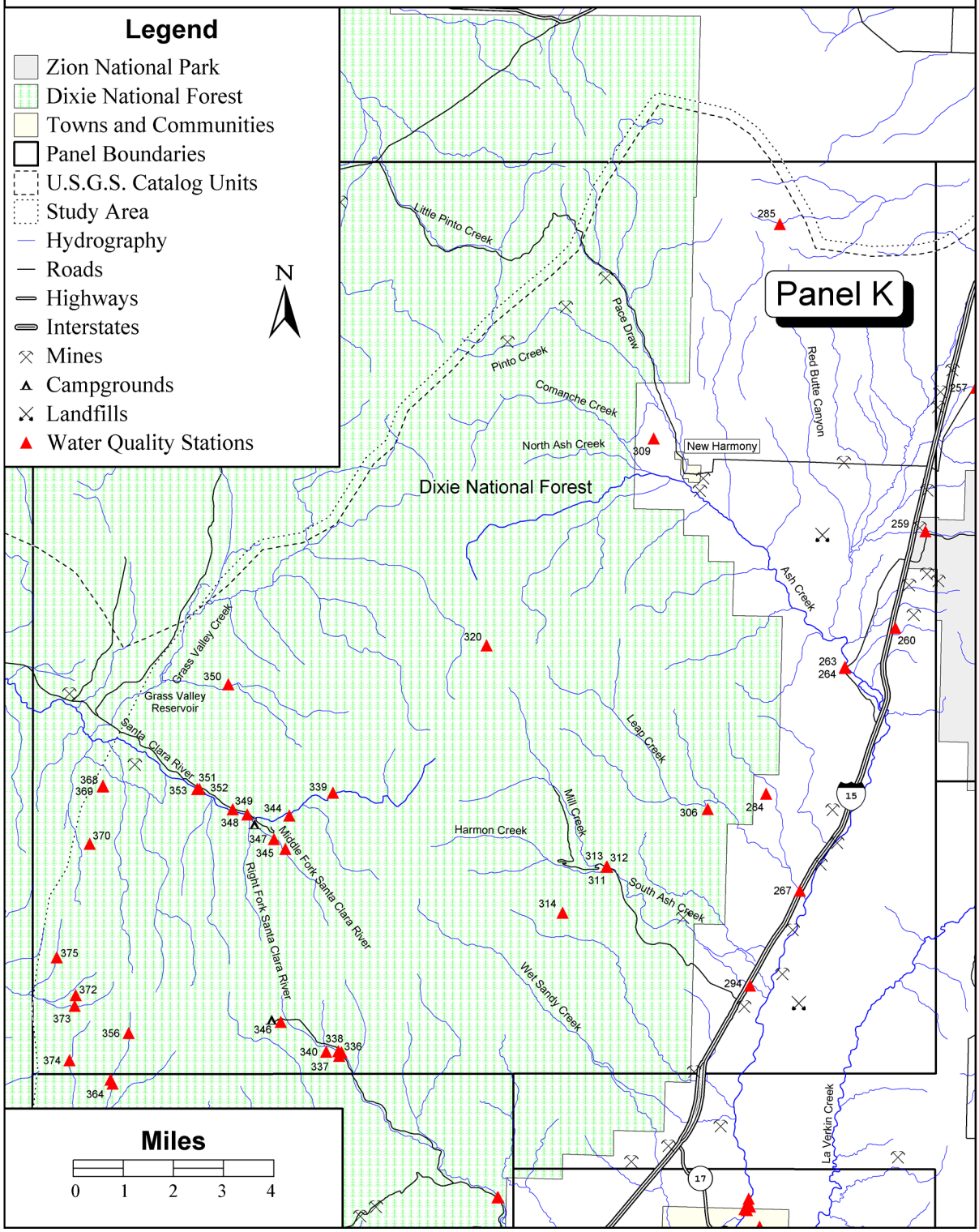
Zion National Park

Water Quality Monitoring Locations



Zion National Park

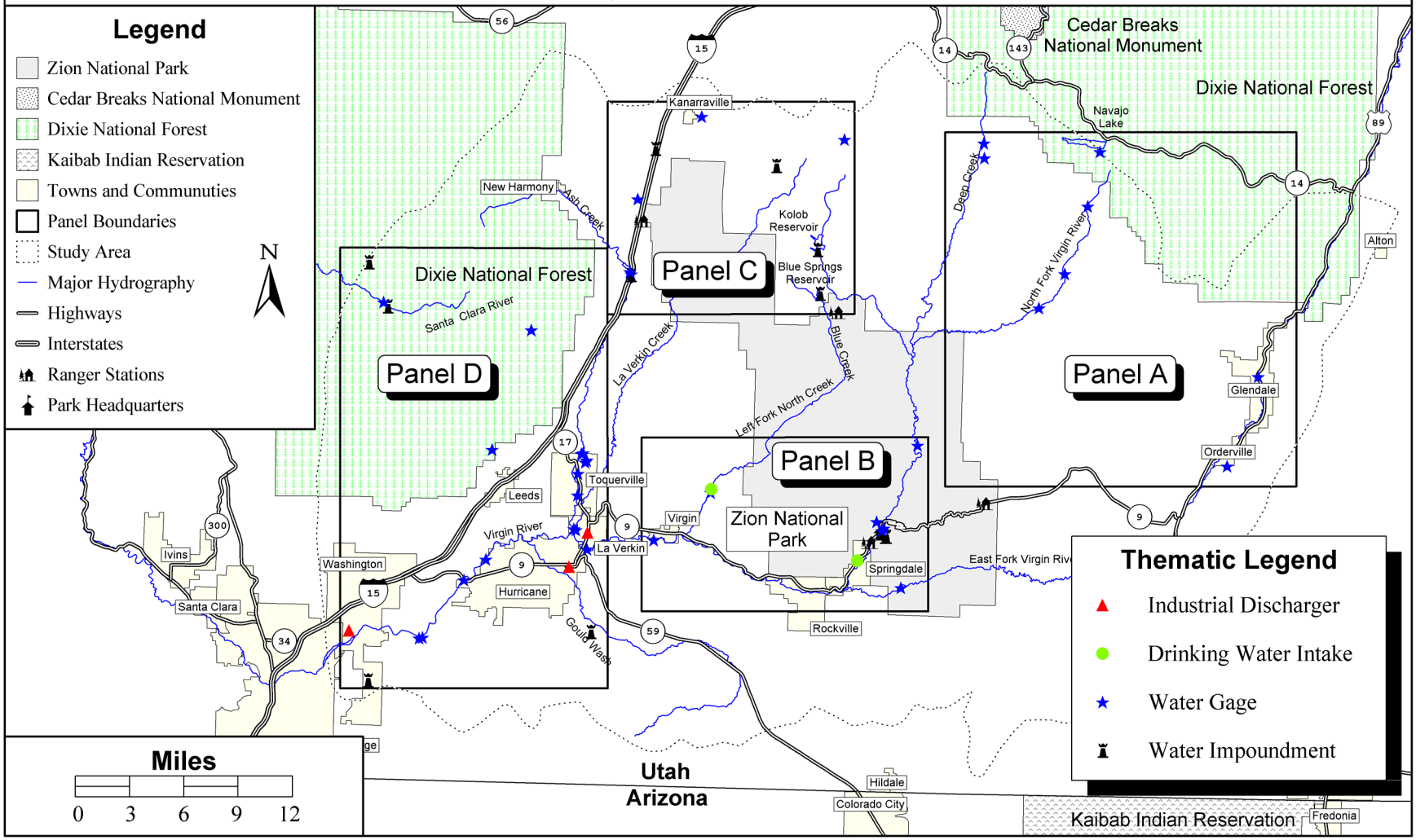
Water Quality Monitoring Locations



Zion National Park

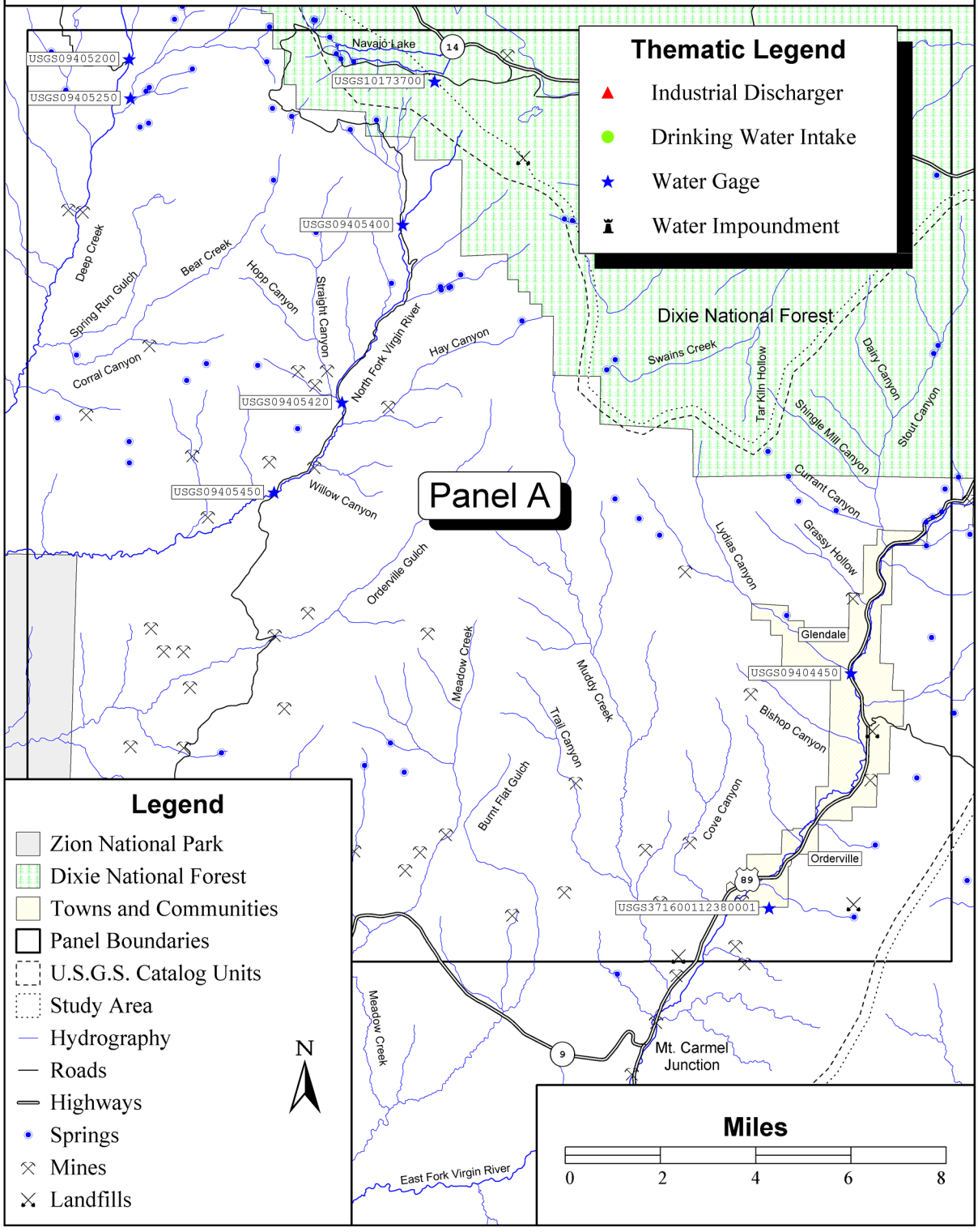
Dischargers, Drinking Intakes, Water Gages, & Water Impoundments

Graphic Panel Index



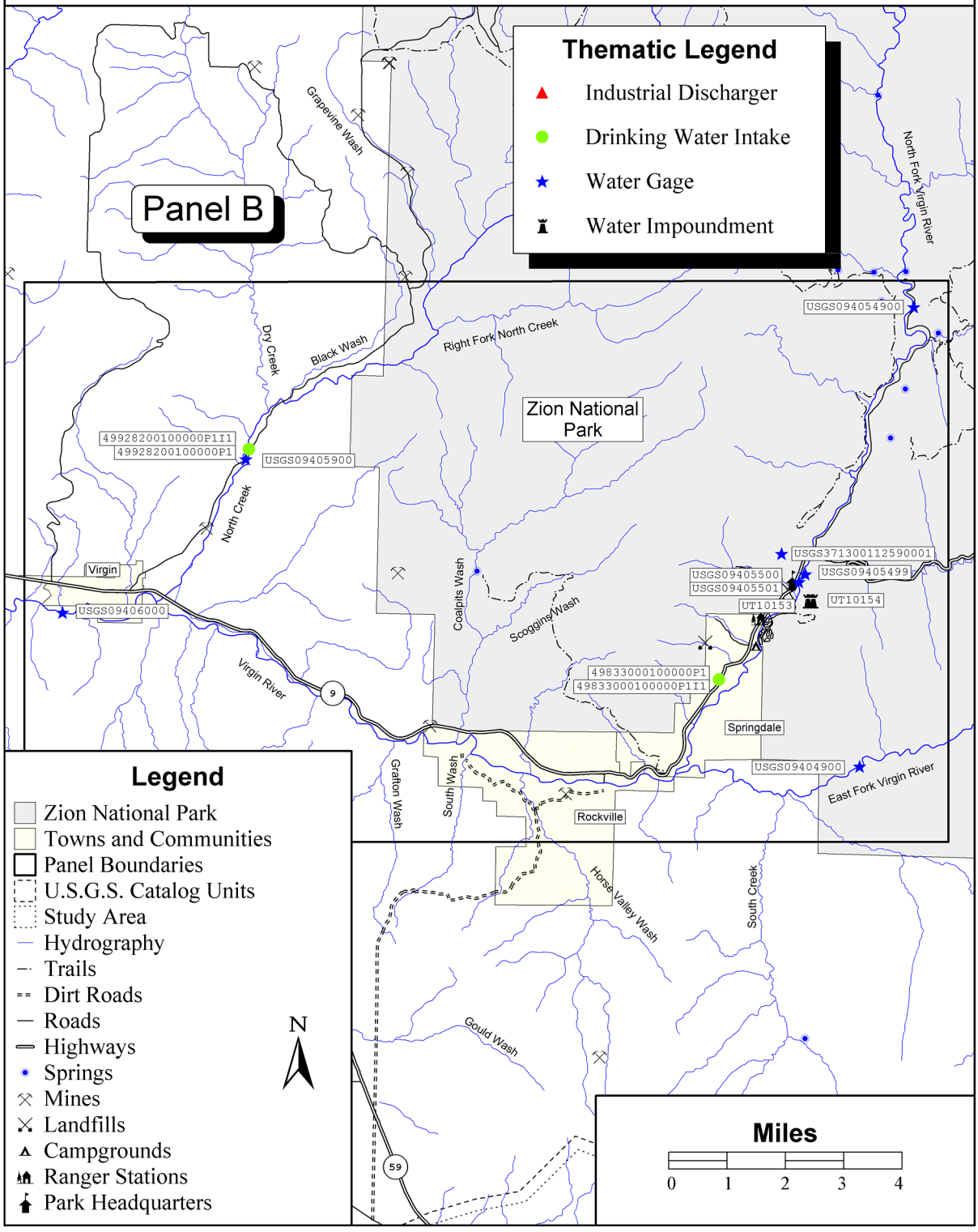
Zion National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



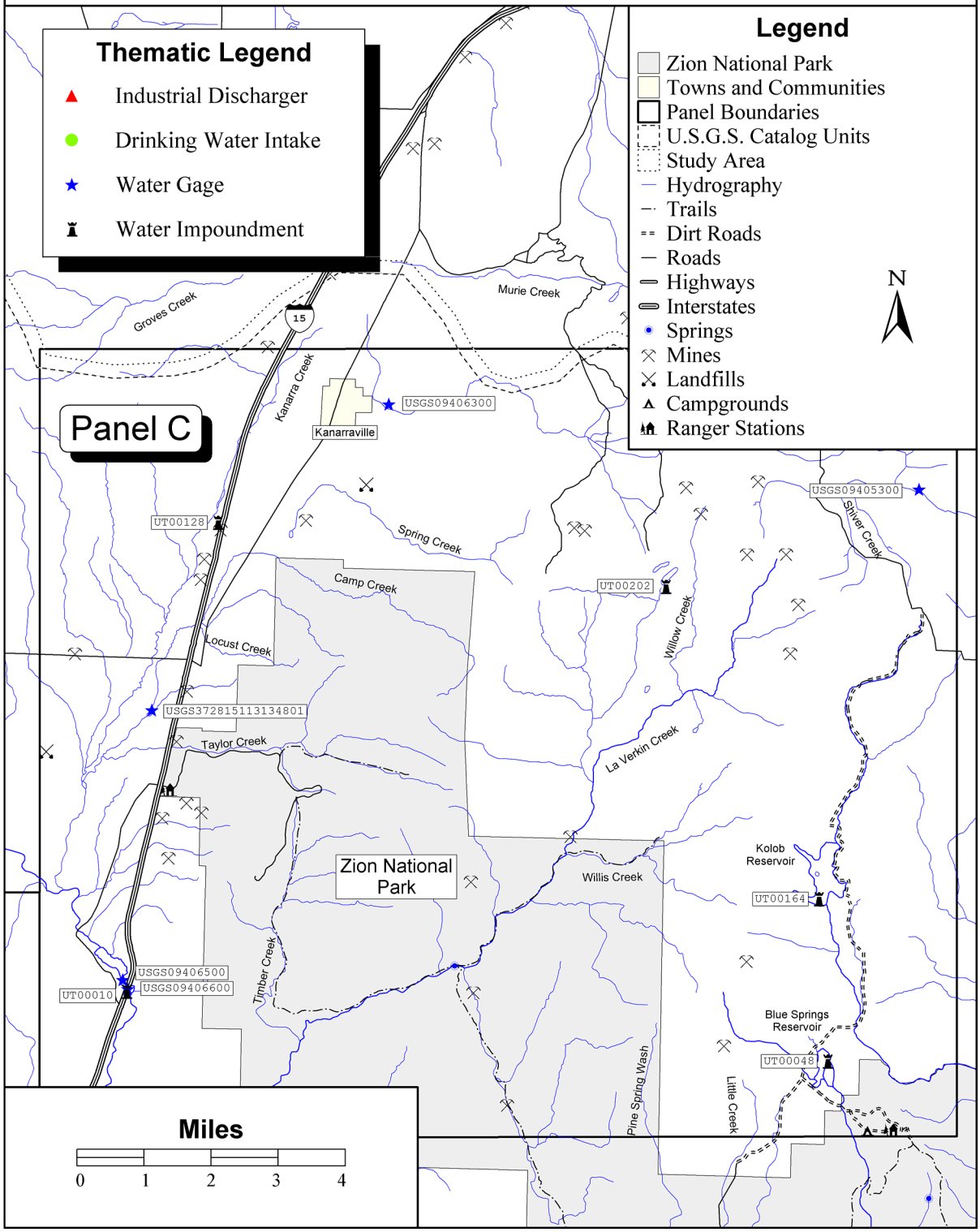
Zion National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



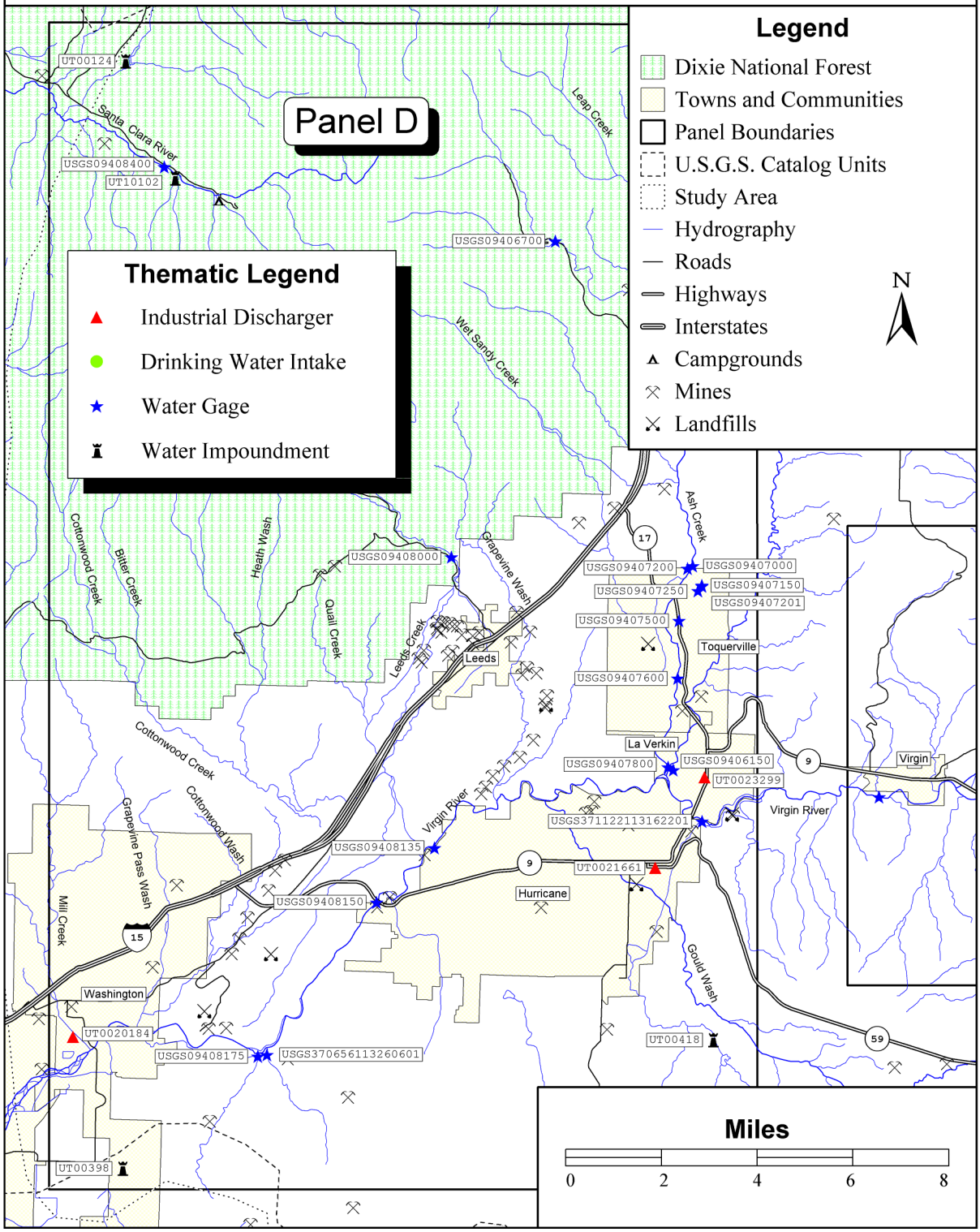
Zion National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



Zion National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



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

Industrial Facility Discharges

Site ID	Station/Facility Name	Address	City	Facility Receiving Water Name
UT0020184	WASHINGTON CITY	85 EAST 100 NORTH	WASHINGTON	VIRGIN R
UT0021661	HURRICANE CITY OF	.....	HURRICANE	.....
UT0023299	USBOR LA VERKIN SPRINGS UNIT	P O BOX 427	BOULDER CITY	VIRGIN R

Drinking Water Intakes

Site ID	Station/Facility Name	City	Population Served	Avg. Daily Production (Gal./Day)
49833000100000P1	TREATMENT PLANT	SPRINGDALE		
49833000100000P1I1	BIG SPRING	SPRINGDALE		
49928200100000P1	TREATMENT PLANT	VIRGIN	260	
49928200100000P1I1	NORTH CREEK	VIRGIN	260	

Water Gages

Site ID	Station Name	Site Type	Drainage Area (Square Miles)	Begin Year	End Year
USGS09404450	EAST FORK VIRGIN RIVER NR GLENDALE, UTAH	Stream	74.00	1967	1996
USGS09405400	NF VIRGIN R.NR.GLENDALE,UTAH	Stream		1973	1979
USGS09405420	N FK VIRGIN R BLW BULLOCH CANYON NR GLENDALE	Stream		1974	1984
USGS09405499	SPRINGDALE CANAL NR. SPRINGDALE, UT	Stream		1969	1989
USGS09405501	NORTH FORK VIRGIN RIVER NR SPRINGDALE, UTAH	Stream		1969	1989
USGS09406000	VIRGIN RIVER AT VIRGIN, UTAH			1909	1996
USGS09406300	KANARRA CR. AT KANARRAVILLE, UT	Stream	10.00	1960	1983
USGS09406500	ASH CR NR NEW HARMONY UT	Stream	4600.00	1939	1948
USGS09406600	ASH CREEK RESERVOIR NEAR NEW HARMONY, UT	Stream			
USGS09406700	SOUTH ASH CR BLW MILL CR NR PINTURA UTAH	Stream	11.00	1966	1983
USGS09407000	ASH CREEK ABOVE TOQUERVILLE, UTAH	Stream		1985	1991
USGS09407150	WEST FIELD DITCH AT TOQUERVILLE,UTAH	Stream		1973	1982
USGS09407200	ASH CR BLW WEST FIELD DITCH AT TOQUERVILLE,UT	Stream		1973	1982
USGS09407201	ASH CR BELOW DIVERSION DAM, AT TOQUERVILLE, UT			1973	1982
USGS09407250	TOQUERVILLE SPRING P	Spring			
USGS09407500	ASH C AT TOQUERVILLE	Stream	1300.00		
USGS09407600	ASH CR NR TOQUERVILLE UT	Stream	1300.00	1956	1958
USGS09407800	ASH CR NR LAVERKIN UT	Stream	1300.00	1956	1958
USGS09408000	LEEDS CREEK NEAR LEEDS UTAH	Stream	15.50	1965	1996
USGS09408150	VIRGIN RIVER NR HURRICANE UTAH	Stream	1530.00	1967	1994
USGS09408400	SANTA CLARA RIVER NR PINE VALLEY UTAH	Stream	18.70	1959	1996
USGS09404900	East Fork Virgin River nr Springdale, Ut.	Stream		1993	1996
USGS09405200	DEEP CREEK NEAR CEDAR CITY, UT	Stream	6.72	1987	1993
USGS09405250	EAST FORK DEEP CREEK NR CEDAR CITY, UT	Stream	7.82	1987	1993
USGS09405300	CRYSTAL CR NR CEDAR CITY UTAH	Stream	10.20	1957	1961
USGS09405450	N. FORK VIRGIN R. ABV ZION NARROWS NR GLENDALE	Stream	41.50	1979	1984
USGS094054900	North Fork Virgin River ab Big Bend nr Springdal	Stream		1991	1994
USGS09405500	NORTH FORK VIRGIN RIVER NEAR SPRINGDALE,UTAH	Stream	344.00	1926	1996
USGS09405900	NORTH CREEK NEAR VIRGIN, UTAH	Stream	96.60	1985	1993

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

Water Gages

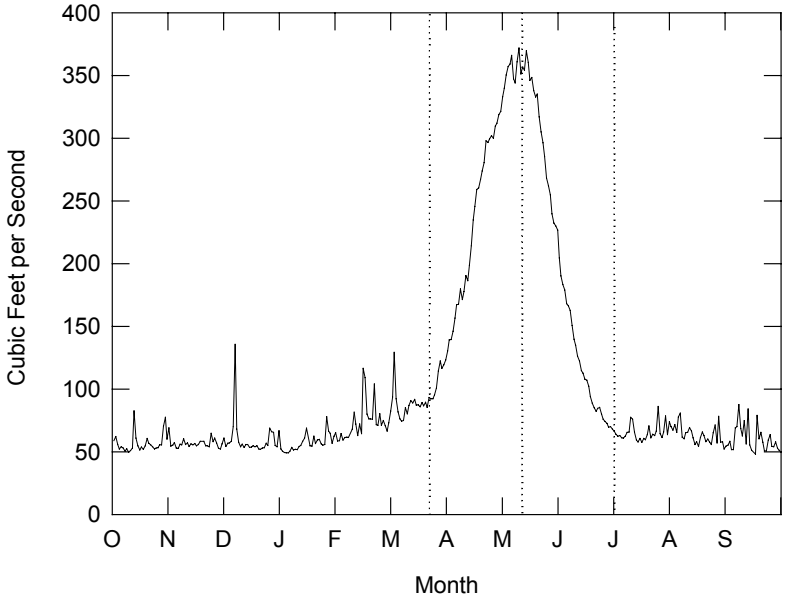
Site ID	Station Name	Site Type	Drainage Area (Square Miles)	Begin Year	End Year
USGS09406150	LA VERKIN CREEK NEAR LA VERKIN, UTAH	Stream	91.30	1985	1991
USGS09408135	VIRGIN RIVER AB QUAIL CR NR HURRICANE, UT.	Stream	1381.00	1989	1994
USGS09408175	ST. GEORGE-WASHINGTON CANAL NR WASHINGTON, UT	Stream		1988	1996
USGS10173700	NAVAJO LAKE WEST OF DIKE,NR.HATCH,UT.	Stream			
USGS370656113260601	ST. GEORGE WASHINGTON CANAL AT INLET, UT	Stream			
USGS371122113162201	VIRGIN R. BELOW LAVERKIN HOT SPRINGS, UT	Stream			
USGS372815113134801	(C-38-12)20CCA- 1	Well			
USGS371300112590001	ZION NATIONAL PARK, UTAH	Climate			
USGS371600112380001	ORDERVILLE, UTAH	Climate			

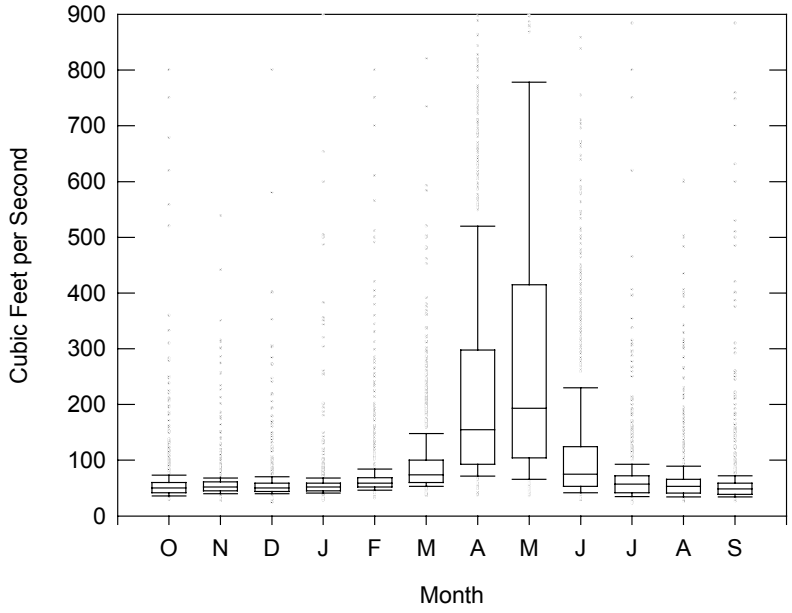
Water Impoundments

Site ID	Impoundment Name	Owner	Primary Purpose	Type of Dam	Downstream Hazard	Year Completed
UT00010	ASH CREEK DAM	ASH CREEK IRRIGATION CO.	Flood	Rockfill	High	1959
UT00048	BLUE SPRINGS RES	KOLOB REC ASSOC INC	Rec.	Earth	Significant	1957
UT00124	GRASS VALLEY	NEWCASTLE RES CO	Irrig.	Rockfill	Significant	1917
UT00128	GUBLER (HARRIS)	HARRIS GUBLER	Irrig.	Earth	Low	1960
UT00164	KOLOB CREEK	KOLOB RES & STORAGE ASSO	Irrig.	Earth	High	1956
UT00202	MEADOW HOLLOW	SPRING CR-LAVERKIN IRR	Irrig.	Earth	Low	1948
UT00398	GYPSUM WASH DEBRIS BASIN	ST GEO WASH FIELD IRR CO	Debris	Earth	Significant	1975
UT00418	FROG HOLLOW DEBRIS BASIN	BENCH LAKE IRRIGATION CO	Debris	Earth	Low	1978
UT10102	PINE VALLEY RESERVOIR	USDA FS	Rec.	Earth	Low	1934
UT10153	ZION NAT.PK.DIVERSION DAM 1 NR	DOI NPS RMR ZION	Irrig.	Earth	Low	1950
UT10154	ZION NAT.PK.DIVERSION DAM 2 NR	DOI NPS RMR ZION	Irrig.	Earth	Low	1950

REPRESENTATIVE MEAN ANNUAL HYDROGRAPH FOR SEASONAL ANALYSIS

ZION NATIONAL PARK
North Fork Virgin River near Springdale, UT
09405500, 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 Zion National Park are: Jul. 1 to Mar. 19, Mar. 20 to May 9, and May 10 to Jun. 30.

CONTACTS FOR AGENCY CODES RETRIEVED FOR ZION

AGENCY	PRIMARY CONTACT NAME	ORGANIZATION	PHONE NUMBER(S)	
112WRD	WILLIAMS, OWEN	US GEOLOGICAL SURVEY	(703)648-5610	
21UTAH	DENTON, RICHARD	UTAH HEALTH DEPT	(801)538-6146	
11NPSWRD	TUCKER, DEAN	NATIONAL PARK SERVICE	(970)225-3516	(970)225-3518
21UTDHDW	BOUSFIELD, KENNETH	UTAH DEPT OF HEALTH	(801)538-6159	
21USU	STORET USER ASSISTANCE	USEPA HQ	(202)260-7050	(800)424-9067
* DATA FOR 21USU HAS BEEN 'RETIRED' AT THE REQUEST OF STORET USER ASSISTANCE (703)883-8861 ON 03/14/86.				
113FORS4	REGIONAL HYDROLOGIST	US FOREST SERVICE	(801)625-5368	
11EPALES	LAMBOU, VICTOR W.	USEPA	(702)798-2259	

QUANTITY OF DATA RETRIEVED FOR ZION BY AGENCY CODE

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

Agency	Organization	Period of Record		Water Quality Stations		Longer Term[1] Stations		No Data Stations		Water Quality Observations		Water Quality Parameters	
		Study Area	Park Only	S.A.	Park	S.A.	Park	S.A.	Park	S.A.	Park	S.A.	Park
112WRD	US GEOLOGICAL SURVEY	07/14/62-10/03/91	12/12/66-08/13/91	159	10	3	0	1	0	16382	1041	211	55
21UTAH	UTAH HEALTH DEPT	01/04/67-12/11/96	01/04/67-11/10/93	51	4	27	2	4	0	36016	2644	167	108
11NPSWRD	NATIONAL PARK SERVICE	06/08/64-10/06/92	06/08/64-10/06/92	91	24	0	0	0	0	3383	1123	100	69
21UTDHDW	UTAH DEPT OF HEALTH	11/09/77-01/17/90	04/07/81-01/25/88	42	5	0	0	5	2	2115	106	115	35
21USU	USEPA HQ	10/31/73-07/16/74	10/31/73-07/15/74	21	5	0	0	6	1	2877	804	53	53
113FORS4	US FOREST SERVICE	06/10/74-05/12/82	No Data in Park	9	0	2	0	0	0	744	0	34	0
11EPALES	USEPA	08/13/75-09/25/75	No Data in Park	2	0	0	0	0	0	114	0	16	0
Totals		07/14/62-12/11/96	06/08/64-11/10/93	375	48	32	2	16	3	61631	5718	393	161

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

Station Period of Record Tabulation
From 07/14/62 To 12/11/96

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75
ZION0001	ALTON - ALTON (BIRCH)	No	43	22	21	0
ZION0002	(C-38- 6)25CCC-S3	No	23	0	23	0
ZION0003	(C-38- 6)26DDD-S1	No	27	0	27	0
ZION0004	(C-38- 6)34CAB-S1	No	24	0	24	0
ZION0005	(C-39- 4)33DAC-S1	No	24	0	24	0
ZION0006	E. FK. VIRGIN R. AT HIWAY 136 BRIDGE, UT	No	113	0	113	0
ZION0007	(C-39- 6)16BBD-S1	No	24	0	24	0
ZION0008	(C-39- 6) 9CCA-S1	No	24	0	24	0
ZION0009	(C-39- 6)20ABC-S1	No	23	0	23	0
ZION0010	(C-39- 6)29BCB-	No	61	0	61	0
ZION0011	(C-39- 6)30ABA-S1	No	22	0	22	0
ZION0012	GLENDALE - HOPS SPRING	No	21	21	0	0
ZION0013	GLENDALE - SPENCER SPRING	No	21	21	0	0
ZION0014	(C-39- 7)13ABA-S1	No	50	0	50	0
ZION0015	E. FK. VIRGIN R. ABOVE STOUT CANYON, UT	No	57	0	57	0
ZION0016	STOUT CANYON AT MOUTH, UT	No	54	0	54	0
ZION0017	(C-39- 7)26DDA-S1	No	50	0	50	0
ZION0018	(C-40- 7)14BAD- 1	No	27	0	27	0
ZION0019	(C-40- 7)14BAD-S1	No	29	0	29	0
ZION0020	E. FK VIRGIN RIVER ABV LYDIA'S CANYON, UT	No	30	0	30	0
ZION0021	EAST FORK VIRGIN RIVER NR GLENDALE, UTAH	No	755	196	456	103
ZION0022	E F VIRGIN RIVER N OF GLENDALE	No	241	0	0	241
ZION0023	LYDIA'S CANYON AT MOUTH, UTAH	No	29	0	29	0
ZION0024	(C-40- 7)14BAA-S1	No	24	0	24	0
ZION0025	(C-39- 7)26CDB-S1	No	24	0	24	0
ZION0026	(C-41- 7) 4AAA- 1	No	0	0	0	0
ZION0027	(C-40-7)3CCC-S1	No	24	0	24	0
ZION0028	ORDERVILLE - NORTH SPRING	No	111	30	81	0
ZION0029	GLENDALE - LYDIAS CANYON	No	72	51	21	0
ZION0030	(C-41- 7) 8DBA-	No	62	0	62	0
ZION0031	RIGHT FORK LYDIA'S CANYON AT ROAD'S END, UT	No	57	0	57	0
ZION0032[1]	MUDDY CK AT US-89 XING	No	471	471	0	0
ZION0033	MUDDY CREEK AT MOUTH, UTAH	No	27	0	27	0
ZION0034[1]	MUDDY CREEK 1 MI ABOVE US-89 XING	No	205	205	0	0
ZION0035	E F VIRGIN RIVER AT MT CARMEL J	No	235	0	0	235
ZION0036	CDDF501R	No	14	0	14	0
ZION0037	E. FK. VIRGIN R. AT MT. CARAMEL JUNCTION, UT	No	115	0	115	0
ZION0038[1]	MUDDY CK AT 4X4 XING NEAR DEER HOLLOW	No	175	175	0	0
ZION0039	(C-43- 8) 1ACA-S1	No	20	0	20	0
ZION0040[1]	MUDDY CK AT MAIN RD XING 1 MI AB DEER HOLLOW	No	183	183	0	0
ZION0041	CDCC511R	No	12	0	12	0
ZION0042	CASCADE FALLS SPRING	No	191	191	0	0
ZION0043	CASCADE SPRINGS, UT	No	84	0	84	0
ZION0044	(C-39- 8) 5ABD-S1	No	48	23	25	0
ZION0045	NAVAJO LAKE EAST OF DIKE, UT	No	76	0	76	0
ZION0046	(C-41- 8) 5CDA-	No	62	0	62	0
ZION0047	NAVAJO LAKE - ADJACENT TO SPRUCE CAMPGROUND	No	89	0	69	20
ZION0048	(C-38- 8)32CBB-S1	No	24	0	24	0
ZION0049	(C-40- 8) 5bcd-S1	No	22	22	0	0
ZION0050	(C-40- 8)29BCA-S1	No	46	22	24	0
ZION0051	CDCB513R	No	13	0	13	0
ZION0052	CDCE037R	No	14	0	14	0
ZION0053	NF VIRGIN R.NR.GLENDALE,UTAH	No	116	0	80	36
ZION0054	(C-40- 8) 7aad-S1	No	23	23	0	0
ZION0055	NAVAJO LAKE - ADJACENT TO CHRISTENSEN BOAT DOCK	No	89	0	69	20
ZION0056[1]	NAVAJO LAKE 02 MIDLAKE	No	952	952	0	0
ZION0057	CDCB504R	No	13	0	13	0
ZION0058	N.FK. VIRGIN BLW ROSY CANYON	No	45	45	0	0
ZION0059[1]	NAVAJO LAKE - ADJACENT TO NAVAJO LAKE CAMPGROUND	No	96	0	76	20
ZION0060	(C-39- 8)19cca-S1	No	21	21	0	0
ZION0061	NAVAJO LAKE	No	57	0	57	0
ZION0062	(C-40- 8) 7cda-S1	No	21	21	0	0
ZION0063	(C-40- 8) 7cad-S1	No	5	5	0	0
ZION0064	(C-40- 8)30BAD-S1	No	24	0	24	0
ZION0065	CDCB507R	No	13	0	13	0
ZION0066	NAVAJO LAKE 06 NR SPRING #3	No	0	0	0	0
ZION0067	(C-38- 8)18CBD-S1	No	24	0	24	0
ZION0068	ORDERVILLE GULCH BLW. TWIN HOLLOW	No	22	22	0	0
ZION0069	(C-40- 9)12dad-S1	No	6	6	0	0
ZION0070	(C-40- 9)12daa-S1	No	23	23	0	0
ZION0071	(C-39- 9)36abd-S1	No	21	21	0	0

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ZION0072	NAVAJO LAKE - ADJACENT TO NAVAJO LAKE LODGE	No	89	0	69	20
ZION0073	(D-39- 1) 9DAA-	No	62	0	62	0
ZION0074	NAVAJO LAKE	No	57	0	57	0
ZION0075	LARSON SPRING NR NAVAJO LAKE	No	223	223	0	0
ZION0076	NORTH FORK VIRGIN RIVER ABOVE BULLOCK CANYON	No	110	110	0	0
ZION0077	N FK VIRGIN R BLW BULLOCH CANYON NR GLENDALE	No	408	21	377	10
ZION0078	TEAH CAMPGROUND - OLSEN SPRING	No	37	0	37	0
ZION0079	CDCB502R	No	13	0	13	0
ZION0080	BOY SCOUT SPRING - BOY SCOUT SPR.	No	37	0	37	0
ZION0081	FOURMILE BENCH DUMP STA. - SPRING	No	2	0	2	0
ZION0082	NAVAJO LAKE SPRUCES CG - LARSON LODGE SP	No	37	0	37	0
ZION0083	ORDERVILLE GULCH ABV. ROADCROSSING	No	27	27	0	0
ZION0084[1]	NAVAJO LAKE 03 UPPER END	No	734	734	0	0
ZION0085	ELDERBERRY SPRING NR NAVAJO LAKE	No	0	0	0	0
ZION0086	(C-40- 9)13BDC-S1	No	22	22	0	0
ZION0087	STREAM AB NAVAJO LAKE AND BL NAVAJO LAKE SPRING	No	167	167	0	0
ZION0088	(C-38- 8)12BDB-S1	No	23	0	23	0
ZION0089	(C-40- 9)36CCB-S1	No	78	28	50	0
ZION0090[1]	NAVAJO LAKE SPRING NR NAVAJO LAKE	No	86	86	0	0
ZION0091	N FK VIRGIN NR WILLOW CANYON	No	23	23	0	0
ZION0092	NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON	No	40	0	40	0
ZION0093	CDCB512R	No	13	0	13	0
ZION0094	NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON	No	99	99	0	0
ZION0095	(C-38- 9)12BDB-S1	No	24	0	24	0
ZION0096	(C-40- 9)26CDA-S1	No	50	0	50	0
ZION0097	(C-40- 9)26CDA-S2	No	48	0	48	0
ZION0098	(C-40- 9)26CDC-S1	No	58	8	50	0
ZION0099	(C-40- 9)35BAB-S1	No	56	0	56	0
ZION0100	(C-40- 9)35BAB-S1	No	22	0	22	0
ZION0101	ORDERVILLE GULCH AT ROADCROSSING, UT	No	75	20	55	0
ZION0102	ORDERVILLE GULCH	No	40	0	40	0
ZION0103	Clear Creek	No	23	23	0	0
ZION0104[1]	N. FORK VIRGIN R. ABV ZION NARROWS NR GLENDALE	No	406	43	363	0
ZION0105	CDCB503R	No	14	0	14	0
ZION0106	CDCB506R	No	13	0	13	0
ZION0107	CDCE019R	No	13	0	13	0
ZION0108	(C-40- 9)27adc-S1	No	21	21	0	0
ZION0109	CDCE024R	No	13	0	13	0
ZION0110	(C-41- 9)15DDB- 1	No	124	98	26	0
ZION0111	(C-39- 9)10DDC-S1	No	20	20	0	0
ZION0112	(C-41- 9)10CDD- 1	No	26	0	26	0
ZION0113	NORTH FORK VIRGIN RIVER NEAR GLENDALE	No	80	0	80	0
ZION0114	(C-40- 9)22cdc-S1	No	23	23	0	0
ZION0115[1]	BOY SCOUT SPRING NR NAVAJO LAKE	No	161	161	0	0
ZION0116	(C-39- 9)33ADA-S1	No	24	24	0	0
ZION0117	ORDERVILLE GULCH BELOW SW 19	No	20	20	0	0
ZION0118	(C-39- 9)16dcc-S1	No	22	22	0	0
ZION0119	NORTH FORK VIRGIN RIVER 2.5 MI UP FROM ZION NP	No	70	0	70	0
ZION0120	CDCC501R	No	11	0	11	0
ZION0121	N. F. VIRGIN RIVER PAST	No	20	20	0	0
ZION0122	CDCC510R	No	12	0	12	0
ZION0123	CDCC506R	No	12	0	12	0
ZION0124	EAST FORK DEEP CREEK NR CEDAR CITY, UT	No	138	138	0	0
ZION0125	DEEP CREEK AT ROAD CROSSING, UT	No	29	0	29	0
ZION0126	DEER HAVEN CAMPGROUND - DEER HAVEN SPR	No	37	0	37	0
ZION0127	DEEP CREEK NEAR CEDAR CITY, UT	No	159	159	0	0
ZION0128	CDCC504R	No	12	0	12	0
ZION0129	(C-37- 9)20DAC-S1	No	25	0	25	0
ZION0130	CDCB511R	No	13	0	13	0
ZION0131	CDCB510R	No	12	0	12	0
ZION0132	(C-40- 9)31CBA-S1	No	23	23	0	0
ZION0133	NORTH FORK VIRGIN R ABOVE ZION NP NORTH BNDY	No	36	0	36	0
ZION0134	EAST FORK VIRGIN RIVER ABOVE PARUNUWEAP CANYON	Yes	63	63	0	0
ZION0135	TROSSACH LOCH ESTATES - HOP SPRING	No	0	0	0	0
ZION0136	CDCC505R	Yes	12	0	12	0
ZION0137[1]	VIRGIN RIVER-ZION NTL PK NARROWS	Yes	1851	446	1405	0
ZION0138	(C-39-10)11DDD-	No	92	0	92	0
ZION0139	ZION PARK WWTP INFLUENT	Yes	51	0	51	0
ZION0140	N FK VIRGIN R. ABOVE ZION NP WTP	Yes	188	0	188	0
ZION0141[1]	N FK VIRGIN R. BELOW ZION NP WTP	Yes	554	0	114	440
ZION0142	CDCB508R	Yes	13	0	13	0

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ZION0143	ECHO CANYON SPRING	Yes	47	47	0	0
ZION0144	CDCB509R	Yes	13	0	13	0
ZION0145	WEEPING ROCK AT TRAIL, UT	Yes	57	0	57	0
ZION0146	WEEPING ROCK SPRING	Yes	47	47	0	0
ZION0147	WEEPING ROCK SPRING NEAR TRAIL	Yes	40	0	40	0
ZION0148	NORTH FORK VIRGIN RIVER NEAR ANGELS LANDING	Yes	120	120	0	0
ZION0149	(C-39-10) 3ACA-	No	90	0	90	0
ZION0150	LARRY'S GROTTO	Yes	47	47	0	0
ZION0151	EAST FORK VIRGIN RIVER BELOW PARUNUWEAP CANYON	Yes	116	116	0	0
ZION0152	ZION CANYON WATER SYSTEM - UPPER GROTTO SP	Yes	0	0	0	0
ZION0153	ZION CANYON WATER SYSTEM - LOWER GROTTO SP	Yes	33	33	0	0
ZION0154	THE GROTTO	Yes	47	47	0	0
ZION0155	TEMPLE OF SINAWAVA SEEP	Yes	27	27	0	0
ZION0156	N.F.VIRGIN R. AT MOUTH OF NARROWS, UT.	Yes	117	8	109	0
ZION0157	NORTH FORK VIRGIN RIVER AT LOWER ZION NARROWS	Yes	55	55	0	0
ZION0158	NORTH FORK VIRGIN RIVER AT LOWER ZION NARROWS	Yes	80	0	80	0
ZION0159	(C-40-10)	Yes	7	7	0	0
ZION0160	ZION CANYON WATER SYSTEM - WYLIE SPRING	Yes	0	0	0	0
ZION0161	REFRIGERATOR SPRING	Yes	47	47	0	0
ZION0162	(C-40-10)16c -S1	Yes	30	30	0	0
ZION0163	CDBE516R	No	12	0	12	0
ZION0164	CDCC508R	Yes	13	0	13	0
ZION0165	MIDDLE EMERALD POOL	Yes	27	27	0	0
ZION0166	ZION CANYON WATER SYSTEM - WATERCRESS SPR.	Yes	33	0	33	0
ZION0167	EAST FORK VIRGIN RIVER NEAR SOUTH BNDY ZION NP	No	77	0	77	0
ZION0168	(C-37-10)22CAB-	No	90	0	90	0
ZION0169	ZION CANYON WATER SYSTEM - BIRCH SPRINGS	Yes	40	7	33	0
ZION0170	SPRINGDALE CANAL NR. SPRINGDALE, UT	Yes	9	0	9	0
ZION0171	SPRINGDALE CANAL NR SPRINGDALE, UTAH	Yes	12	0	12	0
ZION0172	NORTH FORK VIRGIN RIVER NR SPRINGDALE, UTAH	Yes	73	0	43	30
ZION0173	NORTH FORK VIRGIN RIVER NR SPRINGDALE, UTAH	Yes	336	204	120	12
ZION0174	N F VIRGIN RIV NE OF SPRINGDALE	Yes	240	0	0	240
ZION0175	NORTH FORK VIRGIN RIVER NEAR SPRINGDALE,UTAH	Yes	377	0	314	63
ZION0176	NORTH FORK VIRGIN RIVER AT ZION NP HQ	Yes	129	0	129	0
ZION0177[1]	SOUTH CREEK BL SOUTH CREEK RES	No	498	498	0	0
ZION0178[1]	SOUTH CREEK RES AB DAM	No	907	907	0	0
ZION0179	SOUTH CREEK AB SOUTH CREEK RESERVOIR	No	17	17	0	0
ZION0180	ZION PARK WWTP EFF OUTFALL	Yes	186	0	0	186
ZION0181	N F VIRGIN RIVER BLW ZION P EFF	Yes	240	0	0	240
ZION0182	(C-41-10)28BCA- 1	No	21	0	21	0
ZION0183	NORTH FORK OF THE VIRGIN RIVER NEAR SPRINGDALE	No	105	0	105	0
ZION0184	CDCC509R	Yes	11	0	11	0
ZION0185	SPRINGDALE - BIG SPRING	No	138	119	19	0
ZION0186[1]	E FK VIRGIN R JUST AB CNFL W/N FK VIRGIN R	No	3908	3532	376	0
ZION0187	E. FK. VIRGIN R. ABOVE CONFLUENCE, UT	No	112	0	112	0
ZION0188	EAST FORK VIRGIN RIVER ABOVE CONFLUENCE	No	125	0	125	0
ZION0189	N. FK. VIRGIN R. ABOVE CONFLUENCE, UT	No	116	0	116	0
ZION0190	N F VIRGIN RIV ABV CONFL E FORK	Yes	138	0	0	138
ZION0191	N F VIRGIN RIV ABV CONFL E FORK	Yes	0	0	0	0
ZION0192[1]	N FK VIRGIN R JUST AB CNFL W/E FK VIRGIN R	No	4356	3406	950	0
ZION0193	NORTH FORK OF THE VIRGIN RIVER ABOVE CONFLUENCE	No	124	0	124	0
ZION0194	CDCA514R	No	12	0	12	0
ZION0195	E FORK VIRGIN R ABOVE CONFLUENCE WITH N FORK	No	50	0	50	0
ZION0196	N FORK VIRGIN R ABOVE CONFLUENCE WITH E FORK	No	68	0	68	0
ZION0197	VIRGIN RIVER BELOW CONFLUENCE	No	100	0	100	0
ZION0198	CDCD005R	No	13	0	13	0
ZION0199	(C-39-10)30CDB-S2	Yes	23	0	0	23
ZION0200	CDCD001R	No	13	0	13	0
ZION0201	ROCKVILLE PIPELINE CO - RIMROCK SPRING	No	149	34	115	0
ZION0202	(C-42-10) 7BDD- 1	No	49	0	49	0
ZION0203	VIRGIN R. BELOW CONFLUENCE, UT	No	114	0	114	0
ZION0204	KOLOB CREEK ABOVE RESERVOIR	No	20	0	20	0
ZION0205[1]	VIRGIN R AT CO ROAD XING IN ROCKVILLE	No	589	0	589	0
ZION0206	KOLOB CK BL KOLOB RES	No	107	0	107	0
ZION0207	CDCA510R	Yes	12	0	12	0
ZION0208	CDCD007R	No	14	0	14	0
ZION0209	CDCD002R	No	13	0	13	0
ZION0210	(C-42-11) 1DCB- 1	No	22	0	22	0
ZION0211	CDCD003R	No	13	0	13	0
ZION0212	KOLOB CK AB KOLOB RES	No	211	104	107	0
ZION0213	KOLOB CREEK ABOVE RESERVOIR, UT	No	29	0	29	0

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ZION0214	CDBD010R	No	11	0	11	0
ZION0215[1]	KOLOB RES AB DAM 01	No	857	535	322	0
ZION0216	CDBD009R	No	13	0	13	0
ZION0217[1]	KOLOB RES MIDWAY UP LAKE 02	No	240	210	30	0
ZION0218	CDBD502R	No	13	0	13	0
ZION0219	CDCA511R	Yes	12	0	12	0
ZION0220	CDCD006R	No	13	0	13	0
ZION0221	CDCD010R	No	13	0	13	0
ZION0222	CDCD021R	No	13	0	13	0
ZION0223	SANTA CLARA RIVER AT MOUTH, UT	No	150	0	150	0
ZION0224	CDBD503R	No	13	0	13	0
ZION0225	CDCA512R	Yes	12	0	12	0
ZION0226	CDCA513R	No	12	0	12	0
ZION0227	CDBD504R	No	14	0	14	0
ZION0228	CDBD013R	No	13	0	13	0
ZION0229	(- -) -	No	29	0	0	29
ZION0230	CDCD013R	No	14	0	14	0
ZION0231	(C-42-11)19CCC- 2	No	27	0	27	0
ZION0232	VIRGIN - NORTH CREEK	No	52	33	19	0
ZION0233	NORTH CREEK NEAR VIRGIN, UTAH	No	166	166	0	0
ZION0234	(- -) -	No	29	0	0	29
ZION0235	KANARRAVILLE WATER SYSTEM - KANARRAVILLE SP	No	35	34	1	0
ZION0236	HUNTINGTON SP	No	29	0	0	29
ZION0237	VIRGIN - 3 MI SO OF TOWN	No	37	0	37	0
ZION0238	(C-40-12) 2ADB-S1	No	24	0	24	0
ZION0239	KANARRA CR. AT KANARRAVILLE, UT	No	375	0	298	77
ZION0240	(C-42-12) 2DCD- 1	No	26	0	26	0
ZION0241	NORTH CK AB CNFL/ VIRGIN R	No	336	336	0	0
ZION0242	NORTH CREEK AT MOUTH, UT	No	136	0	136	0
ZION0243	NORTH CREEK AT HIGHWAY 15 BRIDGE	No	54	0	54	0
ZION0244	NORTH CREEK AT U-15 BRIDGE	No	137	0	0	137
ZION0245	NORTH CREEK AT U-15 BRIDGE	No	0	0	0	0
ZION0246	LAVERKIN CREEK AT LEE PASS TRAIL	Yes	111	0	111	0
ZION0247	E F VIRGIN RIV ABV CONFL N FORK	No	0	0	0	0
ZION0248	E F VIRGIN RIV ABV CONFL N FORK	No	139	0	0	139
ZION0249	MOUTH OF NORTH CREEK	No	125	0	125	0
ZION0250	VIRGIN R. ABOVE NORTH CREEK, UT	No	117	0	117	0
ZION0251	VIRGIN CANAL 1 MILE NE OF VIRGIN	No	29	0	0	29
ZION0252	VIRGIN RIVER ABOVE NORTH CREEK	No	100	0	100	0
ZION0253	VIRGIN RIVER NEAR VIRGIN UT	No	34	0	34	0
ZION0254	CDBD023R	No	13	0	13	0
ZION0255	VIRGIN RIVER AT VIRGIN UT	No	125	0	125	0
ZION0256[1]	VIRGIN R 1 MI W OF VIRGIN	No	3141	2649	492	0
ZION0257	CDBD024R	No	12	0	12	0
ZION0258[1]	VIRGIN RIVER AT VIRGIN, UTAH	No	2379	220	351	1808
ZION0259	TAYLOR CREEK NEAR WEST ENTRANCE ZION NP	Yes	22	0	0	22
ZION0260	CDCD025R	No	12	0	12	0
ZION0261	CDDD501R	No	13	0	13	0
ZION0262	(C-42-12)19DBB-S1	No	5	0	5	0
ZION0263	NORTH ASH CREEK AB ASH CREEK RES., UT	No	94	0	94	0
ZION0264	ASH CK AB ASH CK RES	No	108	108	0	0
ZION0265	(C-42-12)18CCD- 2	No	27	0	27	0
ZION0266	(C-42-12)19BBB-S1	No	5	0	5	0
ZION0267	LEAP CREEK NEAR PINTURA	No	28	0	28	0
ZION0268	VRIGIN R. ABOVE LAVERKIN HOT SPRINGS, UT	No	115	0	115	0
ZION0269	VIRGIN R ABV LAVERKN HOT SPRING	No	0	0	0	0
ZION0270	VIRGIN R ABV LAVERKN HOT SPRING	No	141	0	0	141
ZION0271	LA VERKIN HOT SPRINGS	No	0	0	0	0
ZION0272	LA VERKIN HOT SPRINGS	No	135	0	0	135
ZION0273	LAVERKIN HOT SPRINGS, UT	No	58	0	58	0
ZION0274	DIXIE HOT SPRINGS UTAH	No	5	0	5	0
ZION0275	VIRGIN RIVER NEAR LA VERKIN HOT SPRINGS	No	68	0	68	0
ZION0276[1]	LAVERKIN CK AT U17 XING N OF LAVERKIN	No	3408	2622	786	0
ZION0277[1]	VIRGIN R AT U17 XING E OF LAVERKIN	No	353	21	332	0
ZION0278	VIRGIN RIV N OF HURRICN AT BRDG	No	238	0	0	238
ZION0279	LAVERKIN SPRING	No	42	0	42	0
ZION0280	VIRGIN R. BELOW LAVERKIN HOT SPRINGS, UT	No	115	0	115	0
ZION0281	(C-41-13)25CBC-S1	No	24	0	0	24
ZION0282	WEST FIELD DITCH AT TOQUERVILLE,UTAH	No	52	0	41	11
ZION0283	LAVERKIN CR N OF HURRICANE U-17	No	234	0	0	234
ZION0284	CDCA506R	No	12	0	12	0

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ZION0285	CDBC508R	No	14	0	14	0
ZION0286	LA VERKIN CREEK AT HIGHWAY 17 BRIDGE	No	36	0	36	0
ZION0287	ASH CREEK ABOVE TOQUERVILLE, UTAH	No	54	54	0	0
ZION0288	ASH CK AB SPRINGS	No	27	27	0	0
ZION0289	TOQUERVILLE - TOQUERVILLE SPR	No	0	0	0	0
ZION0290	LA VERKIN - TOQUERVILLE SPR	No	41	22	19	0
ZION0291	HURRICANE - TOQUERVILLE SPR	No	137	33	104	0
ZION0292	(C-40-13)35ACD-S1	No	27	0	0	27
ZION0293	ASH CR BLW WEST FIELD DITCH AT TOQUERVILLE,UT	No	376	0	324	52
ZION0294	SOUTH ASH C NR PINTURA, UTAH	No	21	0	0	21
ZION0295	LA VERKIN - ASH CREEK SPRIN	No	57	21	36	0
ZION0296	(C-41-13)11CAD-S1	No	22	0	0	22
ZION0297	HURRICANE - ASH CREEK SPRIN	No	137	34	103	0
ZION0298	LA VERKIN CREEK NEAR LA VERKIN, UTAH	No	200	200	0	0
ZION0299[1]	ASH CK AT U17 XING N OF TOQUERVILLE	No	2263	1533	730	0
ZION0300	LAVERKIN CREEK AT MOUTH, UTAH	No	27	0	27	0
ZION0301	LAVERKIN CREEK AT MOUTH, UT	No	100	0	100	0
ZION0302	ASH CK AB CNF/ VIRGIN R	No	336	336	0	0
ZION0303	ASH CRK N OF HURRICANE AT U-17	No	236	0	0	236
ZION0304	ASH CREEK AT MOUTH, UT	No	115	0	115	0
ZION0305	VIRGIN R. BELOW ASH CREEK, UT	No	148	0	148	0
ZION0306	CDCA504R	No	13	0	13	0
ZION0307	VIRGIN RIVER UPPER SECT	No	23	0	23	0
ZION0308[1]	HURRICANE LAGOONS EFFLUENT	No	352	0	352	0
ZION0309	(C-38-13)16BDB-S1	No	24	0	0	24
ZION0310	GOULD WASH AT MOUTH, UT	No	57	0	57	0
ZION0311	SOUTH ASH CREEK - NEAR USGS GAGING STATION	No	58	0	58	0
ZION0312	SOUTH ASH CK AT USGS 09406700 BL CNFL/MILL/CKS/	No	36	36	0	0
ZION0313	SOUTH ASH CR BLW MILL CR NR PINTURA UTAH	No	314	0	255	59
ZION0314	CDCA503R	No	12	0	12	0
ZION0315	VIRGIN RIVER LOWER SECT	No	23	0	23	0
ZION0316	LEEDS CK AT FS BNDY	No	336	336	0	0
ZION0317	LEEDS CREEK NEAR LEEDS UTAH	No	794	342	368	84
ZION0318	VIRGIN R. ABOVE LEEDS CREEK, UT	No	162	0	162	0
ZION0319	VIRGIN R AT QUAIL CK BYPASS (DIVERTED-PIPED WTR)	No	0	0	0	0
ZION0320	CDCA505R	No	11	0	11	0
ZION0321	LEEDS CREEK AT MOUTH, UT	No	112	0	112	0
ZION0322[1]	QUAIL CK RES 001	No	792	792	0	0
ZION0323	(C-42-14) 1BCB-S1	No	19	0	0	19
ZION0324[1]	QUAIL CK RES 003	No	579	579	0	0
ZION0325	(C-42-14) 2DAB-S1	No	20	0	0	20
ZION0326[1]	QUAIL CK RES 002	No	751	751	0	0
ZION0327	QUAIL CREEK AT I-15 BRIDGE	No	0	0	0	0
ZION0328	QUAIL CREEK AT I-15 BRIDGE	No	96	0	0	96
ZION0329	QUAIL CK ST PARK SWIM BEACH	No	23	23	0	0
ZION0330[1]	VIRGIN R AT U-15 XING W OF HURRICANE	No	4062	3569	493	0
ZION0331[1]	VIRGIN RIVER NR HURRICANE UTAH	No	2189	176	433	1580
ZION0332	VIRGIN RIVER AT U-15 BRDG USGS	No	241	0	0	241
ZION0333	QUAIL CK AB RES	No	192	192	0	0
ZION0334	LEEDS CK AB QUAIL CK	No	148	148	0	0
ZION0335	(C-42-14) 2CCA-S1	No	6	0	0	6
ZION0336	LEEDS CREEK - AT BRIDGE NEAR LEEDS SPRING BOX	No	51	0	51	0
ZION0337	SILVER REEF SPEC SER DIST - OAK GROVE SPR.	No	20	1	19	0
ZION0338	LEEDS DOMESTIC WAT USERS - OAK GROVE SPR	No	106	52	54	0
ZION0339	(C-39-14)20ACD-S1	No	3	0	0	3
ZION0340	(C-40-14)16DBC-S1	No	31	0	0	31
ZION0341	ST. GEORGE WASHINGTON CANAL AT INLET, UT	No	58	0	58	0
ZION0342	ST. GEORGE-WASHINGTON CANAL NR WASHINGTON, UT	No	70	70	0	0
ZION0343	(C-42-14)32ABB-S1	No	19	0	0	19
ZION0344	SANTA CLARA R. ABOVE CAMPGROUND, UT	No	55	0	55	0
ZION0345	JUNIPER PARK CAMPGROUND - SPRING	No	4	3	1	0
ZION0346	OAK GROVE CAMPGROUND - OAK GROVE SPR.	No	37	0	37	0
ZION0347	SANTA CLARA RIVER - NEAR HEAD OF WHIPPLE TRAIL	No	116	0	114	2
ZION0348	SANTA CLARA R. BELOW RIGHT FK., UT	No	57	0	57	0
ZION0349[1]	SANTA CLARA RIVER - BELOW RECREATION AREA	No	146	0	142	4
ZION0350	WATER CANYON - NEAR JEEP ROAD	No	10	0	10	0
ZION0351	SANTA CLARA RIVER BL PINE VALLEY RES	No	0	0	0	0
ZION0352	SANTA CLARA R BL PINE VALLEY RES	No	119	64	55	0
ZION0353	SANTA CLARA RIVER NR PINE VALLEY UTAH	No	651	196	382	73
ZION0354	VIRGIN R AB WASHINGTON LAGOONS	No	281	0	281	0
ZION0355	(C-42-15)11D -S1	No	26	0	0	26

Station Period of Record Tabulation
From 07/14/62 To 12/11/96

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75
ZION0356	ST. GEORGE CITY - COTTONWOOD SPR	No	233	160	73	0
ZION0357	WASHINGTON - #6 SPRING	No	0	0	0	0
ZION0358	WASHINGTON - WESTOVER SPG #2	No	71	0	71	0
ZION0359	WASHINGTON - SPROUL SPRINGS	No	47	0	47	0
ZION0360	WASHINGTON - PRISBREY SPG #1	No	82	0	82	0
ZION0361	WASHINGTON - #7 SPRING	No	5	0	5	0
ZION0362	MILL C. BELOW WASHINGTON, UT	No	57	0	57	0
ZION0363[1]	WASHINGTON LAGOONS EFFLUENT	No	449	0	449	0
ZION0364	ST. GEORGE CITY - LOWER SPRING	No	35	0	35	0
ZION0365	ST. GEORGE CITY - SULLIVAN SPRING	No	34	0	34	0
ZION0366	(C-42-15)14BCB-S1	No	22	0	0	22
ZION0367	(C-42-15)15AAA-S1	No	32	0	0	32
ZION0368	(C-39-15)15DBC-S1	No	6	0	0	6
ZION0369	(C-39-15)15DCD-S1	No	4	0	0	4
ZION0370	(C-39-15)22CCD-S1	No	24	0	0	24
ZION0371	(C-42-15)15BBA-S1	No	23	0	0	23
ZION0372	ST. GEORGE CITY - QUAKING ASP SPR	No	33	0	33	0
ZION0373	ST. GEORGE CITY - BIG PINE CANYON	No	33	0	33	0
ZION0374	ST. GEORGE CITY - W FORK CTTNWD	No	34	0	34	0
ZION0375	ST. GEORGE CITY - CARTER CANYON	No	34	0	34	0

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

Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	14	0	14	0	8	0
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	930	716	214	0	48	2
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3336	1351	1450	535	296	31
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	122	0	62	60	8	2
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	584	436	148	0	97	5
00025	BAROMETRIC PRESSURE (MM OF HG)	146	0	146	0	48	4
00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	810	402	408	0	90	6
00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	892	404	488	0	111	6
00058	FLOW, RATE GALLONS/MIN	9	2	7	0	5	1
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	56	25	31	0	43	1
00060	FLOW, STREAM, MEAN DAILY CFS	502	0	6	496	19	3
00061	FLOW, STREAM, INSTANTANEOUS CFS	2084	883	1153	48	125	14
00070	TURBIDITY, (JACKSON CANDLE UNITS)	88	0	38	50	27	7
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	8	0	8	0	2	0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	898	634	264	0	86	6
00077	TRANSPARENCY, SECCHI DISC (INCHES)	2	0	2	0	2	0
00078	TRANSPARENCY, SECCHI DISC (METERS)	102	101	1	0	8	0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	1254	923	311	20	66	9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	2673	956	1414	303	312	33
00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	16	1	15	0	4	0
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	157	47	49	61	34	10
00300	OXYGEN, DISSOLVED MG/L	1317	889	428	0	108	6
00310	BOD, 5 DAY, 20 DEG C MG/L	216	5	95	116	27	8
00335	COD, .025N K2CR2O7 MG/L	471	304	167	0	30	4
00400	PH (STANDARD UNITS)	1636	924	572	140	258	24
00403	PH, LAB, STANDARD UNITS SU	971	590	381	0	193	15
00405	CARBON DIOXIDE (MG/L AS CO2)	858	616	189	53	88	10
00406	PH, FIELD, STANDARD UNITS SU	91	76	15	0	19	11
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1068	703	287	78	208	19
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	114	0	59	55	34	9
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	26	26	0	0	7	7
00440	BICARBONATE ION (MG/L AS HCO3)	915	620	219	76	126	14
00445	CARBONATE ION (MG/L AS CO3)	867	605	188	74	100	11
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	1	1	0	0	1	0
00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	1	1	0	0	1	0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	180	0	180	0	17	4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1003	733	154	116	65	6
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	1	1	0	0	1	0
00600	NITROGEN, TOTAL (MG/L AS N)	52	52	0	0	6	4
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	65	0	5	60	20	4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	1040	811	229	0	68	5
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	413	269	83	61	45	7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	200	105	91	4	52	5
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	423	269	93	61	43	8
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	318	111	180	27	65	5
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	793	586	207	0	44	8
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	321	136	185	0	31	6
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	654	429	221	4	149	8
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	99	0	76	23	9	0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	175	0	102	73	80	10
00665	PHOSPHORUS, TOTAL (MG/L AS P)	1118	852	205	61	67	12
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	418	418	0	0	30	1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	573	293	276	4	100	9
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	504	303	148	53	44	8
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	61	0	0	61	15	4
00690	CARBON, TOTAL (MG/L AS C)	53	0	0	53	15	4
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	4	1	3	0	3	0
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	9	0	9	0	4	2
00745	SULFIDE, TOTAL (MG/L AS S)	5	5	0	0	3	0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	1229	684	455	90	221	20
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	100	0	75	25	62	4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1284	740	454	90	247	28
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1331	739	502	90	297	34
00930	SODIUM, DISSOLVED (MG/L AS NA)	1337	744	507	86	301	36
00931	SODIUM ADSORPTION RATIO	275	0	250	25	130	8
00932	SODIUM, PERCENT	206	0	201	5	102	5
00933	SODIUM,PLUS POTASSIUM (MG/L)	4	0	0	4	4	0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	1271	736	451	84	243	28
00940	CHLORIDE,TOTAL IN WATER MG/L	703	245	361	97	182	13
00941	CHLORIDE, DISSOLVED IN WATER MG/L	740	488	251	1	105	17
00945	SULFATE, TOTAL (MG/L AS SO4)	320	30	201	89	153	11

Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
00946	SULFATE, DISSOLVED (MG/L AS SO4)	1005	719	285	1	110	18
00950	FLUORIDE, DISSOLVED (MG/L AS F)	514	54	390	70	223	21
00955	SILICA, DISSOLVED (MG/L AS SI02)	531	96	364	71	220	21
01000	ARSENIC, DISSOLVED (UG/L AS AS)	229	135	29	65	58	9
01002	ARSENIC, TOTAL (UG/L AS AS)	515	328	187	0	62	5
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	3	0	3	0	3	0
01005	BARIUM, DISSOLVED (UG/L AS BA)	229	131	33	65	56	10
01007	BARIUM, TOTAL (UG/L AS BA)	501	328	173	0	56	5
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	6	1	5	0	6	1
01015	BISMUTH, DISSOLVED (UG/L AS BI)	5	0	5	0	5	0
01020	BORON, DISSOLVED (UG/L AS B)	434	2	348	84	176	19
01025	CADMIUM, DISSOLVED (UG/L AS CD)	233	137	31	65	61	10
01027	CADMIUM, TOTAL (UG/L AS CD)	499	328	171	0	56	5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	156	128	28	0	38	3
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	172	14	93	65	59	10
01034	CHROMIUM, TOTAL (UG/L AS CR)	499	328	171	0	56	5
01035	COBALT, DISSOLVED (UG/L AS CO)	6	1	5	0	6	1
01040	COPPER, DISSOLVED (UG/L AS CU)	246	137	39	70	71	10
01042	COPPER, TOTAL (UG/L AS CU)	501	328	173	0	56	5
01044	IRON, SUSPENDED (UG/L AS FE)	14	0	14	0	8	0
01045	IRON, TOTAL (UG/L AS FE)	88	0	38	50	33	5
01046	IRON, DISSOLVED (UG/L AS FE)	330	160	100	70	132	11
01049	LEAD, DISSOLVED (UG/L AS PB)	236	138	29	69	64	10
01051	LEAD, TOTAL (UG/L AS PB)	514	328	186	0	62	5
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	3	0	3	0	3	0
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	3	0	3	0	3	0
01054	MANGANESE, SUSPENDED (UG/L AS MN)	19	0	19	0	8	0
01055	MANGANESE, TOTAL (UG/L AS MN)	535	328	207	0	70	5
01056	MANGANESE, DISSOLVED (UG/L AS MN)	378	158	150	70	181	18
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	1	8	0	9	1
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	15	0	15	0	6	0
01065	NICKEL, DISSOLVED (UG/L AS NI)	80	1	14	65	29	7
01067	NICKEL, TOTAL (UG/L AS NI)	157	2	155	0	37	3
01075	SILVER, DISSOLVED (UG/L AS AG)	219	130	25	64	50	9
01077	SILVER, TOTAL (UG/L AS AG)	498	328	170	0	56	5
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	7	2	5	0	7	1
01085	VANADIUM, DISSOLVED (UG/L AS V)	59	1	58	0	59	9
01090	ZINC, DISSOLVED (UG/L AS ZN)	240	130	40	70	68	10
01092	ZINC, TOTAL (UG/L AS ZN)	500	328	172	0	56	5
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	5	0	5	0	5	0
01100	TIN, DISSOLVED (UG/L AS SN)	5	0	5	0	5	0
01105	ALUMINUM, TOTAL (UG/L AS AL)	1	1	0	0	1	0
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	105	56	49	0	55	4
01120	GALLIUM, DISSOLVED (UG/L AS GA)	5	0	5	0	5	0
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	5	0	5	0	5	0
01130	LITHIUM, DISSOLVED (UG/L AS LI)	6	1	5	0	6	1
01145	SELENIUM, DISSOLVED (UG/L AS SE)	227	136	26	65	56	9
01147	SELENIUM, TOTAL (UG/L AS SE)	514	328	186	0	62	5
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	3	0	3	0	3	0
01150	TITANIUM, DISSOLVED (UG/L AS TI)	5	0	5	0	5	0
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	5	0	5	0	5	0
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	50	50	0	0	13	1
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	3	0	3	0	3	0
01501	ALPHA, TOTAL	51	25	26	0	23	3
03501	BETA, TOTAL	18	11	7	0	8	1
03509	BETA, SPECIFIC ACTIVITY (PC/GM OF SUSP. SOLIDS)	1	0	1	0	1	1
03515	BETA, DISSOLVED GROSS, AS CS-137, PC/L	1	1	0	0	1	0
07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	5	1	4	0	4	1
07005	TRITIUM, DISSOLVED (PC/L)	15	15	0	0	5	5
09501	RADIUM 226, TOTAL	21	9	12	0	6	1
09511	RADIUM 226, DISSOLVED, RADON METHOD	1	0	1	0	1	0
11501	RADIUM 228, TOTAL	5	2	3	0	3	0
22703	URANIUM, NATURAL, DISSOLVED	53	0	53	0	53	8
30191	DINOSEB, WATER, WHOLE, RECOVERABLE UG/L	2	2	0	0	1	0
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	50	50	0	0	6	4
30218	DICHLORVOS, WATER, WHOLE, RECOVERABLE UG/L	1	1	0	0	1	0
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	59	26	33	0	18	2
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	39	0	39	0	5	2
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	121	0	7	114	16	5
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	90	0	90	0	12	3
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	104	29	75	0	26	2

Parameter Period of Record Tabulation
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Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	86	0	86	0	12	3
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	85	0	26	59	21	4
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	78	0	51	27	11	3
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	47	23	24	0	17	2
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	44	0	44	0	10	2
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	6	2	4	0	2	0
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	2	2	0	0	2	0
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	2	2	0	0	2	0
32104	BROMOFORM,WHOLE WATER,UG/L	2	2	0	0	2	0
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	4	1	3	0	2	0
32106	CHLOROFORM,WHOLE WATER,UG/L	6	2	4	0	2	0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	151	90	0	61	23	4
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	4	0	4	0	2	0
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	1	1	0	0	1	0
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	1	1	0	0	1	0
34301	CHLOROBENZENE TOTWUG/L	2	2	0	0	2	0
34306	CHLORODIBROMOMETHANE TOTWUG/L	1	1	0	0	1	0
34311	CHLOROETHANE TOTWUG/L	2	2	0	0	2	0
34351	ENDOSULFAN SULFATE TOTWUG/L	6	6	0	0	1	0
34356	ENDOSULFAN, BETA TOTWUG/L	6	6	0	0	1	0
34361	ENDOSULFAN, ALPHA TOTWUG/L	6	6	0	0	1	0
34366	ENDRIN ALDEHYDE TOTWUG/L	6	6	0	0	1	0
34371	ETHYLBENZENE TOTWUG/L	1	1	0	0	1	0
34391	HEXACHLOROBUTADIENE TOTWUG/L	1	1	0	0	1	0
34413	METHYL BROMIDE TOTWUG/L	2	2	0	0	2	0
34418	METHYL CHLORIDE TOTWUG/L	2	2	0	0	2	0
34423	METHYLENE CHLORIDE TOTWUG/L	2	2	0	0	2	0
34475	TETRACHLOROETHYLENE TOTWUG/L	2	2	0	0	2	0
34488	TRICHLOROFLUOROMETHANE TOTWUG/L	2	2	0	0	2	0
34496	1,1-DICHLOROETHANE TOTWUG/L	2	2	0	0	2	0
34501	1,1-DICHLOROETHYLENE TOTWUG/L	2	2	0	0	2	0
34506	1,1,1-TRICHLOROETHANE TOTWUG/L	2	2	0	0	2	0
34511	1,1,2-TRICHLOROETHANE TOTWUG/L	2	2	0	0	2	0
34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	2	2	0	0	2	0
34536	1,2-DICHLOROBENZENE TOTWUG/L	2	2	0	0	2	0
34541	1,2-DICHLOROPROPANE TOTWUG/L	2	2	0	0	2	0
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	2	2	0	0	2	0
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	1	1	0	0	1	0
34561	1,3-DICHLOROPROPENE TOTWUG/L	2	2	0	0	2	0
34566	1,3-DICHLOROBENZENE TOTWUG/L	2	2	0	0	2	0
34571	1,4-DICHLOROBENZENE TOTWUG/L	2	2	0	0	2	0
34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	1	1	0	0	1	0
34668	DICHLORODIFUOROMETHANE TOTWUG/L	1	1	0	0	1	0
34671	PCB - 1016 TOTWUG/L	6	6	0	0	1	0
34688	HEXACHLOROBENZENE WET WGTTISMG/KG	1	1	0	0	1	0
34696	NAPHTHALENE TOTWUG/L	1	1	0	0	1	0
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	1	1	0	0	1	0
34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	1	1	0	0	1	0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	42	9	29	4	28	3
38442	DICAMBA (BANVEL) WATER,DISSUG/L	2	2	0	0	1	0
38760	DBCP WATER, TOTUG/L	1	1	0	0	1	0
39023	PHORATE, FLAME IONIZATION, WATER SAMPLE (UG/L)	1	1	0	0	1	0
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	1	1	0	0	1	0
39034	PERTHANE IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39053	ALDICARB IN WHOLE WATER (UG/L)	1	1	0	0	1	0
39055	SIMAZINE IN WHOLE WATER (UG/L)	1	1	0	0	1	0
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	1	1	0	0	1	0
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	2	2	0	0	2	0
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	2	2	0	0	2	0
39250	NAPTHALENES, POLYCHLORINATED (UG/L)	1	1	0	0	1	0
39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	3	0	3	0	3	0
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	7	7	0	0	1	0
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	1	0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	6	6	0	0	1	0
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	7	7	0	0	1	0
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	4	4	0	0	2	0
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	3	0	3	0	3	0
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	8	8	0	0	2	0
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	3	0	3	0	3	0

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Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	3	0	3	0	3	0
39388	ENDOSULFAN IN WHOLE WATER SAMPLE (UG/L)	2	2	0	0	2	0
39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	3	0	3	0	3	0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	9	9	0	0	2	0
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	3	0	3	0	3	0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	9	9	0	0	2	0
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	3	0	3	0	3	0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	3	0	3	0	3	0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2	0
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	3	0	3	0	3	0
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	6	6	0	0	1	0
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	6	6	0	0	1	0
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	6	6	0	0	1	0
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	6	6	0	0	1	0
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	6	6	0	0	1	0
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	7	7	0	0	1	0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	6	0	6	0	6	0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	2	2	0	0	1	0
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	3	0	3	0	3	0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	3	0	3	0	3	0
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	7	7	0	0	2	0
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39755	MIREX, TOTAL (UG/L)	1	1	0	0	1	0
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	3	0	3	0	3	0
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	9	9	0	0	2	0
39770	DACTHAL (DCPA) IN WHOLE WATER SAMPLE (UG/L)	2	2	0	0	1	0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	1	0
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	3	0	3	0	3	0
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	3	0	3	0	3	0
46323	DELTA-BHC IN WHOLE WATER SMAPLE (UG/L)	6	6	0	0	1	0
50051	FLOW, RATE, INSTANTANEOUS MGD	10	0	10	0	4	1
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	12	0	12	0	3	1
50700	INVALID PARAMETER	41	0	41	0	41	6
50760	INVALID PARAMETER	53	0	53	0	53	8
50761	INVALID PARAMETER	20	0	20	0	20	5
50793	INVALID PARAMETER	52	52	0	0	6	4
50794	INVALID PARAMETER	52	52	0	0	6	4
50795	INVALID PARAMETER	52	52	0	0	6	4
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	1219	832	301	86	160	16
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	247	0	237	10	117	7
70302	SOLIDS, DISSOLVED-TONS PER DAY	159	0	149	10	60	4
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	172	0	162	10	72	4
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	99	99	0	0	16	0
70326	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .002MM	1	0	0	1	1	0
70327	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .004MM	1	0	0	1	1	0
70329	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .016MM	1	0	0	1	1	0
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	7	1	0	6	2	0
70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	5	0	0	5	1	0
70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	5	0	0	5	1	0
70334	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .500MM	2	0	0	2	1	0
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	272	0	7	265	4	0
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	273	0	7	266	4	0
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	230	0	5	225	4	0
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	278	0	7	271	4	0
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	271	0	7	264	4	0

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Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	258	0	7	251	4	0
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	180	0	7	173	3	0
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	13	0	1	12	3	0
70347	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 2.00MM	1	0	0	1	1	0
71830	HYDROXIDE ION (MG/L AS OH)	811	605	155	51	60	7
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	4	0	0	4	1	1
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	3	0	3	0	3	0
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	27	0	10	17	22	4
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	1	0	1	0	1	0
71865	IODIDE (MG/L AS I)	1	0	0	1	1	0
71870	BROMIDE (MG/L AS BR)	1	0	0	1	1	0
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	5	0	0	5	5	0
71885	IRON (UG/L AS FE)	6	0	0	6	6	1
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	81	18	63	0	21	2
71890	MERCURY, DISSOLVED (UG/L AS HG)	155	135	20	0	35	3
71900	MERCURY, TOTAL (UG/L AS HG)	575	329	195	51	80	10
71910	GOLD, TOTAL (UG/L AS AU)	1	1	0	0	1	1
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	18	0	0	18	14	1
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	233	225	8	0	9	0
72025	DEPTH OF POND OR RESERVOIR IN FEET	4	0	4	0	2	0
74010	IRON, TOTAL (MG/L AS FE)	528	328	200	0	63	8
75009	CADDIS	6	0	0	6	6	2
75012	SNAILS	6	0	0	6	6	2
75021	CHIRONOMIDAE	6	0	0	6	6	2
75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	3	0	3	0	3	0
75986	ALPHA GROSS,1 SIGMA PRC EST AS NAT U,DISS,WTR UG/L	1	1	0	0	1	0
75987	ALPHA GROSS,DISS,1 SIGMA PRC EST AS TH230,WTR PC/L	1	1	0	0	1	0
75988	BETA GROSS,DISS,1 SIGMA PRC EST AS SR90/Y90 PC/L	1	1	0	0	1	0
75989	BETA GROSS,1 SIGMA PRC EST AS CS-137,DISS,WTR PC/L	1	1	0	0	1	0
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	1	1	0	0	1	0
77128	STYRENE WHOLE WATER,UG/L	2	2	0	0	2	0
77135	O-XYLENE WHOLE WATER,UG/L	1	1	0	0	1	0
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	1	1	0	0	1	0
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	1	1	0	0	1	0
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	1	1	0	0	1	0
77222	1,2,4-TRIMETHYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77223	ISOPROPYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77224	N-PROPYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77226	1,3,5-TRIMETHYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77275	1-METHYL-2-CHLOROBENZENE (O-CHLOR*WHOLE WATER,UG/L	1	1	0	0	1	0
77277	1-METHYL-4-CHLOROBENZENE (P-CHLOR*WHOLE WATER,UG/L	1	1	0	0	1	0
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	1	1	0	0	1	0
77342	N-BUTYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77350	SEC-BUTYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77353	TERT-BUTYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77356	1-METHYL-4-ISOPROPYLBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	1	1	0	0	1	0
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	1	1	0	0	1	0
77613	1,2,3-TRICHLOROBENZENE WHOLE WATER,UG/L	1	1	0	0	1	0
77651	1,2-DIBROMOETHANE WHOLE WATER,UG/L	2	2	0	0	2	0
77700	CARBARYL WHOLE WATER,UG/L	1	1	0	0	1	0
77825	ALACHLOR WHOLE WATER,UG/L	1	1	0	0	1	0
78008	ENDRIN KETONE IN WATER UG/L	3	3	0	0	1	0
78113	ETHYL BENZENE WHOLE WATER SAMPLE UG/L	1	1	0	0	1	0
78124	BENZENE IN WATER (VOLATILE ANALYSIS) UG/L	1	1	0	0	1	0
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) UG/L	1	1	0	0	1	0
78132	P-XYLENE IN WHOLE WATER UG/L	1	1	0	0	1	0
80000	ALPHA ACTIVITY (PC/MG)	1	0	1	0	1	1
80020	URANIUM,DISS.,BY EXTRACTION FLUOROMETRIC METHOD	1	0	1	0	1	0
80030	ALPHA,DISSOLVED GROSS,AS URANIUM-NATURAL,UG/L	1	1	0	0	1	0
80050	BETA,DISSOLVED GROSS,AS SR-Y-90, PC/L	1	1	0	0	1	0
80110	SPECIFIC GRAVITY WATER-UNITY AT 4C	1	0	1	0	1	0
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	316	9	22	285	18	1
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	307	0	22	285	13	1
80158	BED MATERIAL FALL DIAMETER, % FINER THAN .062MM	30	0	0	30	2	0
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	46	0	0	46	2	0
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	46	0	0	46	2	0
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	46	0	0	46	2	0
80162	BED MATERIAL FALL DIAMETER, % FINER THAN 1.00MM	26	0	0	26	2	0
80163	BED MATERIAL FALL DIAMETER, % FINER THAN 2.00MM	23	0	0	23	2	0
80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	5	0	0	5	2	0

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Parameter Code	Name	Total Obs	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Stations Total	Stations Park
80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	3	0	0	3	2	0
80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	3	0	0	3	2	0
80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	3	0	0	3	2	0
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	22	0	0	22	2	0
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	22	0	0	22	2	0
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	44	0	0	44	2	0
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	39	0	0	39	2	0
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	34	0	0	34	2	0
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	29	0	0	29	2	0
80174	BED MATERIAL SIEVE DIAMETER,% FINER THAN 64.0MM	1	0	0	1	1	0
81284	TRIFLURALIN(C13H16F3N3O4) WHOLE WATER SAMPLE UG/L	1	1	0	0	1	0
81405	CARBOFURAN (EURADAN) WHOLE WATER SAMPLE UG/L	1	1	0	0	1	0
81522	DIBROMOETHANE WHL WATER SMPL UG/L	1	1	0	0	1	0
81551	XYLENE WHL WATER SMPL UG/L	1	1	0	0	1	0
81555	BROMOBENZENE WHL WATER SMPL UG/L	1	1	0	0	1	0
81710	M-XYLENE IN THE WHOLE WATER SAMPLE MG/L	1	1	0	0	1	0
81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	3	0	3	0	3	0
81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	1	1	0	0	1	0
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	18	0	18	0	18	6
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	16	0	16	0	16	0
82080	TRIHALOMETHANE TOTAL IN WATER, BY SUMMATION UG/L	4	0	4	0	1	0
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	20	20	0	0	5	5
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	20	20	0	0	5	5
82183	2,4-DP (DICHLORPROP) TOTAL UG/L	1	1	0	0	1	0
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	35	0	35	0	35	2
82702	AS DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82703	BA DECNT FLD ACID WTR MG/L	50	50	0	0	13	1
82705	CD DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82706	CR DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82708	CU DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82710	FE DECNT FLD ACID WTR MG/L	50	50	0	0	13	1
82711	PB DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82712	MN DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82713	HG DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82716	AG DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
82719	ZN DECNT FLD ACID WTR UG/L	50	50	0	0	13	1
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	112	19	78	15	99	4
84001	AQUIFER NAME CODE (SEE USGS CATALOG)	112	19	78	15	99	4

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0061	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	08/13/75-09/25/75	0	4	
ZION0074	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	08/13/75-09/25/75	0	4	
ZION0182	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	12/07/77-12/07/77	0	1	
ZION0210	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	12/09/77-12/09/77	0	1	
ZION0231	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	11/18/77-11/18/77	0	1	
ZION0265	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	11/16/77-11/16/77	0	1	
ZION0307	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	02/03/75-02/03/75	0	1	
ZION0315	No	00003	SAMPLING STATION LOCATION, VERTICAL (FEET)	02/03/75-02/03/75	0	1	
ZION0032	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/19/92-12/10/96	4	39	
ZION0034	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/19/92-03/13/96	4	31	
ZION0038	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/09/92-03/13/96	3	29	
ZION0040	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	09/02/91-03/13/96	4	27	
ZION0042	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/28/93-06/16/94	0	9	
ZION0056	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/03/88-08/08/95	7	36	
ZION0061	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/13/75-09/25/75	0	4	
ZION0074	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/13/75-09/25/75	0	4	
ZION0075	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/11/93-06/16/94	1	10	
ZION0084	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	10/05/88-08/08/95	6	32	
ZION0087	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/27/93-08/08/95	1	8	
ZION0090	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/02/88-09/09/94	6	4	
ZION0115	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	10/05/88-06/28/93	4	8	
ZION0137	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/21/79-11/10/93	14	38	
ZION0141	Yes	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/16/84-10/31/84	0	3	
ZION0177	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	11/18/92-03/12/96	3	15	
ZION0178	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/11/90-07/31/96	6	38	
ZION0179	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/07/91-08/07/91	0	1	
ZION0186	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/26/82-12/11/96	14	70	
ZION0192	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/19/79-12/11/96	17	79	
ZION0205	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/18/79-04/14/82	2	16	
ZION0206	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/22/79-08/28/79	0	2	
ZION0212	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/22/79-08/09/95	16	8	
ZION0215	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/22/79-08/09/95	16	30	
ZION0217	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/22/79-08/09/95	16	14	
ZION0241	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/03/96-12/11/96	0	11	
ZION0256	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/24/82-12/11/96	14	47	
ZION0264	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/02/96-12/11/96	0	4	
ZION0274	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/23/75-07/23/75	0	1	
ZION0276	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/17/80-12/11/96	16	52	
ZION0277	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/17/80-12/16/81	1	9	
ZION0279	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/21/83-06/21/83	0	1	
ZION0288	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	12/11/96-12/11/96	0	1	
ZION0299	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	10/28/80-04/24/96	15	34	
ZION0302	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/02/96-12/11/96	0	11	
ZION0308	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/21/79-02/24/82	3	16	
ZION0312	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	06/25/93-06/25/93	0	1	
ZION0316	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	04/03/96-12/11/96	0	11	
ZION0322	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/22/91-08/09/95	4	22	
ZION0324	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/03/90-08/09/95	5	16	
ZION0326	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/03/90-08/09/95	5	18	
ZION0329	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/16/96-09/03/96	0	8	
ZION0330	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/24/82-12/11/96	14	67	
ZION0333	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	08/03/90-08/09/95	5	6	
ZION0334	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/09/96-12/11/96	0	5	
ZION0352	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	05/23/79-06/25/93	14	4	
ZION0354	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	07/20/82-04/27/83	0	6	
ZION0363	No	00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE	02/21/79-04/27/83	4	24	
ZION0002	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	0	1	
ZION0004	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/81-10/20/81	0	1	
ZION0005	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-07/30/81	0	1	
ZION0006	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-08/31/82	1	4	
ZION0007	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	0	1	
ZION0008	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/81-07/17/81	0	1	
ZION0009	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	0	1	
ZION0010	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/20/81-08/24/81	0	2	
ZION0011	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	0	1	
ZION0014	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-05/07/82	0	2	
ZION0015	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0016	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0017	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-05/07/82	0	2	
ZION0018	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/77-06/22/77	0	1	
ZION0019	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/77-06/22/77	0	1	
ZION0020	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-05/03/82	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0021	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	24	153	
ZION0022	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	0	5	
ZION0024	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/17/81-10/17/81	0	1	
ZION0025	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	0	1	
ZION0027	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/29/81-08/29/81	0	1	
ZION0030	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-08/26/81	0	2	
ZION0031	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0032	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/19/92-12/10/96	4	39	
ZION0033	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-05/03/82	0	1	
ZION0034	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/19/92-12/06/95	3	25	
ZION0035	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	0	5	
ZION0036	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/80-07/05/80	0	1	
ZION0037	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/31/82	1	4	
ZION0038	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/92-12/06/95	3	21	
ZION0040	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/02/91-12/06/95	4	18	
ZION0041	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	0	1	
ZION0042	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/93-06/16/94	0	8	
ZION0043	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	1	3	
ZION0044	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/81-09/13/86	4	2	
ZION0045	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	1	3	
ZION0046	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-08/26/81	0	2	
ZION0047	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	0	1	
ZION0048	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	0	1	
ZION0049	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/86-06/24/86	0	1	
ZION0050	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/19/86	4	2	
ZION0051	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/80-07/07/80	0	1	
ZION0052	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	0	1	
ZION0053	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/73-09/07/78	5	38	
ZION0054	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/86-07/13/86	0	1	
ZION0055	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	0	1	
ZION0056	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/08/95	7	34	
ZION0057	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	0	1	
ZION0058	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/86-07/16/86	0	2	
ZION0059	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-06/25/79	1	2	
ZION0060	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/86-09/10/86	0	1	
ZION0061	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/75-09/25/75	0	4	
ZION0062	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	0	1	
ZION0063	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	0	1	
ZION0064	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	0	1	
ZION0065	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/80-07/01/80	0	1	
ZION0067	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	0	1	
ZION0068	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/86-06/22/86	0	1	
ZION0069	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	0	1	
ZION0070	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/86-07/13/86	0	1	
ZION0071	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/86-07/17/86	0	1	
ZION0072	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	0	1	
ZION0073	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-03/04/82	0	2	
ZION0074	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/75-09/25/75	0	4	
ZION0075	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/93-06/16/94	1	10	
ZION0076	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/03/92-10/05/92	0	10	
ZION0077	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/74-06/12/86	11	68	
ZION0079	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	0	1	
ZION0083	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/86-11/06/86	0	2	
ZION0084	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-08/08/95	6	30	
ZION0086	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/86-08/22/86	0	1	
ZION0087	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/27/93-08/08/95	1	7	
ZION0088	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	0	1	
ZION0089	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/20/86	4	4	
ZION0090	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/15/90	2	2	
ZION0091	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/86-06/18/86	0	1	
ZION0092	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-08/20/82	0	2	
ZION0093	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	0	1	
ZION0094	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/03/92-10/05/92	0	9	
ZION0095	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	0	1	
ZION0096	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	0	2	
ZION0097	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	0	2	
ZION0098	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/21/86	4	3	
ZION0099	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	0	2	
ZION0100	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	0	1	
ZION0101	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/86	4	3	
ZION0102	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-05/03/82	0	2	
ZION0103	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/14/86-09/14/86	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0104	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/79-07/16/86	7	53	
ZION0105	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	0	1	
ZION0106	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/80-07/01/80	0	1	
ZION0107	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	0	1	
ZION0108	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/86-07/15/86	0	1	
ZION0109	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	0	1	
ZION0110	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/12/77-06/19/90	12	2	
ZION0111	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/26/86-08/26/86	0	1	
ZION0112	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/12/77-11/12/77	0	1	
ZION0113	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	1	4	
ZION0114	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/86-07/15/86	0	1	
ZION0115	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-06/28/93	4	6	
ZION0116	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/87-07/28/87	0	1	
ZION0117	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/87-09/18/87	0	1	
ZION0118	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/86-09/11/86	0	1	
ZION0120	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/80-07/17/80	0	1	
ZION0121	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/87-09/18/87	0	1	
ZION0122	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	0	1	
ZION0123	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/20/80-07/20/80	0	1	
ZION0124	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/87-08/21/91	4	23	
ZION0125	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/20/81	0	1	
ZION0127	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/87-08/21/91	4	27	
ZION0128	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/80-07/19/80	0	1	
ZION0129	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/82-06/11/82	0	1	
ZION0130	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	0	1	
ZION0131	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/80-07/05/80	0	1	
ZION0132	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/23/86-08/23/86	0	1	
ZION0134	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/92-09/18/92	0	6	
ZION0136	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/80-07/19/80	0	1	
ZION0137	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/77-11/10/93	16	38	
ZION0138	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	1	3	
ZION0139	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/77-03/31/77	0	1	
ZION0140	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/01/77-11/29/77	0	9	
ZION0141	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/84-10/31/84	0	1	
ZION0142	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/02/80-07/02/80	0	1	
ZION0144	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/02/80-07/02/80	0	1	
ZION0145	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	0	2	
ZION0148	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/92-10/06/92	0	11	
ZION0149	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	1	3	
ZION0151	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/92-10/02/92	0	11	
ZION0156	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-09/19/86	5	5	
ZION0157	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/92-10/06/92	0	5	
ZION0158	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	0	4	
ZION0159	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/87-06/30/87	0	1	
ZION0162	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/86-09/18/86	0	1	
ZION0163	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	0	1	
ZION0168	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	1	3	
ZION0170	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/75-07/13/76	1	3	
ZION0171	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/75-07/13/76	1	4	
ZION0172	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-08/22/80	6	23	
ZION0173	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/73-08/13/91	17	55	
ZION0174	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	13	99	
ZION0177	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/18/92-03/12/96	3	14	
ZION0178	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/90-07/31/96	6	36	
ZION0179	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/07/91-08/07/91	0	1	
ZION0180	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	0	5	
ZION0183	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	4	
ZION0184	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	0	1	
ZION0186	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/82-12/11/96	14	102	
ZION0187	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	4	
ZION0188	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	5	
ZION0189	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	0	3	
ZION0192	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-12/11/96	17	117	
ZION0193	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	5	
ZION0194	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/80-07/15/80	0	1	
ZION0195	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	0	2	
ZION0196	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0197	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	5	
ZION0198	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	0	1	
ZION0200	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	0	1	
ZION0203	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	4	
ZION0204	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-08/17/81	0	1	
ZION0205	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-04/14/82	2	18	
ZION0206	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/80-07/13/80	0	1	
ZION0208	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	0	1	
ZION0209	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	0	1	
ZION0210	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/77-12/09/77	0	1	
ZION0211	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	0	1	
ZION0212	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	16	9	
ZION0213	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-08/17/81	0	1	
ZION0214	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0215	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	16	37	
ZION0216	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0217	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	16	18	
ZION0218	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0219	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/80-07/13/80	0	1	
ZION0220	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	0	1	
ZION0221	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	0	1	
ZION0222	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/80-07/10/80	0	1	
ZION0223	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-08/23/82	1	4	
ZION0224	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/80-07/14/80	0	1	
ZION0226	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/80-07/15/80	0	1	
ZION0227	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0228	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	0	1	
ZION0229	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	0	1	
ZION0230	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	0	1	
ZION0231	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/18/77-11/18/77	0	1	
ZION0233	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/87-07/15/91	3	28	
ZION0234	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	0	1	
ZION0236	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/74-01/18/74	0	1	
ZION0238	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/77-12/10/77	0	1	
ZION0239	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	10	99	
ZION0240	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/17/77-11/17/77	0	1	
ZION0241	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/03/96-12/11/96	0	11	
ZION0242	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	5	
ZION0243	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	0	3	
ZION0244	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	0	3	
ZION0248	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	0	3	
ZION0249	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	5	
ZION0250	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	4	
ZION0251	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	0	1	
ZION0252	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	5	
ZION0253	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	0	2	
ZION0254	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/80-06/21/80	0	1	
ZION0255	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	5	
ZION0256	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	14	82	
ZION0257	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/80-06/21/80	0	1	
ZION0258	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	28	232	
ZION0260	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/80-07/12/80	0	1	
ZION0261	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/80-06/26/80	0	1	
ZION0262	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	0	1	
ZION0263	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-09/02/82	1	3	
ZION0264	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/02/96-12/11/96	0	4	
ZION0265	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	0	1	
ZION0266	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	0	1	
ZION0267	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/11/82-05/11/82	0	1	
ZION0268	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0270	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/16/74	0	3	
ZION0272	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/16/74	0	3	
ZION0273	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-05/05/82	0	2	
ZION0275	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	0	3	
ZION0276	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-12/11/96	16	91	
ZION0277	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-04/23/85	4	15	
ZION0278	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	0	5	
ZION0280	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0281	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/25/66-03/25/66	0	1	
ZION0282	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/23/73-07/18/78	5	16	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0283	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	0	5	
ZION0284	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/80-07/12/80	0	1	
ZION0285	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/23/80-06/23/80	0	1	
ZION0286	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	0	2	
ZION0287	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/11/87-05/20/91	3	9	
ZION0288	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/11/96-12/11/96	0	1	
ZION0292	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/25/68-02/27/70	1	2	
ZION0293	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	9	86	
ZION0296	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/28/68-10/28/68	0	1	
ZION0298	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/13/87-10/03/91	3	34	
ZION0299	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/81-04/24/96	15	60	
ZION0300	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/82-05/07/82	0	1	
ZION0301	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	3	
ZION0302	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/02/96-12/11/96	0	11	
ZION0303	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	0	5	
ZION0304	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0305	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	5	
ZION0306	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	0	1	
ZION0307	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/75-02/03/75	0	1	
ZION0308	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/07/78-02/24/82	4	18	
ZION0310	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-05/07/82	0	2	
ZION0311	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/77-08/05/77	0	2	
ZION0312	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/25/93-06/25/93	0	1	
ZION0313	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/03/82	11	81	
ZION0314	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	0	1	
ZION0315	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/75-02/03/75	0	1	
ZION0316	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/03/96-12/11/96	0	11	
ZION0317	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	20	169	
ZION0318	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/31/81-08/23/82	0	5	
ZION0320	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	0	1	
ZION0321	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-08/23/82	1	4	
ZION0322	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	35	
ZION0323	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/07/65-10/07/65	0	1	
ZION0324	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	24	
ZION0325	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/68-08/20/68	0	1	
ZION0326	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	30	
ZION0328	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-05/28/74	0	2	
ZION0330	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	14	101	
ZION0331	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	24	252	
ZION0332	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	0	5	
ZION0333	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	8	
ZION0334	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/09/96-10/30/96	0	4	
ZION0335	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/10/68-10/10/68	0	1	
ZION0336	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/77-09/23/77	0	4	
ZION0339	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/24/68-10/24/68	0	1	
ZION0340	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/68-10/30/68	0	1	
ZION0341	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-05/06/82	0	2	
ZION0342	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/87-04/18/89	1	13	
ZION0343	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/65-11/04/65	0	1	
ZION0344	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-05/04/82	0	2	
ZION0347	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/77-09/23/77	0	3	
ZION0348	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-05/04/82	0	2	
ZION0349	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/77-07/24/79	2	6	
ZION0350	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/12/82-05/12/82	0	1	
ZION0352	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/79-06/25/93	14	2	
ZION0353	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	20	143	
ZION0354	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/20/82-04/27/83	0	6	
ZION0362	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-05/06/82	0	2	
ZION0363	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/25/77-04/27/83	6	31	
ZION0366	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/68-10/16/68	0	1	
ZION0367	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/68-10/16/68	0	1	
ZION0368	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/23/68-10/23/68	0	1	
ZION0369	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/23/68-10/23/68	0	1	
ZION0371	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/66-10/16/68	2	2	
ZION0047	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	2	13	
ZION0055	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	2	13	
ZION0059	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	2	13	
ZION0072	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	2	13	
ZION0141	Yes	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	02/10/69-12/18/75	6	45	
ZION0259	Yes	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/08/64-06/08/64	0	1	
ZION0347	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	05/16/75-10/14/76	1	12	
ZION0349	No	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	05/16/75-10/14/76	1	12	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0006	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-08/31/82	1	4	
ZION0015	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0016	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0020	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	0	1	
ZION0021	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/15/91	9	31	
ZION0023	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	0	1	
ZION0031	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	0	2	
ZION0033	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	0	1	
ZION0037	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/31/82	1	4	
ZION0042	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/28/93-06/16/94	0	7	
ZION0043	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/23/82	1	3	
ZION0044	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/86-09/13/86	0	1	
ZION0045	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/23/82	1	3	
ZION0049	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/24/86-06/24/86	0	1	
ZION0050	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/86-08/19/86	0	1	
ZION0054	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/13/86-07/13/86	0	1	
ZION0056	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-05/24/94	2	10	
ZION0058	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/11/86-07/16/86	0	2	
ZION0060	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/86-09/10/86	0	1	
ZION0062	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/12/86-07/12/86	0	1	
ZION0068	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/86-06/22/86	0	1	
ZION0070	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/13/86-07/13/86	0	1	
ZION0071	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/17/86-07/17/86	0	1	
ZION0075	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/11/93-06/16/94	1	9	
ZION0077	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-06/12/86	4	3	
ZION0083	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/86-06/22/86	0	1	
ZION0084	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-09/09/94	3	11	
ZION0086	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/22/86-08/22/86	0	1	
ZION0087	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/27/93-06/16/94	0	4	
ZION0089	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/14/86-07/14/86	0	1	
ZION0091	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/18/86-06/18/86	0	1	
ZION0101	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-05/03/82	0	2	
ZION0103	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/14/86-09/14/86	0	1	
ZION0104	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-07/16/86	4	6	
ZION0108	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/15/86-07/15/86	0	1	
ZION0111	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/26/86-08/26/86	0	1	
ZION0114	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/15/86-07/15/86	0	1	
ZION0115	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-06/28/93	2	3	
ZION0124	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/08/87-08/21/91	4	22	
ZION0125	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/20/81	0	1	
ZION0127	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/08/87-08/21/91	4	26	
ZION0132	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/04/91-04/04/91	0	1	
ZION0145	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/04/82	0	2	
ZION0156	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/04/82	0	4	
ZION0173	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/04/82-08/13/91	9	30	
ZION0175	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/24/81	0	1	
ZION0178	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/07/91-08/07/91	0	4	
ZION0179	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/07/91-08/07/91	0	1	
ZION0186	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	0	5	
ZION0187	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	4	
ZION0189	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	4	
ZION0192	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	0	4	
ZION0203	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	4	
ZION0212	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	0	1	
ZION0213	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-08/17/81	0	1	
ZION0215	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	0	4	
ZION0217	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	0	1	
ZION0223	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-08/23/82	1	4	
ZION0233	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/87-01/09/91	3	23	
ZION0239	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-05/11/82	0	2	
ZION0242	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	0	5	
ZION0250	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-09/01/82	1	4	
ZION0256	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	0	4	
ZION0258	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-07/16/91	9	39	
ZION0263	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-09/02/82	1	3	
ZION0267	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/11/82-05/11/82	0	1	
ZION0268	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0273	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-05/05/82	0	2	
ZION0276	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	0	4	
ZION0280	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0287	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/11/87-05/20/91	3	9	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0293	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	3	
ZION0298	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/13/87-10/03/91	3	32	
ZION0299	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-01/16/91	0	2	
ZION0300	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/07/82-05/07/82	0	1	
ZION0301	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	3	
ZION0304	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	4	
ZION0305	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	1	5	
ZION0310	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/28/81-05/07/82	0	2	
ZION0312	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/93-06/25/93	0	1	
ZION0313	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-05/11/82	0	2	
ZION0317	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	9	70	
ZION0318	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/23/82	0	5	
ZION0321	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-08/23/82	1	4	
ZION0322	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/08/91-08/08/91	0	4	
ZION0324	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/03/90-08/08/91	1	3	
ZION0326	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/08/91-08/08/91	0	2	
ZION0330	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-09/18/91	1	5	
ZION0331	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/13/91	9	29	
ZION0341	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-05/06/82	0	2	
ZION0342	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	10/16/87-04/18/89	1	12	
ZION0344	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-05/04/82	0	2	
ZION0348	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-05/04/82	0	2	
ZION0352	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/04/90-06/25/93	2	2	
ZION0353	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-06/17/91	9	28	
ZION0362	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-05/06/82	0	2	
ZION0006	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	0	4	
ZION0015	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	0	2	
ZION0016	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	0	2	
ZION0020	No	00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	0	1	
ZION0021	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	0	4	
ZION0023	No	00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	0	1	
ZION0031	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	0	2	
ZION0033	No	00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	0	1	
ZION0037	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	0	4	
ZION0043	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/23/82	1	3	
ZION0045	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/23/82	1	3	
ZION0077	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	0	2	
ZION0101	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	0	2	
ZION0104	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	0	3	
ZION0125	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/20/81	0	1	
ZION0145	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/04/82	0	2	
ZION0156	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/04/82	0	4	
ZION0173	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	08/23/82-08/23/82	0	1	
ZION0175	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-05/04/82	0	3	
ZION0187	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	0	5	
ZION0189	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	0	5	
ZION0203	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	1	5	
ZION0213	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-08/17/81	0	1	
ZION0223	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-08/23/82	1	5	
ZION0239	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/11/82	0	2	
ZION0242	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	0	5	
ZION0250	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	1	5	
ZION0258	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	1	4	
ZION0263	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-09/02/82	1	3	
ZION0267	No	00025	BAROMETRIC PRESSURE (MM OF HG)	05/11/82-05/11/82	0	1	
ZION0268	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	5	
ZION0273	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-05/05/82	0	2	
ZION0280	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	5	
ZION0293	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	3	
ZION0301	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	5	
ZION0304	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	5	
ZION0305	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	1	5	
ZION0310	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/28/81-05/07/82	0	2	
ZION0313	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/11/82	0	2	
ZION0317	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/24/81	0	1	
ZION0318	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/31/81-08/23/82	0	5	
ZION0321	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-08/23/82	1	5	
ZION0331	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/31/81-08/23/82	0	5	
ZION0341	No	00025	BAROMETRIC PRESSURE (MM OF HG)	05/06/81-08/24/81	0	2	
ZION0344	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-05/04/82	0	2	
ZION0348	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-05/04/82	0	2	
ZION0353	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/04/82	0	2	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0362	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/06/82	0	2	
ZION0004	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-10/20/81	0	1	
ZION0006	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/12/81-08/31/82	0	4	
ZION0014	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/07/82-05/07/82	0	1	
ZION0015	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0016	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0017	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/07/82-05/07/82	0	1	
ZION0020	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0021	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/06/81-08/15/91	9	71	
ZION0023	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0024	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/17/81-10/17/81	0	1	
ZION0031	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0033	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-05/03/82	0	1	
ZION0037	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/12/81-08/31/82	0	4	
ZION0043	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/08/81-08/23/82	0	2	
ZION0044	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	11/16/81-09/13/86	4	2	
ZION0045	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/12/81-08/23/82	0	2	
ZION0049	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/24/86-06/24/86	0	1	
ZION0054	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/13/86-07/13/86	0	1	
ZION0058	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/11/86-07/16/86	0	2	
ZION0060	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/10/86-09/10/86	0	1	
ZION0062	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/12/86-07/12/86	0	1	
ZION0068	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/22/86-06/22/86	0	1	
ZION0069	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/12/86-07/12/86	0	1	
ZION0070	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/13/86-07/13/86	0	1	
ZION0071	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/17/86-07/17/86	0	1	
ZION0073	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/04/82-03/04/82	0	1	
ZION0077	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/07/81-06/12/86	4	28	
ZION0083	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/22/86-11/06/86	0	2	
ZION0089	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/17/82-07/14/86	3	2	
ZION0091	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/18/86-06/18/86	0	1	
ZION0096	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/07/82-06/07/82	0	1	
ZION0097	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/07/82-06/07/82	0	1	
ZION0098	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/07/82-08/21/86	4	2	
ZION0099	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/07/82-07/06/82	0	2	
ZION0101	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/03/82-06/21/86	4	2	
ZION0103	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/14/86-09/14/86	0	1	
ZION0104	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/07/81-07/16/86	4	32	
ZION0108	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/15/86-07/15/86	0	1	
ZION0110	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/19/90-06/19/90	0	1	
ZION0114	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/15/86-07/15/86	0	1	
ZION0116	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/28/87-07/28/87	0	1	
ZION0117	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/18/87-09/18/87	0	1	
ZION0118	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/11/86-09/11/86	0	1	
ZION0121	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/18/87-09/18/87	0	1	
ZION0124	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/08/87-08/21/91	4	24	
ZION0127	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	07/08/87-08/21/91	4	27	
ZION0129	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/11/82-06/11/82	0	1	
ZION0132	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/23/86-08/23/86	0	1	
ZION0138	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/16/82-08/16/82	0	1	
ZION0145	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/04/82-05/04/82	0	1	
ZION0149	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/16/82-08/16/82	0	1	
ZION0156	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/17/81-09/19/86	4	4	
ZION0159	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/30/87-06/30/87	0	1	
ZION0162	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/18/86-09/18/86	0	1	
ZION0168	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/16/82-08/16/82	0	1	
ZION0173	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/04/82-08/13/91	9	51	
ZION0175	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/07/81-09/13/84	2	24	
ZION0187	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-08/23/82	0	4	
ZION0189	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-08/23/82	0	4	
ZION0203	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/01/82	0	4	
ZION0223	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/15/81-08/23/82	0	4	
ZION0233	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/25/87-07/15/91	3	29	
ZION0239	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/06/81-09/15/82	0	13	
ZION0242	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/17/81-08/23/82	0	4	
ZION0250	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/17/81-09/01/82	0	4	
ZION0258	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/08/81-08/21/91	9	76	
ZION0263	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/11/82-09/02/82	0	2	
ZION0267	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/11/82-05/11/82	0	1	
ZION0268	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/02/82	0	4	
ZION0273	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/05/82-05/05/82	0	1	
ZION0280	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/02/82	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0287	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	11/11/87-05/20/91	3	9	
ZION0293	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/06/81-09/09/82	0	12	
ZION0298	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/02/87-10/03/91	4	35	
ZION0300	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/07/82-05/07/82	0	1	
ZION0301	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/02/82	0	4	
ZION0304	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/02/82	0	4	
ZION0305	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-09/02/82	0	4	
ZION0310	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/07/82-05/07/82	0	1	
ZION0313	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/06/81-08/03/82	0	11	
ZION0317	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/08/81-08/20/91	9	92	
ZION0318	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-08/23/82	0	4	
ZION0321	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/20/81-08/23/82	0	4	
ZION0331	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/06/81-08/13/91	9	67	
ZION0341	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/06/82-05/06/82	0	1	
ZION0342	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/16/87-04/18/89	1	13	
ZION0344	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/04/82-05/04/82	0	1	
ZION0348	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/04/82-05/04/82	0	1	
ZION0353	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/05/81-08/20/91	9	65	
ZION0362	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	05/06/82-05/06/82	0	1	
ZION0002	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/16/81-07/16/81	0	1	
ZION0004	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/20/81-10/20/81	0	1	
ZION0005	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/30/81-07/30/81	0	1	
ZION0006	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-08/31/82	1	5	
ZION0007	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/16/81-07/16/81	0	1	
ZION0008	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/17/81-07/17/81	0	1	
ZION0009	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/16/81-07/16/81	0	1	
ZION0010	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/20/81-08/24/81	0	2	
ZION0011	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/28/81	0	1	
ZION0014	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/30/81-05/07/82	0	2	
ZION0015	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-05/03/82	0	2	
ZION0016	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-05/03/82	0	2	
ZION0017	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/30/81-05/07/82	0	2	
ZION0020	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/03/82-05/03/82	0	1	
ZION0021	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-08/15/91	9	72	
ZION0023	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/03/82-05/03/82	0	1	
ZION0024	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/17/81-10/17/81	0	1	
ZION0025	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/28/81	0	1	
ZION0027	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/29/81-08/29/81	0	1	
ZION0030	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/22/81-08/26/81	0	2	
ZION0031	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-05/03/82	0	2	
ZION0033	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/03/82-05/03/82	0	1	
ZION0037	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-08/31/82	1	5	
ZION0043	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-08/23/82	1	3	
ZION0044	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	11/16/81-09/13/86	4	2	
ZION0045	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-08/23/82	1	3	
ZION0046	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/22/81-08/26/81	0	2	
ZION0048	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/81-07/15/81	0	1	
ZION0049	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/24/86-06/24/86	0	1	
ZION0050	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/19/86	4	2	
ZION0054	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/13/86-07/13/86	0	1	
ZION0058	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/11/86-07/16/86	0	2	
ZION0060	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/10/86-09/10/86	0	1	
ZION0062	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/12/86-07/12/86	0	1	
ZION0064	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/28/81	0	1	
ZION0067	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/81-07/15/81	0	1	
ZION0068	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/22/86-06/22/86	0	1	
ZION0070	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/13/86-07/13/86	0	1	
ZION0071	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/17/86-07/17/86	0	1	
ZION0073	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/22/81-03/04/82	0	2	
ZION0077	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-06/12/86	4	29	
ZION0083	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/22/86-11/06/86	0	2	
ZION0086	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/22/86-08/22/86	0	1	
ZION0088	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/81-07/15/81	0	1	
ZION0089	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-07/14/86	4	3	
ZION0091	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/18/86-06/18/86	0	1	
ZION0095	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/81-07/15/81	0	1	
ZION0096	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-06/07/82	0	2	
ZION0097	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-06/07/82	0	2	
ZION0098	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/21/86	4	3	
ZION0099	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-07/06/82	0	3	
ZION0100	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-08/28/81	0	1	
ZION0101	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-06/21/86	4	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0103	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/14/86-09/14/86	0	1	
ZION0104	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/22/81-07/16/86	5	35	
ZION0108	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/86-07/15/86	0	1	
ZION0110	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/19/90-06/19/90	0	1	
ZION0111	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/26/86-08/26/86	0	1	
ZION0114	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/15/86-07/15/86	0	1	
ZION0116	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/28/87-07/28/87	0	1	
ZION0117	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/18/87-09/18/87	0	1	
ZION0118	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/11/86-09/11/86	0	1	
ZION0121	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/18/87-09/18/87	0	1	
ZION0124	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/08/87-08/21/91	4	24	
ZION0125	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-08/20/81	0	1	
ZION0127	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	07/08/87-08/21/91	4	27	
ZION0129	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/11/82-06/11/82	0	1	
ZION0132	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/23/86-08/23/86	0	1	
ZION0138	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/23/81-08/16/82	1	3	
ZION0145	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-05/04/82	0	2	
ZION0149	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/23/81-08/16/82	1	3	
ZION0156	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-09/19/86	5	5	
ZION0159	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/30/87-06/30/87	0	1	
ZION0162	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/18/86-09/18/86	0	1	
ZION0168	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/23/81-08/16/82	1	3	
ZION0173	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/04/82-08/13/91	9	51	
ZION0175	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-09/13/84	3	25	
ZION0187	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-08/23/82	0	5	
ZION0189	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-08/23/82	0	5	
ZION0203	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-09/01/82	1	5	
ZION0213	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/17/81-08/17/81	0	1	
ZION0223	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/81-08/23/82	1	5	
ZION0233	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/87-07/15/91	3	29	
ZION0239	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/17/81-09/15/82	1	14	
ZION0242	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-08/23/82	0	5	
ZION0250	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-09/01/82	1	5	
ZION0258	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-08/21/91	9	77	
ZION0263	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/81-09/02/82	1	3	
ZION0267	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/11/82-05/11/82	0	1	
ZION0268	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/02/82	1	5	
ZION0273	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-05/05/82	0	2	
ZION0280	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/02/82	1	6	
ZION0287	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	11/11/87-05/20/91	3	9	
ZION0293	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/09/82	1	13	
ZION0298	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/02/87-10/03/91	4	35	
ZION0300	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	05/07/82-05/07/82	0	1	
ZION0301	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/02/82	1	5	
ZION0304	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/02/82	1	5	
ZION0305	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/25/81-09/02/82	1	5	
ZION0310	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/28/81-05/07/82	0	2	
ZION0313	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/17/81-08/03/82	0	12	
ZION0317	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-08/20/91	9	93	
ZION0318	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/31/81-08/23/82	0	5	
ZION0321	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/19/81-08/23/82	1	5	
ZION0331	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/31/81-08/13/91	9	68	
ZION0341	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/24/81-05/06/82	0	2	
ZION0342	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	10/16/87-04/18/89	1	13	
ZION0344	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/81-05/04/82	0	2	
ZION0348	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/81-05/04/82	0	2	
ZION0353	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/17/81-08/20/91	10	66	
ZION0362	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/20/81-05/06/82	0	2	
ZION0075	No	00058	FLOW, RATE GALLONS/MIN	09/10/93-09/10/93	0	1	
ZION0099	No	00058	FLOW, RATE GALLONS/MIN	06/07/82-06/07/82	0	1	
ZION0139	Yes	00058	FLOW, RATE GALLONS/MIN	12/12/78-12/12/78	0	1	
ZION0276	No	00058	FLOW, RATE GALLONS/MIN	08/05/87-08/05/87	0	1	
ZION0363	No	00058	FLOW, RATE GALLONS/MIN	04/19/79-04/27/83	4	5	
ZION0005	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-07/30/81	0	1	
ZION0007	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/16/81-07/16/81	0	1	
ZION0008	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/17/81-07/17/81	0	1	
ZION0014	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-05/07/82	0	2	
ZION0017	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-05/07/82	0	2	
ZION0025	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	0	1	
ZION0027	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/29/81-08/29/81	0	1	
ZION0044	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/81-09/13/86	4	2	
ZION0048	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	0	1	

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Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0049	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/24/86-06/24/86	0	1	
ZION0050	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/19/86	4	2	
ZION0054	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/13/86-07/13/86	0	1	
ZION0060	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/10/86-09/10/86	0	1	
ZION0062	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	0	1	
ZION0063	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	0	1	
ZION0064	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	0	1	
ZION0067	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	0	1	
ZION0069	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	0	1	
ZION0070	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/13/86-07/13/86	0	1	
ZION0071	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/17/86-07/17/86	0	1	
ZION0086	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/22/86-08/22/86	0	1	
ZION0088	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	0	1	
ZION0089	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/20/86	4	4	
ZION0095	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	0	1	
ZION0096	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-06/07/82	0	2	
ZION0097	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-06/07/82	0	2	
ZION0098	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/21/86	4	3	
ZION0099	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-07/06/82	0	3	
ZION0100	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	0	1	
ZION0103	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/14/86-09/14/86	0	1	
ZION0108	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/86-07/15/86	0	1	
ZION0110	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/19/90-06/19/90	0	1	
ZION0111	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/26/86-08/26/86	0	1	
ZION0114	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/86-07/15/86	0	1	
ZION0116	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/28/87-07/28/87	0	1	
ZION0117	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/18/87-09/18/87	0	1	
ZION0118	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/11/86-09/11/86	0	1	
ZION0121	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/18/87-09/18/87	0	1	
ZION0129	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/11/82-06/11/82	0	1	
ZION0132	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/23/86-08/23/86	0	1	
ZION0159	Yes	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/30/87-06/30/87	0	1	
ZION0262	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/77-11/16/77	0	1	
ZION0266	No	00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/77-11/16/77	0	1	
ZION0021	No	00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-08/20/74	7	24	
ZION0053	No	00060	FLOW, STREAM, MEAN DAILY CFS	05/04/73-07/02/74	1	10	
ZION0077	No	00060	FLOW, STREAM, MEAN DAILY CFS	10/26/74-09/21/76	1	7	
ZION0172	Yes	00060	FLOW, STREAM, MEAN DAILY CFS	10/26/73-08/19/74	0	8	
ZION0173	Yes	00060	FLOW, STREAM, MEAN DAILY CFS	12/04/73-04/23/74	0	4	
ZION0175	Yes	00060	FLOW, STREAM, MEAN DAILY CFS	12/12/66-09/13/73	6	22	
ZION0229	No	00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	0	1	
ZION0234	No	00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	0	1	
ZION0236	No	00060	FLOW, STREAM, MEAN DAILY CFS	01/18/74-01/18/74	0	1	
ZION0239	No	00060	FLOW, STREAM, MEAN DAILY CFS	10/21/71-08/21/74	2	24	
ZION0251	No	00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	0	1	
ZION0258	No	00060	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	8	171	A
ZION0282	No	00060	FLOW, STREAM, MEAN DAILY CFS	01/23/73-05/20/74	1	4	
ZION0293	No	00060	FLOW, STREAM, MEAN DAILY CFS	01/23/73-08/19/74	1	16	
ZION0294	No	00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-12/15/66	0	1	
ZION0313	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/02/71-08/26/74	3	19	
ZION0317	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/02/71-08/26/74	3	27	
ZION0331	No	00060	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	7	137	A
ZION0353	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/03/71-07/17/74	2	24	
ZION0006	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-08/31/82	1	4	
ZION0010	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/20/81-08/24/81	0	2	
ZION0015	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	0	2	
ZION0016	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	0	2	
ZION0020	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	0	1	
ZION0021	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	16	135	
ZION0022	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/15/74	0	5	
ZION0023	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	0	1	
ZION0030	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-08/26/81	0	2	
ZION0031	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	0	2	
ZION0032	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	02/19/92-12/10/96	4	39	
ZION0033	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	0	1	
ZION0034	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	02/19/92-12/06/95	3	24	
ZION0035	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	0	2	
ZION0037	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/31/82	1	4	
ZION0038	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/92-12/06/95	3	20	
ZION0040	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/02/91-12/06/95	4	18	
ZION0042	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/28/93-06/16/94	0	5	
ZION0043	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/23/82	1	3	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0046	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-08/26/81	0	2	
ZION0053	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/15/74-09/07/78	3	29	
ZION0058	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/11/86-07/16/86	0	2	
ZION0073	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-03/04/82	0	2	
ZION0075	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/11/93-06/16/94	1	6	
ZION0077	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/04/74-06/12/86	11	75	
ZION0083	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/86-11/06/86	0	2	
ZION0087	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/27/93-08/08/95	1	6	
ZION0090	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/23/88-09/09/94	6	3	
ZION0091	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/86-06/18/86	0	1	
ZION0101	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/86	4	3	
ZION0104	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/26/79-07/16/86	7	57	
ZION0115	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/05/88-06/28/93	4	5	
ZION0116	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	07/28/87-07/28/87	0	1	
ZION0117	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/18/87-09/18/87	0	1	
ZION0121	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/18/87-09/18/87	0	1	
ZION0124	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	07/08/87-08/21/91	4	24	
ZION0125	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/20/81	0	1	
ZION0127	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	07/08/87-08/21/91	4	27	
ZION0137	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/78-08/18/93	15	16	
ZION0138	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	1	3	
ZION0140	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/31/77-03/31/77	0	1	
ZION0141	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/84-10/31/84	0	1	
ZION0145	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/04/82	0	2	
ZION0149	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	1	3	
ZION0156	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-09/19/86	5	5	
ZION0159	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/30/87-06/30/87	0	1	
ZION0168	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	1	3	
ZION0170	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/07/75-07/13/76	1	3	
ZION0171	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/17/75-07/13/76	1	4	
ZION0172	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/15/74-08/22/80	5	16	
ZION0173	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/82-08/13/91	9	51	
ZION0174	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/15/74	0	5	
ZION0175	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	8	81	
ZION0177	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	11/18/92-03/12/96	3	14	
ZION0179	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/07/91-08/07/91	0	1	
ZION0180	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-10/31/73	0	1	
ZION0181	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	0	2	
ZION0186	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/19/83-03/12/96	12	80	
ZION0187	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	0	4	
ZION0189	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	0	4	
ZION0192	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/19/79-08/29/95	16	52	
ZION0195	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/14/76	0	2	
ZION0196	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	0	3	
ZION0203	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-09/01/82	1	4	
ZION0206	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/22/79-08/28/79	0	2	
ZION0212	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/22/79-08/09/95	16	9	
ZION0213	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-08/17/81	0	1	
ZION0223	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-08/23/82	1	4	
ZION0233	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/87-07/15/91	3	29	
ZION0239	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	7	78	
ZION0241	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/03/96-12/11/96	0	11	
ZION0242	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	0	5	
ZION0243	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	0	3	
ZION0244	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	0	1	
ZION0248	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	0	1	
ZION0250	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-09/01/82	1	4	
ZION0256	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/09/95	13	41	
ZION0258	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	12	101	
ZION0263	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-09/02/82	1	3	
ZION0264	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/02/96-12/11/96	0	4	
ZION0267	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/11/82-05/11/82	0	1	
ZION0268	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	1	4	
ZION0273	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-05/05/82	0	3	
ZION0275	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	0	3	
ZION0276	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/17/80-12/11/96	16	72	
ZION0277	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/28/80-06/16/81	0	4	
ZION0278	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	0	2	
ZION0280	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	1	4	
ZION0282	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/16/75-07/18/78	3	14	
ZION0283	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-04/09/74	0	3	
ZION0286	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/14/76	0	2	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0287	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	11/11/87-05/20/91	3	9	
ZION0288	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	12/11/96-12/11/96	0	1	
ZION0293	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	7	77	
ZION0298	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/02/87-10/03/91	4	35	
ZION0299	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/28/80-04/24/96	15	42	
ZION0300	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/07/82-05/07/82	0	1	
ZION0301	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	1	3	
ZION0302	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/02/96-12/11/96	0	11	
ZION0303	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-04/09/74	0	3	
ZION0304	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	1	4	
ZION0305	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	1	5	
ZION0308	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/12/78-12/16/81	3	4	
ZION0310	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/28/81-05/07/82	0	2	
ZION0312	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/25/93-06/25/93	0	1	
ZION0313	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/74-08/03/82	7	65	
ZION0316	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/03/96-12/11/96	0	11	
ZION0317	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	16	151	
ZION0318	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/31/81-08/23/82	0	5	
ZION0321	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-08/23/82	1	4	
ZION0328	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	0	1	
ZION0330	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/29/95	13	59	
ZION0331	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	16	125	
ZION0332	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/16/74	0	5	
ZION0333	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/86-08/09/95	8	7	
ZION0334	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	07/09/96-10/30/96	0	4	
ZION0341	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-05/06/82	0	2	
ZION0342	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/87-04/18/89	1	13	
ZION0344	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-05/04/82	0	2	
ZION0348	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-05/04/82	0	2	
ZION0352	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	05/23/79-06/25/93	14	2	
ZION0353	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	16	128	
ZION0354	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/15/82-03/02/83	0	3	
ZION0362	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-05/06/82	0	2	
ZION0363	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	04/11/78-06/16/81	3	4	
ZION0022	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0035	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0047	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	0	4	
ZION0055	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	0	4	
ZION0059	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	0	4	
ZION0072	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	0	4	
ZION0119	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/23/76-07/23/76	0	1	
ZION0141	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-07/26/74	0	4	
ZION0167	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/13/77-08/05/77	0	2	
ZION0174	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0176	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	09/17/75-05/16/77	1	3	
ZION0180	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0190	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	0	2	
ZION0202	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/28/75-12/28/75	0	1	
ZION0244	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/77-09/04/77	0	3	
ZION0248	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	0	2	
ZION0270	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	0	2	
ZION0272	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	0	2	
ZION0278	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0283	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0303	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0328	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/28/74-05/28/74	0	1	
ZION0332	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	0	4	
ZION0347	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/75-10/30/75	0	6	
ZION0349	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/75-10/30/75	0	6	
ZION0061	No	00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	08/13/75-09/25/75	0	4	
ZION0074	No	00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	08/13/75-09/25/75	0	4	
ZION0001	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/29/82-02/22/88	6	2	
ZION0012	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/21/89-07/21/89	0	1	
ZION0013	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/23/87-06/23/87	0	1	
ZION0028	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/09/77-05/27/86	8	4	
ZION0029	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/09/77-08/07/89	11	3	
ZION0032	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/24/96-12/10/96	0	7	
ZION0040	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/02/91-09/02/91	0	1	
ZION0042	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/28/93-06/28/93	0	1	
ZION0047	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	1	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0055	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	1	5	
ZION0056	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/03/88-06/29/93	5	15	
ZION0059	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-06/25/79	3	6	
ZION0072	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	1	5	
ZION0078	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/15/78-09/15/78	0	1	
ZION0080	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	0	1	
ZION0082	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	0	1	
ZION0084	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/05/88-06/29/93	4	8	
ZION0090	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/02/88-03/23/88	0	2	
ZION0115	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/05/88-06/11/93	4	2	
ZION0126	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	0	1	
ZION0137	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/18/77-11/10/93	16	40	
ZION0140	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/31/84-10/31/84	0	1	
ZION0153	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/25/88-01/25/88	0	1	
ZION0166	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/07/81-04/07/81	0	1	
ZION0169	Yes	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/07/81-04/07/81	0	1	
ZION0177	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/18/92-03/12/96	3	14	
ZION0178	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/11/90-07/31/96	6	19	
ZION0185	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/83-01/17/90	6	5	
ZION0186	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/26/82-12/11/96	14	102	
ZION0192	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/19/79-12/11/96	17	111	T,S
ZION0195	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	0	2	
ZION0196	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	0	3	
ZION0201	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/17/78-11/12/89	11	4	
ZION0205	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/18/79-04/14/82	2	11	
ZION0206	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/28/79	0	2	
ZION0212	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/28/79	0	2	
ZION0215	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/09/95	16	13	
ZION0232	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/22/84-09/06/88	4	2	
ZION0235	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/07/88-03/07/88	0	1	
ZION0237	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/14/78-06/14/78	0	1	
ZION0241	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/96-12/11/96	0	11	
ZION0243	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	0	3	
ZION0253	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	0	2	
ZION0256	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	14	79	
ZION0264	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/02/96-12/11/96	0	4	
ZION0275	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	0	3	
ZION0276	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-12/11/96	16	84	T
ZION0277	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-04/23/85	4	8	
ZION0279	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/21/83-06/21/83	0	1	
ZION0286	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	0	2	
ZION0288	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/11/96-12/11/96	0	1	
ZION0290	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/07/84-07/06/87	3	2	
ZION0291	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/81-09/16/89	8	4	
ZION0295	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/12/78-03/12/86	7	2	
ZION0297	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/81-09/16/89	8	4	
ZION0299	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/28/80-04/24/96	15	54	
ZION0302	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/02/96-12/11/96	0	11	
ZION0308	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/21/79-04/14/81	2	2	
ZION0311	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/14/77-08/05/77	0	2	
ZION0312	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/25/93-06/25/93	0	1	
ZION0316	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/96-12/11/96	0	11	
ZION0322	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/09/95	8	14	
ZION0324	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/03/90	3	7	
ZION0326	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-05/22/91	4	9	
ZION0330	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	14	101	
ZION0333	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/03/90	3	3	
ZION0334	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/09/96-10/30/96	0	4	
ZION0336	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/20/77-09/23/77	0	4	
ZION0338	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-01/09/89	11	4	
ZION0346	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/19/78-09/19/78	0	1	
ZION0347	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/12/76-09/23/77	1	9	
ZION0349	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/12/76-07/24/79	3	12	
ZION0352	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/24/79-06/25/93	14	3	
ZION0354	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/20/82-04/27/83	0	6	
ZION0356	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/28/77-08/23/89	11	5	
ZION0358	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-07/13/83	5	3	
ZION0359	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/05/77-12/06/77	0	2	
ZION0360	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-07/12/83	5	3	
ZION0363	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/21/79-02/21/79	0	1	
ZION0364	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0365	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	
ZION0372	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	
ZION0373	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	
ZION0374	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	
ZION0375	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	0	1	
ZION0061	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	09/25/75-09/25/75	0	1	
ZION0074	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	09/25/75-09/25/75	0	1	
ZION0056	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	03/23/88-08/08/95	7	22	
ZION0084	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	10/05/88-06/29/95	6	20	
ZION0178	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	04/11/90-07/31/96	6	10	
ZION0215	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	08/28/79-08/09/95	15	10	
ZION0217	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	05/31/89-08/09/95	6	8	
ZION0322	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	8	11	
ZION0324	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	8	10	
ZION0326	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	8	11	
ZION0032	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/19/92-12/10/96	4	39	
ZION0034	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/19/92-12/06/95	3	25	
ZION0038	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/09/92-12/06/95	3	21	
ZION0040	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/02/91-12/06/95	4	18	
ZION0042	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/28/93-06/16/94	0	7	
ZION0047	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	3	14	
ZION0055	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	3	14	
ZION0056	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/08/95	7	34	
ZION0059	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-06/25/79	5	15	
ZION0061	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/13/75-09/25/75	0	4	
ZION0072	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	3	14	
ZION0074	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/13/75-09/25/75	0	4	
ZION0075	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/11/93-06/16/94	1	9	
ZION0084	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-08/08/95	6	30	
ZION0087	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/27/93-08/08/95	1	7	
ZION0090	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/15/90	2	2	
ZION0115	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-06/28/93	4	6	
ZION0137	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/10/78-11/10/93	15	37	
ZION0141	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/31/84-10/31/84	0	1	
ZION0143	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/28/88-05/04/89	0	4	
ZION0146	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/16/88-05/04/89	0	4	
ZION0150	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/16/88-05/03/89	0	4	
ZION0154	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/28/88-05/04/89	0	3	
ZION0161	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/26/88-05/03/89	0	4	
ZION0165	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/28/88-05/01/89	0	3	
ZION0177	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/18/92-03/12/96	3	14	
ZION0178	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/11/90-07/31/96	6	36	
ZION0179	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/07/91-08/07/91	0	1	
ZION0186	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/26/82-12/11/96	14	101	
ZION0192	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-12/11/96	17	116	T,S
ZION0195	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	0	2	
ZION0196	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	0	3	
ZION0205	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-04/14/82	2	18	
ZION0206	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/28/79	0	2	
ZION0212	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	16	9	
ZION0215	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	16	37	
ZION0217	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	16	18	
ZION0241	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/03/96-12/11/96	0	11	
ZION0243	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	0	3	
ZION0253	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	0	2	
ZION0256	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	14	81	
ZION0264	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/02/96-12/11/96	0	4	
ZION0275	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	0	3	
ZION0276	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-12/11/96	16	91	T
ZION0277	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-04/23/85	4	15	
ZION0286	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	0	2	
ZION0288	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/11/96-12/11/96	0	1	
ZION0299	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/13/81-04/24/96	15	60	
ZION0302	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/02/96-12/11/96	0	11	
ZION0308	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/21/79-02/24/82	3	13	
ZION0311	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/14/77-08/05/77	0	2	
ZION0316	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/03/96-12/11/96	0	11	
ZION0322	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	35	
ZION0324	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	24	
ZION0326	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	30	
ZION0330	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM 25C)	02/24/82-12/11/96	14	101	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0333	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	8	
ZION0334	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/09/96-10/30/96	0	4	
ZION0336	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/20/77-09/23/77	0	4	
ZION0347	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/12/76-09/23/77	1	9	
ZION0349	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/23/75-07/24/79	4	14	
ZION0350	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/12/82-05/12/82	0	1	
ZION0352	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/23/79-09/04/90	11	2	
ZION0354	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/20/82-04/27/83	0	6	
ZION0363	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/21/79-04/27/83	4	22	
ZION0002	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	0	1	
ZION0003	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/77-06/21/77	0	1	
ZION0004	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/20/81-10/20/81	0	1	
ZION0005	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-07/30/81	0	1	
ZION0006	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-08/31/82	1	4	
ZION0007	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	0	1	
ZION0008	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/81-07/17/81	0	1	
ZION0009	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	0	1	
ZION0010	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/20/81-08/24/81	0	2	
ZION0011	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	0	1	
ZION0014	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-05/07/82	0	2	
ZION0015	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	0	2	
ZION0016	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	0	2	
ZION0017	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-05/07/82	0	2	
ZION0018	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/77-06/22/77	0	1	
ZION0019	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/77-06/22/77	0	1	
ZION0020	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	0	1	
ZION0021	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	24	158	T,A,S
ZION0022	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	0	5	
ZION0023	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	0	1	
ZION0024	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/17/81-10/17/81	0	1	
ZION0025	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	0	1	
ZION0027	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/29/81-08/29/81	0	1	
ZION0028	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/09/77-05/27/86	8	3	
ZION0029	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/09/77-07/22/85	7	2	
ZION0030	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-08/26/81	0	2	
ZION0031	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	0	2	
ZION0032	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/24/96-12/10/96	0	7	
ZION0033	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	0	1	
ZION0035	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	0	5	
ZION0036	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/05/80-07/05/80	0	1	
ZION0037	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/31/82	1	4	
ZION0039	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/01/77-05/01/77	0	1	
ZION0040	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/02/91-09/02/91	0	1	
ZION0041	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	0	1	
ZION0042	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/93-06/28/93	0	1	
ZION0043	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	1	3	
ZION0044	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/81-09/13/86	4	2	
ZION0045	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	1	3	
ZION0046	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-08/26/81	0	2	
ZION0048	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	0	1	
ZION0049	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/24/86-06/24/86	0	1	
ZION0050	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/19/86	4	2	
ZION0051	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/80-07/07/80	0	1	
ZION0052	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	0	1	
ZION0053	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/04/73-09/07/78	5	39	
ZION0054	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/86-07/13/86	0	1	
ZION0056	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/88-06/14/90	2	13	
ZION0057	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	0	1	
ZION0058	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/86-07/16/86	0	2	
ZION0060	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/86-09/10/86	0	1	
ZION0062	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	0	1	
ZION0063	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	0	1	
ZION0064	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	0	1	
ZION0065	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/01/80-07/01/80	0	1	
ZION0067	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	0	1	
ZION0068	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/86-06/22/86	0	1	
ZION0069	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	0	1	
ZION0070	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/86-07/13/86	0	1	
ZION0071	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/86-07/17/86	0	1	
ZION0073	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-03/04/82	0	2	
ZION0077	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/74-06/12/86	11	71	
ZION0078	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM 25C)	09/15/78-09/15/78	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0079	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	0	1	
ZION0080	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	0	1	
ZION0082	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	0	1	
ZION0083	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/86-11/06/86	0	2	
ZION0084	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/05/88-06/14/90	1	6	
ZION0086	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/22/86-08/22/86	0	1	
ZION0088	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	0	1	
ZION0089	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/20/86	4	4	
ZION0090	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/02/88-03/23/88	0	2	
ZION0091	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/18/86-06/18/86	0	1	
ZION0092	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-08/20/82	0	2	
ZION0093	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	0	1	
ZION0095	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	0	1	
ZION0096	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	0	2	
ZION0097	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	0	2	
ZION0098	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/21/86	4	3	
ZION0099	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	0	2	
ZION0100	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	0	1	
ZION0101	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-06/21/86	4	3	
ZION0102	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-05/03/82	0	2	
ZION0103	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/86-09/14/86	0	1	
ZION0104	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/26/79-07/16/86	7	55	
ZION0105	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	0	1	
ZION0106	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/01/80-07/01/80	0	1	
ZION0107	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	0	1	
ZION0108	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/86-07/15/86	0	1	
ZION0109	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	0	1	
ZION0110	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/12/77-06/19/90	12	2	
ZION0111	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/26/86-08/26/86	0	1	
ZION0112	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/12/77-11/12/77	0	1	
ZION0113	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	1	4	
ZION0114	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/86-07/15/86	0	1	
ZION0115	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/05/88-10/05/88	0	1	
ZION0116	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/28/87-07/28/87	0	1	
ZION0117	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/87-09/18/87	0	1	
ZION0118	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/86-09/11/86	0	1	
ZION0119	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/23/76-07/23/76	0	1	
ZION0120	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/80-07/17/80	0	1	
ZION0121	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/87-09/18/87	0	1	
ZION0122	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	0	1	
ZION0123	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/20/80-07/20/80	0	1	
ZION0124	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/87-08/21/91	4	21	
ZION0125	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/20/81	0	1	
ZION0126	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	0	1	
ZION0127	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/87-08/21/91	4	25	
ZION0128	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/80-07/19/80	0	1	
ZION0129	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/82-06/11/82	0	1	
ZION0130	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	0	1	
ZION0131	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/05/80-07/05/80	0	1	
ZION0132	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/23/86-08/23/86	0	1	
ZION0136	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/80-07/19/80	0	1	
ZION0137	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-11/10/93	16	43	
ZION0138	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-10/31/84	11	5	
ZION0142	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/02/80-07/02/80	0	1	
ZION0144	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/02/80-07/02/80	0	1	
ZION0145	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	0	2	
ZION0149	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	1	3	
ZION0153	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/25/88-01/25/88	0	1	
ZION0156	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-09/19/86	5	5	
ZION0158	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	0	4	
ZION0159	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/87-06/30/87	0	1	
ZION0162	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/86-09/18/86	0	1	
ZION0163	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	0	1	
ZION0166	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/07/81-04/07/81	0	1	
ZION0167	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/13/77-08/05/77	0	2	
ZION0168	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/07/81-04/07/81	0	1	
ZION0170	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM 25C)	05/07/75-07/13/76	1	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0171	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/75-07/13/76	1	4	
ZION0172	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/26/73-08/22/80	6	24	
ZION0173	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/73-08/13/91	17	51	S
ZION0174	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	13	100	A
ZION0176	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/17/75-05/16/77	1	3	
ZION0177	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/10/93-03/12/96	2	12	
ZION0178	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/91-06/15/94	3	10	
ZION0180	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	0	5	
ZION0182	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/07/77-12/07/77	0	1	
ZION0183	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	4	
ZION0184	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	0	1	
ZION0185	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/86-01/17/90	3	2	
ZION0186	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/82-12/11/96	14	102	
ZION0187	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	4	
ZION0188	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	5	
ZION0189	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	0	3	
ZION0192	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	5	
ZION0194	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/80-07/15/80	0	1	
ZION0197	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	1	5	
ZION0198	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	0	1	
ZION0199	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/03/70-09/03/70	0	1	
ZION0200	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	0	1	
ZION0201	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/17/78-11/12/89	11	4	
ZION0202	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/28/75-12/28/75	0	1	
ZION0203	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	1	4	
ZION0204	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/17/81-08/17/81	0	1	
ZION0205	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/18/79-04/14/82	2	11	
ZION0206	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/80-07/13/80	0	1	
ZION0208	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	0	1	
ZION0209	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	0	1	
ZION0210	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/09/77-12/09/77	0	1	
ZION0211	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	0	1	
ZION0212	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	0	2	
ZION0213	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/17/81-08/17/81	0	1	
ZION0214	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0215	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	0	6	
ZION0216	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0218	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0219	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/80-07/13/80	0	1	
ZION0220	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	0	1	
ZION0221	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	0	1	
ZION0222	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/80-07/10/80	0	1	
ZION0223	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-08/23/82	1	4	
ZION0224	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0226	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/80-07/15/80	0	1	
ZION0227	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0228	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	0	1	
ZION0229	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	0	1	
ZION0230	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	0	1	
ZION0231	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/18/77-11/18/77	0	1	
ZION0232	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/06/88-09/06/88	0	1	
ZION0233	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/87-07/15/91	3	28	
ZION0234	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	0	1	
ZION0235	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/88-03/07/88	0	1	
ZION0236	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/74-01/18/74	0	1	
ZION0237	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/14/78-06/14/78	0	1	
ZION0238	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/10/77-12/10/77	0	1	
ZION0239	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	10	101	A
ZION0240	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/17/77-11/17/77	0	1	
ZION0241	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/03/96-12/11/96	0	11	
ZION0242	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	5	
ZION0244	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/16/77-09/04/77	0	3	
ZION0248	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	0	3	
ZION0249	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	0	5	
ZION0250	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM 25C)	08/24/81-09/01/82	1	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0251	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	0	1	
ZION0252	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	1	5	
ZION0254	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/80-06/21/80	0	1	
ZION0255	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	1	5	
ZION0256	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	14	79	
ZION0257	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/80-06/21/80	0	1	
ZION0258	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	24	96	T,A,S
ZION0259	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/08/64-06/08/64	0	1	
ZION0260	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/80-07/12/80	0	1	
ZION0261	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/26/80-06/26/80	0	1	
ZION0262	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	0	1	
ZION0263	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-09/02/82	1	3	
ZION0264	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/02/96-12/11/96	0	4	
ZION0265	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	0	1	
ZION0266	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	0	1	
ZION0267	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/11/82-05/11/82	0	1	
ZION0268	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	1	4	
ZION0270	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/16/74	0	3	
ZION0272	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/16/74	0	3	
ZION0273	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-05/05/82	0	2	
ZION0276	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-12/11/96	16	84	T
ZION0277	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-04/23/85	4	8	
ZION0278	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	0	5	
ZION0279	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/83-06/21/83	0	1	
ZION0280	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	1	5	
ZION0281	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/25/66-03/25/66	0	1	
ZION0282	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-07/18/78	5	18	
ZION0283	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	0	5	
ZION0284	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/80-07/12/80	0	1	
ZION0285	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/23/80-06/23/80	0	1	
ZION0287	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/11/87-05/20/91	3	9	
ZION0288	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/11/96-12/11/96	0	1	
ZION0291	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/81-09/16/89	8	4	
ZION0292	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/25/68-02/27/70	1	2	
ZION0293	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	9	93	A
ZION0294	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-12/15/66	0	1	
ZION0295	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/78-04/12/78	0	1	
ZION0296	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/68-10/28/68	0	1	
ZION0297	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/81-09/16/89	8	4	
ZION0298	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/02/87-10/03/91	4	29	
ZION0299	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/80-04/24/96	15	54	
ZION0300	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/07/82-05/07/82	0	1	
ZION0301	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	1	4	
ZION0302	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/02/96-12/11/96	0	11	
ZION0303	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	0	5	
ZION0304	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	1	4	
ZION0305	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	1	5	
ZION0306	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	0	1	
ZION0307	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/75-02/03/75	0	1	
ZION0308	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/21/79-02/21/79	0	1	
ZION0309	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/64-03/16/64	0	1	
ZION0310	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-05/07/82	0	2	
ZION0312	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/25/93-06/25/93	0	1	
ZION0313	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/03/82	11	83	
ZION0314	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	0	1	
ZION0315	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/75-02/03/75	0	1	
ZION0316	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/03/96-12/11/96	0	11	
ZION0317	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	20	170	T,A,S
ZION0318	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/31/81-08/23/82	0	5	
ZION0320	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	0	1	
ZION0321	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-08/23/82	1	4	
ZION0322	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	0	8	
ZION0323	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/07/65-10/07/65	0	1	
ZION0324	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	0	6	
ZION0325	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/68-08/20/68	0	1	
ZION0326	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	0	6	
ZION0328	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-05/28/74	0	2	
ZION0330	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	14	99	
ZION0331	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	24	134	T,A,S
ZION0332	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	0	5	
ZION0333	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-08/03/90	3	3	
ZION0334	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM 25C)	07/09/96-10/30/96	0	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0335	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/10/68-10/10/68	0	1	
ZION0338	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-10/06/86	8	3	
ZION0339	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/24/68-10/24/68	0	1	
ZION0340	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/20/64-10/30/68	4	2	
ZION0341	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-05/06/82	0	2	
ZION0342	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/07/88-10/06/88	0	5	
ZION0343	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/04/65-11/04/65	0	1	
ZION0344	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-05/04/82	0	2	
ZION0346	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/19/78-09/19/78	0	1	
ZION0348	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-05/04/82	0	2	
ZION0352	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/79-06/25/93	14	3	
ZION0353	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	20	151	A,S
ZION0354	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/20/82-04/27/83	0	6	
ZION0355	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/10/64-03/10/64	0	1	
ZION0356	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/28/77-04/02/85	7	3	
ZION0358	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-06/28/84	6	3	
ZION0359	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/05/77-12/06/77	0	2	
ZION0360	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-06/28/84	6	3	
ZION0361	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/84-06/28/84	0	1	
ZION0362	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-05/06/82	0	2	
ZION0363	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/25/77-02/21/79	2	8	
ZION0364	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0365	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0366	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/68-10/16/68	0	1	
ZION0367	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/62-10/16/68	6	2	
ZION0368	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/23/68-10/23/68	0	1	
ZION0369	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/23/68-10/23/68	0	1	
ZION0370	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/18/67-02/18/67	0	1	
ZION0371	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/30/66-10/16/68	2	2	
ZION0372	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0373	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0374	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0375	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	0	1	
ZION0186	No	00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	08/03/88-08/03/88	0	1	
ZION0308	No	00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	06/16/81-02/24/82	0	4	
ZION0354	No	00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	09/15/82-04/27/83	0	5	
ZION0363	No	00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	02/25/82-04/27/83	1	6	
ZION0022	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	0	5	
ZION0035	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	0	5	
ZION0076	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/03/92-10/05/92	0	10	
ZION0092	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/03/82-08/20/82	0	2	
ZION0094	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/03/92-10/05/92	0	9	
ZION0102	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/20/81-05/03/82	0	2	
ZION0113	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/20/81-08/23/82	1	4	
ZION0134	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/26/92-09/18/92	0	4	
ZION0147	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/19/81-05/04/82	0	2	
ZION0148	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/02/92-10/06/92	0	10	
ZION0151	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/12/92-10/02/92	0	9	
ZION0157	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/16/92-10/06/92	0	5	
ZION0158	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/19/81-05/04/82	0	4	
ZION0174	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	0	5	
ZION0180	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	0	4	
ZION0181	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	0	5	
ZION0183	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	0	4	
ZION0188	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	0	5	
ZION0190	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	0	3	
ZION0193	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	0	5	
ZION0197	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	1	5	
ZION0204	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/17/81-08/17/81	0	1	
ZION0244	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	0	3	
ZION0248	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	0	3	
ZION0249	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	0	5	
ZION0252	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	1	5	
ZION0255	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	1	5	
ZION0270	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/16/74	0	3	
ZION0272	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/16/74	0	3	
ZION0278	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	0	5	
ZION0283	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	0	5	
ZION0303	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	0	5	
ZION0328	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-05/28/74	0	2	
ZION0332	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	0	5	
ZION0006	No	00300	OXYGEN, DISSOLVED MG/L	08/19/81-08/31/82	1	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0015	No	00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	0	2	
ZION0016	No	00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	0	2	
ZION0020	No	00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	0	1	
ZION0021	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/31/82	1	4	
ZION0023	No	00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	0	1	
ZION0031	No	00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	0	2	
ZION0032	No	00300	OXYGEN, DISSOLVED MG/L	02/19/92-12/10/96	4	39	
ZION0033	No	00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	0	1	
ZION0034	No	00300	OXYGEN, DISSOLVED MG/L	02/19/92-12/06/95	3	25	
ZION0037	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/31/82	1	4	
ZION0038	No	00300	OXYGEN, DISSOLVED MG/L	04/09/92-12/06/95	3	21	
ZION0040	No	00300	OXYGEN, DISSOLVED MG/L	09/02/91-12/06/95	4	18	
ZION0042	No	00300	OXYGEN, DISSOLVED MG/L	06/28/93-06/16/94	0	7	
ZION0043	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	1	3	
ZION0045	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	1	3	
ZION0047	No	00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	1	6	
ZION0055	No	00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	1	6	
ZION0056	No	00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/08/95	7	33	
ZION0059	No	00300	OXYGEN, DISSOLVED MG/L	08/08/75-06/25/79	3	7	
ZION0061	No	00300	OXYGEN, DISSOLVED MG/L	08/13/75-09/25/75	0	4	
ZION0072	No	00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	1	6	
ZION0074	No	00300	OXYGEN, DISSOLVED MG/L	08/13/75-09/25/75	0	4	
ZION0075	No	00300	OXYGEN, DISSOLVED MG/L	06/11/93-06/16/94	1	9	
ZION0077	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/03/82	0	2	
ZION0084	No	00300	OXYGEN, DISSOLVED MG/L	10/05/88-08/08/95	6	29	
ZION0087	No	00300	OXYGEN, DISSOLVED MG/L	08/27/93-08/08/95	1	7	
ZION0090	No	00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/15/90	2	2	
ZION0101	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/03/82	0	2	
ZION0104	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	1	4	
ZION0115	No	00300	OXYGEN, DISSOLVED MG/L	10/05/88-06/28/93	4	6	
ZION0125	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/20/81	0	1	
ZION0137	Yes	00300	OXYGEN, DISSOLVED MG/L	05/24/77-11/10/93	16	37	
ZION0141	Yes	00300	OXYGEN, DISSOLVED MG/L	10/31/84-10/31/84	0	1	
ZION0145	Yes	00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/04/82	0	2	
ZION0156	Yes	00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/04/82	0	4	
ZION0173	Yes	00300	OXYGEN, DISSOLVED MG/L	05/04/82-08/23/82	0	2	
ZION0175	Yes	00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/24/81	0	1	
ZION0177	No	00300	OXYGEN, DISSOLVED MG/L	11/18/92-03/12/96	3	14	
ZION0178	No	00300	OXYGEN, DISSOLVED MG/L	04/11/90-07/31/96	6	36	
ZION0179	No	00300	OXYGEN, DISSOLVED MG/L	08/07/91-08/07/91	0	1	
ZION0186	No	00300	OXYGEN, DISSOLVED MG/L	07/26/82-12/11/96	14	100	
ZION0187	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	0	4	
ZION0189	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	0	4	
ZION0192	No	00300	OXYGEN, DISSOLVED MG/L	04/19/79-12/11/96	17	114	T,S
ZION0195	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	0	2	
ZION0196	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	0	3	
ZION0203	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	1	4	
ZION0205	No	00300	OXYGEN, DISSOLVED MG/L	04/19/79-04/14/82	2	18	
ZION0206	No	00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/28/79	0	2	
ZION0212	No	00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	16	9	
ZION0213	No	00300	OXYGEN, DISSOLVED MG/L	08/17/81-08/17/81	0	1	
ZION0215	No	00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	16	37	
ZION0217	No	00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	16	18	
ZION0223	No	00300	OXYGEN, DISSOLVED MG/L	08/18/81-08/23/82	1	4	
ZION0239	No	00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/11/82	0	2	
ZION0241	No	00300	OXYGEN, DISSOLVED MG/L	04/03/96-12/11/96	0	11	
ZION0242	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	0	5	
ZION0243	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	0	3	
ZION0250	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	1	4	
ZION0253	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	0	2	
ZION0256	No	00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	14	77	
ZION0258	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	1	4	
ZION0263	No	00300	OXYGEN, DISSOLVED MG/L	08/18/81-09/02/82	1	3	
ZION0264	No	00300	OXYGEN, DISSOLVED MG/L	04/02/96-12/11/96	0	4	
ZION0267	No	00300	OXYGEN, DISSOLVED MG/L	05/11/82-05/11/82	0	1	
ZION0268	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	4	
ZION0273	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-05/05/82	0	2	
ZION0275	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	0	3	
ZION0276	No	00300	OXYGEN, DISSOLVED MG/L	06/17/80-12/11/96	16	88	T
ZION0277	No	00300	OXYGEN, DISSOLVED MG/L	06/17/80-04/23/85	4	15	
ZION0280	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	4	
ZION0286	No	00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	0	2	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0288	No	00300	OXYGEN, DISSOLVED MG/L	12/11/96-12/11/96	0	1	
ZION0293	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	3	
ZION0299	No	00300	OXYGEN, DISSOLVED MG/L	01/13/81-04/24/96	15	57	
ZION0300	No	00300	OXYGEN, DISSOLVED MG/L	05/07/82-05/07/82	0	1	
ZION0301	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	3	
ZION0302	No	00300	OXYGEN, DISSOLVED MG/L	04/02/96-12/11/96	0	11	
ZION0304	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	4	
ZION0305	No	00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	1	5	
ZION0308	No	00300	OXYGEN, DISSOLVED MG/L	04/19/79-02/24/82	2	12	
ZION0310	No	00300	OXYGEN, DISSOLVED MG/L	08/28/81-05/07/82	0	2	
ZION0311	No	00300	OXYGEN, DISSOLVED MG/L	06/14/77-08/05/77	0	2	
ZION0313	No	00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/11/82	0	2	
ZION0316	No	00300	OXYGEN, DISSOLVED MG/L	04/03/96-12/11/96	0	11	
ZION0317	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/24/81	0	1	
ZION0318	No	00300	OXYGEN, DISSOLVED MG/L	08/31/81-08/23/82	0	5	
ZION0321	No	00300	OXYGEN, DISSOLVED MG/L	08/19/81-08/23/82	1	4	
ZION0322	No	00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	35	
ZION0324	No	00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	24	
ZION0326	No	00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	30	
ZION0330	No	00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	14	97	
ZION0331	No	00300	OXYGEN, DISSOLVED MG/L	08/31/81-08/23/82	0	4	
ZION0333	No	00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	8	
ZION0334	No	00300	OXYGEN, DISSOLVED MG/L	07/09/96-10/30/96	0	4	
ZION0336	No	00300	OXYGEN, DISSOLVED MG/L	05/20/77-09/23/77	0	4	
ZION0341	No	00300	OXYGEN, DISSOLVED MG/L	08/24/81-05/06/82	0	2	
ZION0344	No	00300	OXYGEN, DISSOLVED MG/L	08/18/81-05/04/82	0	2	
ZION0347	No	00300	OXYGEN, DISSOLVED MG/L	05/16/75-09/23/77	2	15	
ZION0348	No	00300	OXYGEN, DISSOLVED MG/L	08/18/81-05/04/82	0	2	
ZION0349	No	00300	OXYGEN, DISSOLVED MG/L	05/16/75-07/24/79	4	18	
ZION0350	No	00300	OXYGEN, DISSOLVED MG/L	05/12/82-05/12/82	0	1	
ZION0352	No	00300	OXYGEN, DISSOLVED MG/L	05/23/79-05/23/79	0	1	
ZION0353	No	00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/04/82	0	2	
ZION0354	No	00300	OXYGEN, DISSOLVED MG/L	09/15/82-04/27/83	0	4	
ZION0362	No	00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/06/82	0	2	
ZION0363	No	00300	OXYGEN, DISSOLVED MG/L	04/25/77-04/27/83	6	21	
ZION0022	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	0	5	
ZION0035	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	0	5	
ZION0056	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/23/88-03/23/88	0	2	
ZION0090	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/23/88-03/23/88	0	1	
ZION0137	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/77-09/11/79	2	10	
ZION0139	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	03/31/77-12/12/78	1	4	
ZION0140	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	01/25/77-11/29/77	0	11	
ZION0141	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	01/04/67-12/18/75	8	62	
ZION0174	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	0	5	
ZION0180	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	0	4	
ZION0181	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	0	5	
ZION0190	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	0	3	
ZION0192	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/19/79-06/19/79	0	2	
ZION0205	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/19/79-06/19/79	0	2	
ZION0244	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	0	3	
ZION0248	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	0	3	
ZION0270	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/16/74	0	3	
ZION0272	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/16/74	0	3	
ZION0278	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	0	5	
ZION0283	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	0	5	
ZION0303	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	0	5	
ZION0308	No	00310	BOD, 5 DAY, 20 DEG C MG/L	01/10/78-02/24/82	4	26	
ZION0328	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-05/28/74	0	2	
ZION0330	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/21/85-03/10/88	2	2	
ZION0332	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	0	5	
ZION0354	No	00310	BOD, 5 DAY, 20 DEG C MG/L	07/20/82-04/27/83	0	6	
ZION0363	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/07/78-04/27/83	5	27	
ZION0056	No	00335	COD, .025N K2CR2O7 MG/L	02/03/88-09/10/93	5	13	
ZION0084	No	00335	COD, .025N K2CR2O7 MG/L	10/05/88-09/10/93	4	8	
ZION0090	No	00335	COD, .025N K2CR2O7 MG/L	02/02/88-08/15/90	2	2	
ZION0115	No	00335	COD, .025N K2CR2O7 MG/L	10/05/88-08/15/90	1	3	
ZION0137	Yes	00335	COD, .025N K2CR2O7 MG/L	05/24/77-07/26/90	13	29	
ZION0139	Yes	00335	COD, .025N K2CR2O7 MG/L	01/10/78-12/12/78	0	3	
ZION0140	Yes	00335	COD, .025N K2CR2O7 MG/L	08/02/77-10/05/77	0	3	
ZION0141	Yes	00335	COD, .025N K2CR2O7 MG/L	10/31/84-10/31/84	0	1	
ZION0178	No	00335	COD, .025N K2CR2O7 MG/L	04/11/90-04/11/90	0	2	
ZION0186	No	00335	COD, .025N K2CR2O7 MG/L	07/26/82-07/26/90	8	49	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0192	No	00335	COD, .025N K2CR2O7 MG/L	04/19/79-06/13/90	11	60	
ZION0205	No	00335	COD, .025N K2CR2O7 MG/L	04/19/79-04/14/82	2	11	
ZION0206	No	00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/28/79	0	2	
ZION0212	No	00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	10	4	
ZION0215	No	00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	10	14	
ZION0217	No	00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	10	6	
ZION0256	No	00335	COD, .025N K2CR2O7 MG/L	02/24/82-06/13/90	8	52	
ZION0276	No	00335	COD, .025N K2CR2O7 MG/L	06/17/80-06/13/90	9	57	
ZION0277	No	00335	COD, .025N K2CR2O7 MG/L	06/17/80-04/14/81	0	5	
ZION0279	No	00335	COD, .025N K2CR2O7 MG/L	06/21/83-06/21/83	0	1	
ZION0299	No	00335	COD, .025N K2CR2O7 MG/L	10/28/80-03/07/90	9	41	
ZION0308	No	00335	COD, .025N K2CR2O7 MG/L	01/10/78-02/20/80	2	8	
ZION0322	No	00335	COD, .025N K2CR2O7 MG/L	08/19/86-05/31/89	2	13	
ZION0324	No	00335	COD, .025N K2CR2O7 MG/L	08/19/86-10/05/88	2	8	
ZION0326	No	00335	COD, .025N K2CR2O7 MG/L	08/19/86-05/31/89	2	12	
ZION0330	No	00335	COD, .025N K2CR2O7 MG/L	02/24/82-06/13/90	8	49	
ZION0333	No	00335	COD, .025N K2CR2O7 MG/L	08/19/86-10/05/88	2	2	
ZION0352	No	00335	COD, .025N K2CR2O7 MG/L	05/23/79-09/04/90	11	2	
ZION0354	No	00335	COD, .025N K2CR2O7 MG/L	07/20/82-04/27/83	0	6	
ZION0363	No	00335	COD, .025N K2CR2O7 MG/L	04/11/78-09/11/79	1	5	
ZION0002	No	00400	PH (STANDARD UNITS)	07/16/81-07/16/81	0	1	
ZION0003	No	00400	PH (STANDARD UNITS)	06/21/77-06/21/77	0	1	
ZION0004	No	00400	PH (STANDARD UNITS)	10/20/81-10/20/81	0	1	
ZION0005	No	00400	PH (STANDARD UNITS)	07/30/81-07/30/81	0	1	
ZION0006	No	00400	PH (STANDARD UNITS)	08/19/81-08/31/82	1	4	
ZION0007	No	00400	PH (STANDARD UNITS)	07/16/81-07/16/81	0	1	
ZION0008	No	00400	PH (STANDARD UNITS)	07/17/81-07/17/81	0	1	
ZION0009	No	00400	PH (STANDARD UNITS)	07/16/81-07/16/81	0	1	
ZION0010	No	00400	PH (STANDARD UNITS)	04/20/81-08/24/81	0	2	
ZION0011	No	00400	PH (STANDARD UNITS)	08/28/81-08/28/81	0	1	
ZION0014	No	00400	PH (STANDARD UNITS)	07/30/81-05/07/82	0	2	
ZION0015	No	00400	PH (STANDARD UNITS)	08/19/81-05/03/82	0	2	
ZION0016	No	00400	PH (STANDARD UNITS)	08/19/81-05/03/82	0	2	
ZION0017	No	00400	PH (STANDARD UNITS)	07/30/81-05/07/82	0	2	
ZION0018	No	00400	PH (STANDARD UNITS)	06/22/77-06/22/77	0	1	
ZION0019	No	00400	PH (STANDARD UNITS)	06/22/77-06/22/77	0	1	
ZION0020	No	00400	PH (STANDARD UNITS)	05/03/82-05/03/82	0	1	
ZION0021	No	00400	PH (STANDARD UNITS)	12/15/66-08/31/82	15	5	
ZION0022	No	00400	PH (STANDARD UNITS)	10/31/73-07/15/74	0	5	
ZION0023	No	00400	PH (STANDARD UNITS)	05/03/82-05/03/82	0	1	
ZION0024	No	00400	PH (STANDARD UNITS)	10/17/81-10/17/81	0	1	
ZION0025	No	00400	PH (STANDARD UNITS)	08/28/81-08/28/81	0	1	
ZION0027	No	00400	PH (STANDARD UNITS)	08/29/81-08/29/81	0	1	
ZION0030	No	00400	PH (STANDARD UNITS)	04/22/81-08/26/81	0	2	
ZION0031	No	00400	PH (STANDARD UNITS)	08/19/81-05/03/82	0	2	
ZION0032	No	00400	PH (STANDARD UNITS)	02/19/92-12/10/96	4	39	
ZION0033	No	00400	PH (STANDARD UNITS)	05/03/82-05/03/82	0	1	
ZION0034	No	00400	PH (STANDARD UNITS)	02/19/92-12/06/95	3	25	
ZION0035	No	00400	PH (STANDARD UNITS)	10/31/73-07/15/74	0	5	
ZION0036	No	00400	PH (STANDARD UNITS)	07/05/80-07/05/80	0	1	
ZION0037	No	00400	PH (STANDARD UNITS)	08/20/81-08/31/82	1	4	
ZION0038	No	00400	PH (STANDARD UNITS)	04/09/92-12/06/95	3	21	
ZION0040	No	00400	PH (STANDARD UNITS)	09/02/91-12/06/95	4	18	
ZION0041	No	00400	PH (STANDARD UNITS)	07/22/80-07/22/80	0	1	
ZION0042	No	00400	PH (STANDARD UNITS)	06/28/93-06/16/94	0	7	
ZION0043	No	00400	PH (STANDARD UNITS)	08/20/81-08/23/82	1	3	
ZION0044	No	00400	PH (STANDARD UNITS)	11/16/81-09/13/86	4	2	
ZION0045	No	00400	PH (STANDARD UNITS)	08/20/81-08/23/82	1	3	
ZION0046	No	00400	PH (STANDARD UNITS)	04/22/81-08/26/81	0	2	
ZION0047	No	00400	PH (STANDARD UNITS)	07/15/75-07/13/77	1	9	
ZION0048	No	00400	PH (STANDARD UNITS)	07/15/81-07/15/81	0	1	
ZION0049	No	00400	PH (STANDARD UNITS)	06/24/86-06/24/86	0	1	
ZION0050	No	00400	PH (STANDARD UNITS)	08/28/81-08/19/86	4	2	
ZION0051	No	00400	PH (STANDARD UNITS)	07/07/80-07/07/80	0	1	
ZION0052	No	00400	PH (STANDARD UNITS)	07/26/80-07/26/80	0	1	
ZION0054	No	00400	PH (STANDARD UNITS)	07/13/86-07/13/86	0	1	
ZION0055	No	00400	PH (STANDARD UNITS)	07/15/75-07/13/77	1	9	
ZION0056	No	00400	PH (STANDARD UNITS)	03/23/88-08/08/95	7	34	
ZION0057	No	00400	PH (STANDARD UNITS)	06/30/80-06/30/80	0	1	
ZION0058	No	00400	PH (STANDARD UNITS)	06/11/86-07/16/86	0	2	
ZION0059	No	00400	PH (STANDARD UNITS)	07/15/75-06/25/79	3	10	
ZION0060	No	00400	PH (STANDARD UNITS)	09/10/86-09/10/86	0	1	

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

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0061	No	00400	PH (STANDARD UNITS)	08/13/75-09/25/75	0	4	
ZION0062	No	00400	PH (STANDARD UNITS)	07/12/86-07/12/86	0	1	
ZION0063	No	00400	PH (STANDARD UNITS)	07/12/86-07/12/86	0	1	
ZION0064	No	00400	PH (STANDARD UNITS)	08/28/81-08/28/81	0	1	
ZION0065	No	00400	PH (STANDARD UNITS)	07/01/80-07/01/80	0	1	
ZION0067	No	00400	PH (STANDARD UNITS)	07/15/81-07/15/81	0	1	
ZION0068	No	00400	PH (STANDARD UNITS)	06/22/86-06/22/86	0	1	
ZION0069	No	00400	PH (STANDARD UNITS)	07/12/86-07/12/86	0	1	
ZION0070	No	00400	PH (STANDARD UNITS)	07/13/86-07/13/86	0	1	
ZION0071	No	00400	PH (STANDARD UNITS)	07/17/86-07/17/86	0	1	
ZION0072	No	00400	PH (STANDARD UNITS)	07/15/75-07/13/77	1	9	
ZION0073	No	00400	PH (STANDARD UNITS)	04/22/81-03/04/82	0	2	
ZION0074	No	00400	PH (STANDARD UNITS)	08/13/75-09/25/75	0	4	
ZION0075	No	00400	PH (STANDARD UNITS)	06/11/93-06/16/94	1	9	
ZION0077	No	00400	PH (STANDARD UNITS)	08/20/81-06/12/86	4	3	
ZION0079	No	00400	PH (STANDARD UNITS)	06/30/80-06/30/80	0	1	
ZION0083	No	00400	PH (STANDARD UNITS)	06/22/86-06/22/86	0	1	
ZION0084	No	00400	PH (STANDARD UNITS)	10/05/88-08/08/95	6	30	
ZION0086	No	00400	PH (STANDARD UNITS)	08/22/86-08/22/86	0	1	
ZION0087	No	00400	PH (STANDARD UNITS)	08/27/93-08/08/95	1	7	
ZION0088	No	00400	PH (STANDARD UNITS)	07/15/81-07/15/81	0	1	
ZION0089	No	00400	PH (STANDARD UNITS)	08/28/81-07/14/86	4	3	
ZION0090	No	00400	PH (STANDARD UNITS)	03/23/88-08/15/90	2	2	
ZION0091	No	00400	PH (STANDARD UNITS)	06/18/86-06/18/86	0	1	
ZION0093	No	00400	PH (STANDARD UNITS)	07/06/80-07/06/80	0	1	
ZION0095	No	00400	PH (STANDARD UNITS)	07/15/81-07/15/81	0	1	
ZION0096	No	00400	PH (STANDARD UNITS)	08/28/81-06/07/82	0	2	
ZION0097	No	00400	PH (STANDARD UNITS)	08/28/81-06/07/82	0	2	
ZION0098	No	00400	PH (STANDARD UNITS)	08/28/81-08/21/86	4	3	
ZION0099	No	00400	PH (STANDARD UNITS)	08/28/81-06/07/82	0	2	
ZION0100	No	00400	PH (STANDARD UNITS)	08/28/81-08/28/81	0	1	
ZION0101	No	00400	PH (STANDARD UNITS)	08/20/81-06/21/86	4	3	
ZION0103	No	00400	PH (STANDARD UNITS)	09/14/86-09/14/86	0	1	
ZION0104	No	00400	PH (STANDARD UNITS)	04/22/81-07/16/86	5	8	
ZION0105	No	00400	PH (STANDARD UNITS)	06/30/80-06/30/80	0	1	
ZION0106	No	00400	PH (STANDARD UNITS)	07/01/80-07/01/80	0	1	
ZION0107	No	00400	PH (STANDARD UNITS)	07/26/80-07/26/80	0	1	
ZION0108	No	00400	PH (STANDARD UNITS)	07/15/86-07/15/86	0	1	
ZION0109	No	00400	PH (STANDARD UNITS)	07/26/80-07/26/80	0	1	
ZION0110	No	00400	PH (STANDARD UNITS)	11/12/77-06/19/90	12	2	
ZION0111	No	00400	PH (STANDARD UNITS)	08/26/86-08/26/86	0	1	
ZION0112	No	00400	PH (STANDARD UNITS)	11/12/77-11/12/77	0	1	
ZION0114	No	00400	PH (STANDARD UNITS)	07/15/86-07/15/86	0	1	
ZION0115	No	00400	PH (STANDARD UNITS)	10/05/88-06/28/93	4	6	
ZION0116	No	00400	PH (STANDARD UNITS)	07/28/87-07/28/87	0	1	
ZION0117	No	00400	PH (STANDARD UNITS)	09/18/87-09/18/87	0	1	
ZION0118	No	00400	PH (STANDARD UNITS)	09/11/86-09/11/86	0	1	
ZION0120	No	00400	PH (STANDARD UNITS)	07/17/80-07/17/80	0	1	
ZION0121	No	00400	PH (STANDARD UNITS)	09/18/87-09/18/87	0	1	
ZION0122	No	00400	PH (STANDARD UNITS)	07/22/80-07/22/80	0	1	
ZION0123	No	00400	PH (STANDARD UNITS)	07/20/80-07/20/80	0	1	
ZION0125	No	00400	PH (STANDARD UNITS)	08/20/81-08/20/81	0	1	
ZION0128	No	00400	PH (STANDARD UNITS)	07/19/80-07/19/80	0	1	
ZION0129	No	00400	PH (STANDARD UNITS)	06/11/82-06/11/82	0	1	
ZION0130	No	00400	PH (STANDARD UNITS)	07/06/80-07/06/80	0	1	
ZION0131	No	00400	PH (STANDARD UNITS)	07/05/80-07/05/80	0	1	
ZION0132	No	00400	PH (STANDARD UNITS)	08/23/86-08/23/86	0	1	
ZION0136	Yes	00400	PH (STANDARD UNITS)	07/19/80-07/19/80	0	1	
ZION0137	Yes	00400	PH (STANDARD UNITS)	05/24/77-11/10/93	16	37	
ZION0138	No	00400	PH (STANDARD UNITS)	04/23/81-08/16/82	1	3	
ZION0139	Yes	00400	PH (STANDARD UNITS)	03/31/77-01/10/78	0	2	
ZION0140	Yes	00400	PH (STANDARD UNITS)	03/01/77-05/31/77	0	3	
ZION0141	Yes	00400	PH (STANDARD UNITS)	01/04/67-10/31/84	17	66	S
ZION0142	Yes	00400	PH (STANDARD UNITS)	07/02/80-07/02/80	0	1	
ZION0144	Yes	00400	PH (STANDARD UNITS)	07/02/80-07/02/80	0	1	
ZION0145	Yes	00400	PH (STANDARD UNITS)	08/19/81-05/04/82	0	2	
ZION0149	No	00400	PH (STANDARD UNITS)	04/23/81-08/16/82	1	3	
ZION0156	Yes	00400	PH (STANDARD UNITS)	08/19/81-09/19/86	5	5	
ZION0159	Yes	00400	PH (STANDARD UNITS)	06/30/87-06/30/87	0	1	
ZION0162	Yes	00400	PH (STANDARD UNITS)	09/18/86-09/18/86	0	1	
ZION0163	No	00400	PH (STANDARD UNITS)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00400	PH (STANDARD UNITS)	07/22/80-07/22/80	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0168	No	00400	PH (STANDARD UNITS)	04/23/81-08/16/82	1	3	
ZION0173	Yes	00400	PH (STANDARD UNITS)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00400	PH (STANDARD UNITS)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00400	PH (STANDARD UNITS)	08/24/81-08/24/81	0	1	
ZION0177	No	00400	PH (STANDARD UNITS)	11/18/92-03/12/96	3	14	
ZION0178	No	00400	PH (STANDARD UNITS)	04/11/90-07/31/96	6	33	
ZION0179	No	00400	PH (STANDARD UNITS)	08/07/91-08/07/91	0	1	
ZION0180	Yes	00400	PH (STANDARD UNITS)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00400	PH (STANDARD UNITS)	10/31/73-07/15/74	0	5	
ZION0184	Yes	00400	PH (STANDARD UNITS)	07/22/80-07/22/80	0	1	
ZION0186	No	00400	PH (STANDARD UNITS)	07/26/82-12/11/96	14	99	
ZION0187	No	00400	PH (STANDARD UNITS)	08/24/81-08/23/82	0	4	
ZION0189	No	00400	PH (STANDARD UNITS)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00400	PH (STANDARD UNITS)	04/09/74-07/15/74	0	3	
ZION0192	No	00400	PH (STANDARD UNITS)	04/19/79-12/11/96	17	113	T,S
ZION0194	No	00400	PH (STANDARD UNITS)	07/15/80-07/15/80	0	1	
ZION0198	No	00400	PH (STANDARD UNITS)	06/28/80-06/28/80	0	1	
ZION0199	Yes	00400	PH (STANDARD UNITS)	09/03/70-09/03/70	0	1	
ZION0200	No	00400	PH (STANDARD UNITS)	06/28/80-06/28/80	0	1	
ZION0202	No	00400	PH (STANDARD UNITS)	12/28/75-12/28/75	0	1	
ZION0203	No	00400	PH (STANDARD UNITS)	08/24/81-09/01/82	1	4	
ZION0205	No	00400	PH (STANDARD UNITS)	04/19/79-04/14/82	2	18	
ZION0206	No	00400	PH (STANDARD UNITS)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00400	PH (STANDARD UNITS)	07/13/80-07/13/80	0	1	
ZION0208	No	00400	PH (STANDARD UNITS)	06/29/80-06/29/80	0	1	
ZION0209	No	00400	PH (STANDARD UNITS)	06/28/80-06/28/80	0	1	
ZION0211	No	00400	PH (STANDARD UNITS)	06/28/80-06/28/80	0	1	
ZION0212	No	00400	PH (STANDARD UNITS)	05/22/79-08/09/95	16	9	
ZION0213	No	00400	PH (STANDARD UNITS)	08/17/81-08/17/81	0	1	
ZION0214	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0215	No	00400	PH (STANDARD UNITS)	05/22/79-08/09/95	16	37	
ZION0216	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0217	No	00400	PH (STANDARD UNITS)	05/22/79-08/09/95	16	18	
ZION0218	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0219	Yes	00400	PH (STANDARD UNITS)	07/13/80-07/13/80	0	1	
ZION0220	No	00400	PH (STANDARD UNITS)	06/29/80-06/29/80	0	1	
ZION0221	No	00400	PH (STANDARD UNITS)	06/29/80-06/29/80	0	1	
ZION0222	No	00400	PH (STANDARD UNITS)	07/10/80-07/10/80	0	1	
ZION0223	No	00400	PH (STANDARD UNITS)	08/18/81-08/23/82	1	4	
ZION0224	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00400	PH (STANDARD UNITS)	07/14/80-07/14/80	0	1	
ZION0226	No	00400	PH (STANDARD UNITS)	07/15/80-07/15/80	0	1	
ZION0227	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0228	No	00400	PH (STANDARD UNITS)	06/19/80-06/19/80	0	1	
ZION0229	No	00400	PH (STANDARD UNITS)	05/24/72-05/24/72	0	1	
ZION0230	No	00400	PH (STANDARD UNITS)	07/06/80-07/06/80	0	1	
ZION0231	No	00400	PH (STANDARD UNITS)	11/18/77-11/18/77	0	1	
ZION0234	No	00400	PH (STANDARD UNITS)	05/24/72-05/24/72	0	1	
ZION0236	No	00400	PH (STANDARD UNITS)	01/18/74-01/18/74	0	1	
ZION0238	No	00400	PH (STANDARD UNITS)	12/10/77-12/10/77	0	1	
ZION0239	No	00400	PH (STANDARD UNITS)	08/17/81-05/11/82	0	2	
ZION0240	No	00400	PH (STANDARD UNITS)	11/17/77-11/17/77	0	1	
ZION0241	No	00400	PH (STANDARD UNITS)	04/03/96-12/11/96	0	11	
ZION0242	No	00400	PH (STANDARD UNITS)	08/24/81-08/23/82	0	5	
ZION0244	No	00400	PH (STANDARD UNITS)	04/09/74-05/28/74	0	2	
ZION0248	No	00400	PH (STANDARD UNITS)	04/09/74-07/15/74	0	3	
ZION0250	No	00400	PH (STANDARD UNITS)	08/24/81-09/01/82	1	4	
ZION0251	No	00400	PH (STANDARD UNITS)	05/24/72-05/24/72	0	1	
ZION0254	No	00400	PH (STANDARD UNITS)	06/21/80-06/21/80	0	1	
ZION0256	No	00400	PH (STANDARD UNITS)	02/24/82-12/11/96	14	79	
ZION0257	No	00400	PH (STANDARD UNITS)	06/21/80-06/21/80	0	1	
ZION0258	No	00400	PH (STANDARD UNITS)	12/06/66-09/01/82	15	7	
ZION0259	Yes	00400	PH (STANDARD UNITS)	06/08/64-06/08/64	0	1	
ZION0260	No	00400	PH (STANDARD UNITS)	07/12/80-07/12/80	0	1	
ZION0261	No	00400	PH (STANDARD UNITS)	06/26/80-06/26/80	0	1	
ZION0263	No	00400	PH (STANDARD UNITS)	08/18/81-09/02/82	1	3	
ZION0264	No	00400	PH (STANDARD UNITS)	04/02/96-12/11/96	0	4	
ZION0265	No	00400	PH (STANDARD UNITS)	11/16/77-11/16/77	0	1	
ZION0267	No	00400	PH (STANDARD UNITS)	05/11/82-05/11/82	0	1	
ZION0268	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	4	
ZION0270	No	00400	PH (STANDARD UNITS)	04/09/74-07/16/74	0	3	
ZION0272	No	00400	PH (STANDARD UNITS)	04/09/74-07/16/74	0	3	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0273	No	00400	PH (STANDARD UNITS)	08/25/81-05/05/82	0	2	
ZION0276	No	00400	PH (STANDARD UNITS)	06/17/80-12/11/96	16	88	T
ZION0277	No	00400	PH (STANDARD UNITS)	06/17/80-04/23/85	4	15	
ZION0278	No	00400	PH (STANDARD UNITS)	10/31/73-07/16/74	0	5	
ZION0280	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	4	
ZION0281	No	00400	PH (STANDARD UNITS)	03/25/66-03/25/66	0	1	
ZION0283	No	00400	PH (STANDARD UNITS)	10/31/73-07/16/74	0	5	
ZION0284	No	00400	PH (STANDARD UNITS)	07/12/80-07/12/80	0	1	
ZION0285	No	00400	PH (STANDARD UNITS)	06/23/80-06/23/80	0	1	
ZION0288	No	00400	PH (STANDARD UNITS)	12/11/96-12/11/96	0	1	
ZION0292	No	00400	PH (STANDARD UNITS)	10/25/68-10/25/68	0	1	
ZION0293	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	3	
ZION0294	No	00400	PH (STANDARD UNITS)	12/15/66-12/15/66	0	1	
ZION0296	No	00400	PH (STANDARD UNITS)	10/28/68-10/28/68	0	1	
ZION0299	No	00400	PH (STANDARD UNITS)	01/13/81-04/24/96	15	58	
ZION0300	No	00400	PH (STANDARD UNITS)	05/07/82-05/07/82	0	1	
ZION0301	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	3	
ZION0302	No	00400	PH (STANDARD UNITS)	04/02/96-12/11/96	0	11	
ZION0303	No	00400	PH (STANDARD UNITS)	10/31/73-07/16/74	0	5	
ZION0304	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	4	
ZION0305	No	00400	PH (STANDARD UNITS)	08/25/81-09/02/82	1	5	
ZION0306	No	00400	PH (STANDARD UNITS)	07/11/80-07/11/80	0	1	
ZION0308	No	00400	PH (STANDARD UNITS)	01/10/78-02/24/82	4	19	
ZION0310	No	00400	PH (STANDARD UNITS)	08/28/81-05/07/82	0	2	
ZION0311	No	00400	PH (STANDARD UNITS)	06/14/77-08/05/77	0	2	
ZION0312	No	00400	PH (STANDARD UNITS)	06/25/93-06/25/93	0	1	
ZION0313	No	00400	PH (STANDARD UNITS)	08/17/81-05/11/82	0	2	
ZION0314	No	00400	PH (STANDARD UNITS)	07/11/80-07/11/80	0	1	
ZION0316	No	00400	PH (STANDARD UNITS)	04/03/96-12/11/96	0	11	
ZION0317	No	00400	PH (STANDARD UNITS)	08/24/81-08/24/81	0	1	
ZION0318	No	00400	PH (STANDARD UNITS)	08/31/81-08/23/82	0	5	
ZION0320	No	00400	PH (STANDARD UNITS)	07/11/80-07/11/80	0	1	
ZION0321	No	00400	PH (STANDARD UNITS)	08/19/81-08/23/82	1	4	
ZION0322	No	00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	35	
ZION0323	No	00400	PH (STANDARD UNITS)	10/07/65-10/07/65	0	1	
ZION0324	No	00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	24	
ZION0325	No	00400	PH (STANDARD UNITS)	08/20/68-08/20/68	0	1	
ZION0326	No	00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	30	
ZION0328	No	00400	PH (STANDARD UNITS)	04/09/74-05/28/74	0	2	
ZION0330	No	00400	PH (STANDARD UNITS)	02/24/82-12/11/96	14	99	
ZION0331	No	00400	PH (STANDARD UNITS)	03/07/67-08/23/82	15	5	
ZION0332	No	00400	PH (STANDARD UNITS)	10/31/73-07/16/74	0	5	
ZION0333	No	00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	8	
ZION0334	No	00400	PH (STANDARD UNITS)	07/09/96-10/30/96	0	4	
ZION0336	No	00400	PH (STANDARD UNITS)	05/20/77-09/23/77	0	4	
ZION0340	No	00400	PH (STANDARD UNITS)	02/20/64-02/20/64	0	1	
ZION0341	No	00400	PH (STANDARD UNITS)	08/24/81-05/06/82	0	2	
ZION0342	No	00400	PH (STANDARD UNITS)	01/07/88-01/07/88	0	1	
ZION0343	No	00400	PH (STANDARD UNITS)	11/04/65-11/04/65	0	1	
ZION0344	No	00400	PH (STANDARD UNITS)	08/18/81-05/04/82	0	2	
ZION0347	No	00400	PH (STANDARD UNITS)	05/16/75-09/23/77	2	15	
ZION0348	No	00400	PH (STANDARD UNITS)	08/18/81-05/04/82	0	2	
ZION0349	No	00400	PH (STANDARD UNITS)	05/16/75-07/24/79	4	18	
ZION0350	No	00400	PH (STANDARD UNITS)	05/12/82-05/12/82	0	1	
ZION0352	No	00400	PH (STANDARD UNITS)	05/23/79-06/25/93	14	2	
ZION0353	No	00400	PH (STANDARD UNITS)	08/17/81-05/04/82	0	2	
ZION0354	No	00400	PH (STANDARD UNITS)	09/15/82-04/27/83	0	5	
ZION0355	No	00400	PH (STANDARD UNITS)	03/10/64-03/10/64	0	1	
ZION0362	No	00400	PH (STANDARD UNITS)	08/20/81-05/06/82	0	2	
ZION0363	No	00400	PH (STANDARD UNITS)	04/25/77-04/27/83	6	28	
ZION0366	No	00400	PH (STANDARD UNITS)	10/16/68-10/16/68	0	1	
ZION0367	No	00400	PH (STANDARD UNITS)	07/14/62-07/14/62	0	1	
ZION0001	No	00403	PH, LAB, STANDARD UNITS SU	02/22/88-02/22/88	0	1	
ZION0002	No	00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	0	1	
ZION0004	No	00403	PH, LAB, STANDARD UNITS SU	10/20/81-10/20/81	0	1	
ZION0005	No	00403	PH, LAB, STANDARD UNITS SU	07/30/81-07/30/81	0	1	
ZION0006	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-08/31/82	1	4	
ZION0007	No	00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	0	1	
ZION0008	No	00403	PH, LAB, STANDARD UNITS SU	07/17/81-07/17/81	0	1	
ZION0009	No	00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	0	1	
ZION0010	No	00403	PH, LAB, STANDARD UNITS SU	04/20/81-08/24/81	0	2	
ZION0011	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0012	No	00403	PH, LAB, STANDARD UNITS SU	07/21/89-07/21/89	0	1	
ZION0013	No	00403	PH, LAB, STANDARD UNITS SU	06/23/87-06/23/87	0	1	
ZION0014	No	00403	PH, LAB, STANDARD UNITS SU	07/30/81-05/07/82	0	2	
ZION0015	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	0	2	
ZION0016	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	0	2	
ZION0017	No	00403	PH, LAB, STANDARD UNITS SU	07/30/81-05/07/82	0	2	
ZION0020	No	00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	0	1	
ZION0021	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/31/82	1	4	
ZION0023	No	00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	0	1	
ZION0024	No	00403	PH, LAB, STANDARD UNITS SU	10/17/81-10/17/81	0	1	
ZION0025	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	0	1	
ZION0027	No	00403	PH, LAB, STANDARD UNITS SU	08/29/81-08/29/81	0	1	
ZION0028	No	00403	PH, LAB, STANDARD UNITS SU	11/09/77-10/19/82	4	3	
ZION0029	No	00403	PH, LAB, STANDARD UNITS SU	11/09/77-08/07/89	11	3	
ZION0030	No	00403	PH, LAB, STANDARD UNITS SU	04/22/81-08/26/81	0	2	
ZION0031	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	0	2	
ZION0032	No	00403	PH, LAB, STANDARD UNITS SU	04/24/96-12/10/96	0	7	
ZION0033	No	00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	0	1	
ZION0037	No	00403	PH, LAB, STANDARD UNITS SU	10/12/81-08/31/82	0	3	
ZION0040	No	00403	PH, LAB, STANDARD UNITS SU	09/02/91-09/02/91	0	1	
ZION0042	No	00403	PH, LAB, STANDARD UNITS SU	06/28/93-06/28/93	0	1	
ZION0043	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	1	3	
ZION0044	No	00403	PH, LAB, STANDARD UNITS SU	11/16/81-09/13/86	4	2	
ZION0045	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	1	3	
ZION0046	No	00403	PH, LAB, STANDARD UNITS SU	04/22/81-08/26/81	0	2	
ZION0048	No	00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	0	1	
ZION0049	No	00403	PH, LAB, STANDARD UNITS SU	06/24/86-06/24/86	0	1	
ZION0050	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/19/86	4	2	
ZION0054	No	00403	PH, LAB, STANDARD UNITS SU	07/13/86-07/13/86	0	1	
ZION0056	No	00403	PH, LAB, STANDARD UNITS SU	02/03/88-08/15/90	2	14	
ZION0058	No	00403	PH, LAB, STANDARD UNITS SU	06/11/86-07/16/86	0	2	
ZION0060	No	00403	PH, LAB, STANDARD UNITS SU	09/10/86-09/10/86	0	1	
ZION0062	No	00403	PH, LAB, STANDARD UNITS SU	07/12/86-07/12/86	0	1	
ZION0064	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	0	1	
ZION0067	No	00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	0	1	
ZION0068	No	00403	PH, LAB, STANDARD UNITS SU	06/22/86-06/22/86	0	1	
ZION0070	No	00403	PH, LAB, STANDARD UNITS SU	07/13/86-07/13/86	0	1	
ZION0071	No	00403	PH, LAB, STANDARD UNITS SU	07/17/86-07/17/86	0	1	
ZION0073	No	00403	PH, LAB, STANDARD UNITS SU	04/22/81-03/04/82	0	2	
ZION0077	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/12/86	4	3	
ZION0078	No	00403	PH, LAB, STANDARD UNITS SU	09/15/78-09/15/78	0	1	
ZION0080	No	00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	0	1	
ZION0082	No	00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	0	1	
ZION0083	No	00403	PH, LAB, STANDARD UNITS SU	06/22/86-06/22/86	0	1	
ZION0084	No	00403	PH, LAB, STANDARD UNITS SU	10/05/88-08/15/90	1	7	
ZION0086	No	00403	PH, LAB, STANDARD UNITS SU	08/22/86-08/22/86	0	1	
ZION0088	No	00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	0	1	
ZION0089	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-07/14/86	4	3	
ZION0090	No	00403	PH, LAB, STANDARD UNITS SU	02/02/88-03/23/88	0	2	
ZION0091	No	00403	PH, LAB, STANDARD UNITS SU	06/18/86-06/18/86	0	1	
ZION0092	No	00403	PH, LAB, STANDARD UNITS SU	05/03/82-08/20/82	0	2	
ZION0095	No	00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	0	1	
ZION0096	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	0	2	
ZION0097	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	0	2	
ZION0098	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	0	2	
ZION0099	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	0	2	
ZION0100	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	0	1	
ZION0101	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/86	4	3	
ZION0102	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-05/03/82	0	2	
ZION0103	No	00403	PH, LAB, STANDARD UNITS SU	09/14/86-09/14/86	0	1	
ZION0104	No	00403	PH, LAB, STANDARD UNITS SU	04/22/81-07/16/86	5	8	
ZION0108	No	00403	PH, LAB, STANDARD UNITS SU	07/15/86-07/15/86	0	1	
ZION0110	No	00403	PH, LAB, STANDARD UNITS SU	06/19/90-06/19/90	0	1	
ZION0111	No	00403	PH, LAB, STANDARD UNITS SU	08/26/86-08/26/86	0	1	
ZION0113	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	1	4	
ZION0114	No	00403	PH, LAB, STANDARD UNITS SU	07/15/86-07/15/86	0	1	
ZION0115	No	00403	PH, LAB, STANDARD UNITS SU	10/05/88-10/05/88	0	1	
ZION0116	No	00403	PH, LAB, STANDARD UNITS SU	07/28/87-07/28/87	0	1	
ZION0117	No	00403	PH, LAB, STANDARD UNITS SU	09/18/87-09/18/87	0	1	
ZION0118	No	00403	PH, LAB, STANDARD UNITS SU	09/11/86-09/11/86	0	1	
ZION0119	No	00403	PH, LAB, STANDARD UNITS SU	07/23/76-07/23/76	0	1	
ZION0121	No	00403	PH, LAB, STANDARD UNITS SU	09/18/87-09/18/87	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0125	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/20/81	0	1	
ZION0126	No	00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	0	1	
ZION0129	No	00403	PH, LAB, STANDARD UNITS SU	06/11/82-06/11/82	0	1	
ZION0132	No	00403	PH, LAB, STANDARD UNITS SU	08/23/86-08/23/86	0	1	
ZION0137	Yes	00403	PH, LAB, STANDARD UNITS SU	01/18/77-11/10/93	16	25	
ZION0138	No	00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	1	3	
ZION0139	Yes	00403	PH, LAB, STANDARD UNITS SU	03/31/77-12/12/78	1	4	
ZION0140	Yes	00403	PH, LAB, STANDARD UNITS SU	01/25/77-11/29/77	0	11	
ZION0145	Yes	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	0	2	
ZION0147	Yes	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	0	2	
ZION0149	No	00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	1	3	
ZION0153	Yes	00403	PH, LAB, STANDARD UNITS SU	01/25/88-01/25/88	0	1	
ZION0156	Yes	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	0	4	
ZION0158	Yes	00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	0	4	
ZION0162	Yes	00403	PH, LAB, STANDARD UNITS SU	09/18/86-09/18/86	0	1	
ZION0166	Yes	00403	PH, LAB, STANDARD UNITS SU	04/07/81-04/07/81	0	1	
ZION0167	No	00403	PH, LAB, STANDARD UNITS SU	05/13/77-08/05/77	0	2	
ZION0168	No	00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	1	3	
ZION0169	Yes	00403	PH, LAB, STANDARD UNITS SU	04/07/81-04/07/81	0	1	
ZION0173	Yes	00403	PH, LAB, STANDARD UNITS SU	05/04/82-08/23/82	0	2	
ZION0175	Yes	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/24/81	0	1	
ZION0176	Yes	00403	PH, LAB, STANDARD UNITS SU	09/17/75-05/16/77	1	3	
ZION0177	No	00403	PH, LAB, STANDARD UNITS SU	11/10/93-03/12/96	2	12	
ZION0178	No	00403	PH, LAB, STANDARD UNITS SU	04/11/90-07/31/96	6	19	
ZION0183	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	4	
ZION0185	No	00403	PH, LAB, STANDARD UNITS SU	04/03/83-01/17/90	6	5	
ZION0186	No	00403	PH, LAB, STANDARD UNITS SU	11/11/86-12/11/96	10	84	
ZION0187	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	4	
ZION0188	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	5	
ZION0189	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	4	
ZION0192	No	00403	PH, LAB, STANDARD UNITS SU	04/19/79-12/11/96	17	83	T,S
ZION0193	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	5	
ZION0197	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	5	
ZION0201	No	00403	PH, LAB, STANDARD UNITS SU	04/17/78-11/12/89	11	4	
ZION0203	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	4	
ZION0204	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-08/17/81	0	1	
ZION0205	No	00403	PH, LAB, STANDARD UNITS SU	04/18/79-06/19/79	0	3	
ZION0206	No	00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/28/79	0	2	
ZION0212	No	00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/28/79	0	2	
ZION0213	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-08/17/81	0	1	
ZION0215	No	00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/14/91	12	10	
ZION0223	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-08/23/82	1	4	
ZION0232	No	00403	PH, LAB, STANDARD UNITS SU	06/22/84-09/06/88	4	2	
ZION0235	No	00403	PH, LAB, STANDARD UNITS SU	03/07/88-03/07/88	0	1	
ZION0237	No	00403	PH, LAB, STANDARD UNITS SU	06/14/78-06/14/78	0	1	
ZION0239	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/11/82	0	2	
ZION0241	No	00403	PH, LAB, STANDARD UNITS SU	04/03/96-12/11/96	0	11	
ZION0242	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	5	
ZION0246	Yes	00403	PH, LAB, STANDARD UNITS SU	05/16/77-09/04/77	0	3	
ZION0249	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	0	5	
ZION0250	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	4	
ZION0252	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	5	
ZION0255	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	5	
ZION0256	No	00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	10	57	
ZION0258	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	1	4	
ZION0263	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-09/02/82	1	3	
ZION0264	No	00403	PH, LAB, STANDARD UNITS SU	04/02/96-12/11/96	0	4	
ZION0267	No	00403	PH, LAB, STANDARD UNITS SU	05/11/82-05/11/82	0	1	
ZION0268	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	4	
ZION0273	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-05/05/82	0	2	
ZION0276	No	00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	10	57	
ZION0280	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	4	
ZION0288	No	00403	PH, LAB, STANDARD UNITS SU	12/11/96-12/11/96	0	1	
ZION0290	No	00403	PH, LAB, STANDARD UNITS SU	05/07/84-07/06/87	3	2	
ZION0291	No	00403	PH, LAB, STANDARD UNITS SU	07/06/81-09/16/89	8	4	
ZION0293	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	3	
ZION0295	No	00403	PH, LAB, STANDARD UNITS SU	04/12/78-03/12/86	7	2	
ZION0297	No	00403	PH, LAB, STANDARD UNITS SU	07/06/81-09/16/89	8	4	
ZION0299	No	00403	PH, LAB, STANDARD UNITS SU	12/16/86-04/24/96	9	32	
ZION0300	No	00403	PH, LAB, STANDARD UNITS SU	05/07/82-05/07/82	0	1	
ZION0301	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	3	
ZION0302	No	00403	PH, LAB, STANDARD UNITS SU	04/02/96-12/11/96	0	11	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0304	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	4	
ZION0305	No	00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	1	5	
ZION0308	No	00403	PH, LAB, STANDARD UNITS SU	01/10/78-02/24/82	4	22	
ZION0310	No	00403	PH, LAB, STANDARD UNITS SU	08/28/81-05/07/82	0	2	
ZION0312	No	00403	PH, LAB, STANDARD UNITS SU	06/25/93-06/25/93	0	1	
ZION0313	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/11/82	0	2	
ZION0316	No	00403	PH, LAB, STANDARD UNITS SU	04/03/96-12/11/96	0	11	
ZION0317	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/24/81	0	1	
ZION0318	No	00403	PH, LAB, STANDARD UNITS SU	08/31/81-08/23/82	0	5	
ZION0321	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-08/23/82	1	4	
ZION0322	No	00403	PH, LAB, STANDARD UNITS SU	06/23/87-08/08/91	4	7	
ZION0324	No	00403	PH, LAB, STANDARD UNITS SU	06/23/87-08/03/90	3	5	
ZION0326	No	00403	PH, LAB, STANDARD UNITS SU	06/23/87-05/22/91	3	9	
ZION0330	No	00403	PH, LAB, STANDARD UNITS SU	05/21/85-12/11/96	11	81	
ZION0331	No	00403	PH, LAB, STANDARD UNITS SU	08/31/81-08/23/82	0	4	
ZION0333	No	00403	PH, LAB, STANDARD UNITS SU	10/05/88-08/03/90	1	2	
ZION0334	No	00403	PH, LAB, STANDARD UNITS SU	07/09/96-10/30/96	0	4	
ZION0337	No	00403	PH, LAB, STANDARD UNITS SU	07/05/83-07/05/83	0	1	
ZION0338	No	00403	PH, LAB, STANDARD UNITS SU	12/06/77-01/09/89	11	4	
ZION0341	No	00403	PH, LAB, STANDARD UNITS SU	08/24/81-05/06/82	0	2	
ZION0344	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-05/04/82	0	2	
ZION0346	No	00403	PH, LAB, STANDARD UNITS SU	09/19/78-09/19/78	0	1	
ZION0348	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-05/04/82	0	2	
ZION0352	No	00403	PH, LAB, STANDARD UNITS SU	05/24/79-06/25/93	14	3	
ZION0353	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/04/82	0	2	
ZION0354	No	00403	PH, LAB, STANDARD UNITS SU	09/15/82-04/27/83	0	5	
ZION0356	No	00403	PH, LAB, STANDARD UNITS SU	11/28/77-08/23/89	11	5	
ZION0358	No	00403	PH, LAB, STANDARD UNITS SU	12/06/77-06/28/84	6	4	
ZION0359	No	00403	PH, LAB, STANDARD UNITS SU	12/05/77-12/06/77	0	2	
ZION0360	No	00403	PH, LAB, STANDARD UNITS SU	12/06/77-06/28/84	6	4	
ZION0361	No	00403	PH, LAB, STANDARD UNITS SU	06/28/84-06/28/84	0	1	
ZION0362	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-05/06/82	0	2	
ZION0363	No	00403	PH, LAB, STANDARD UNITS SU	03/07/78-04/27/83	5	17	
ZION0364	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0365	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0372	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0373	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0374	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0375	No	00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	0	1	
ZION0003	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/21/77-06/21/77	0	1	
ZION0018	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/22/77-06/22/77	0	1	
ZION0019	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/22/77-06/22/77	0	1	
ZION0022	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0028	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/86-05/27/86	0	1	
ZION0029	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/22/85-07/22/85	0	1	
ZION0032	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/24/96-12/10/96	0	7	
ZION0035	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0040	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/02/91-09/02/91	0	1	
ZION0042	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/28/93-06/28/93	0	1	
ZION0056	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/03/88-08/15/90	2	14	
ZION0078	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/15/78-09/15/78	0	1	
ZION0080	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	0	1	
ZION0082	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	0	1	
ZION0084	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/05/88-08/15/90	1	7	
ZION0090	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/02/88-03/23/88	0	2	
ZION0110	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/12/77-11/12/77	0	1	
ZION0112	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/12/77-11/12/77	0	1	
ZION0115	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/05/88-10/05/88	0	1	
ZION0126	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	0	1	
ZION0137	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/77-11/10/93	16	40	
ZION0140	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-10/31/84	11	5	
ZION0153	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	01/25/88-01/25/88	0	1	
ZION0166	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	04/07/81-04/07/81	0	1	
ZION0169	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	04/07/81-04/07/81	0	1	
ZION0174	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0177	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/10/93-03/12/96	2	12	
ZION0178	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/11/90-07/31/96	6	19	
ZION0180	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-07/15/74	0	5	
ZION0185	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/04/86-01/17/90	3	2	
ZION0186	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/26/82-12/11/96	14	102	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0190	Yes	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0192	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/19/79-12/11/96	17	110	T,S
ZION0201	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/10/80-11/12/89	9	3	
ZION0202	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/28/75-12/28/75	0	1	
ZION0205	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/18/79-04/14/82	2	11	
ZION0206	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/28/79	0	2	
ZION0212	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/28/79	0	2	
ZION0215	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/14/91	12	10	
ZION0231	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/18/77-11/18/77	0	1	
ZION0232	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/06/88-09/06/88	0	1	
ZION0235	No	00405	CARBON DIOXIDE (MG/L AS CO2)	03/07/88-03/07/88	0	1	
ZION0236	No	00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/74-01/18/74	0	1	
ZION0238	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/10/77-12/10/77	0	1	
ZION0240	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/17/77-11/17/77	0	1	
ZION0241	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/03/96-12/11/96	0	11	
ZION0244	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0248	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0256	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	14	79	
ZION0264	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/02/96-12/11/96	0	4	
ZION0265	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/16/77-11/16/77	0	1	
ZION0270	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0272	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0276	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-12/11/96	16	84	T
ZION0277	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-04/23/85	4	8	
ZION0278	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0279	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/21/83-06/21/83	0	1	
ZION0283	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0288	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/11/96-12/11/96	0	1	
ZION0291	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/06/81-09/16/89	8	4	
ZION0297	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/06/81-09/16/89	8	4	
ZION0299	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/28/80-04/24/96	15	54	
ZION0302	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/02/96-12/11/96	0	11	
ZION0303	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0308	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/21/79-02/21/79	0	1	
ZION0311	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/14/77-08/05/77	0	2	
ZION0312	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/25/93-06/25/93	0	1	
ZION0316	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/03/96-12/11/96	0	11	
ZION0322	No	00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/08/91	4	11	
ZION0324	No	00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/03/90	3	9	
ZION0326	No	00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-05/22/91	4	13	
ZION0328	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	0	2	
ZION0330	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	14	101	
ZION0332	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	0	4	
ZION0333	No	00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/03/90	3	3	
ZION0334	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/09/96-10/30/96	0	4	
ZION0336	No	00405	CARBON DIOXIDE (MG/L AS CO2)	06/14/77-06/14/77	0	1	
ZION0338	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/28/80-10/06/86	6	2	
ZION0346	No	00405	CARBON DIOXIDE (MG/L AS CO2)	09/19/78-09/19/78	0	1	
ZION0352	No	00405	CARBON DIOXIDE (MG/L AS CO2)	05/24/79-06/25/93	14	3	
ZION0354	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/20/82-04/27/83	0	6	
ZION0360	No	00405	CARBON DIOXIDE (MG/L AS CO2)	11/11/80-11/11/80	0	1	
ZION0363	No	00405	CARBON DIOXIDE (MG/L AS CO2)	02/21/79-02/21/79	0	1	
ZION0364	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	0	1	
ZION0365	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	0	1	
ZION0373	No	00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	0	1	
ZION0076	No	00406	PH, FIELD, STANDARD UNITS SU	06/03/92-10/05/92	0	10	
ZION0094	No	00406	PH, FIELD, STANDARD UNITS SU	06/03/92-10/05/92	0	9	
ZION0134	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/20/92-09/18/92	0	6	
ZION0143	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/28/88-05/04/89	0	4	
ZION0146	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/16/88-05/04/89	0	4	
ZION0148	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/21/92-10/06/92	0	11	
ZION0150	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/16/88-05/03/89	0	4	
ZION0151	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/21/92-10/02/92	0	9	
ZION0154	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/17/88-05/04/89	0	4	
ZION0155	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/28/88-05/04/89	0	3	
ZION0157	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/16/92-10/06/92	0	5	
ZION0161	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/26/88-05/03/89	0	4	
ZION0165	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/28/88-05/01/89	0	3	
ZION0195	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	0	2	
ZION0196	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	0	3	
ZION0243	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	0	3	
ZION0253	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	0	2	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0275	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	0	3	
ZION0286	No	00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	0	2	
ZION0003	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/77-06/21/77	0	1	
ZION0014	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	0	1	
ZION0017	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	0	1	
ZION0018	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0019	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0022	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0028	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/09/77-05/27/86	8	3	
ZION0029	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/09/77-07/22/85	7	2	
ZION0032	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/24/96-12/10/96	0	7	
ZION0035	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0036	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/05/80-07/05/80	0	1	
ZION0039	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/01/77-05/01/77	0	1	
ZION0040	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/02/91-09/02/91	0	1	
ZION0041	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	0	1	
ZION0042	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	0	8	
ZION0044	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/13/86-09/13/86	0	1	
ZION0049	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/24/86-06/24/86	0	1	
ZION0050	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/19/86	0	1	
ZION0051	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/07/80-07/07/80	0	1	
ZION0052	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	0	1	
ZION0054	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/86-07/13/86	0	1	
ZION0056	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/88-05/24/94	6	23	
ZION0057	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	0	1	
ZION0058	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/11/86-07/16/86	0	2	
ZION0060	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/10/86-09/10/86	0	1	
ZION0061	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/13/75-09/25/75	0	4	
ZION0062	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	0	1	
ZION0063	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	0	1	
ZION0065	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/01/80-07/01/80	0	1	
ZION0068	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/86-06/22/86	0	1	
ZION0069	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	0	1	
ZION0070	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/86-07/13/86	0	1	
ZION0071	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/17/86-07/17/86	0	1	
ZION0074	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/13/75-09/25/75	0	4	
ZION0075	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	0	9	
ZION0077	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/12/86-06/12/86	0	1	
ZION0078	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/15/78-09/15/78	0	1	
ZION0079	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	0	1	
ZION0080	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	
ZION0082	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	
ZION0083	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/86-06/22/86	0	1	
ZION0084	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/05/88-09/09/94	5	18	
ZION0086	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/22/86-08/22/86	0	1	
ZION0087	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/27/93-08/08/95	1	7	
ZION0089	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/17/82-07/14/86	3	2	
ZION0090	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/02/88-03/23/88	0	2	
ZION0091	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/86-06/18/86	0	1	
ZION0093	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	0	1	
ZION0096	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0097	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0098	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0099	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0101	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/86-06/21/86	0	1	
ZION0103	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/86-09/14/86	0	1	
ZION0104	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/86-07/16/86	0	2	
ZION0105	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	0	1	
ZION0106	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/01/80-07/01/80	0	1	
ZION0107	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	0	1	
ZION0108	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/86-07/15/86	0	1	
ZION0109	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	0	1	
ZION0110	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0111	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/26/86-08/26/86	0	1	
ZION0112	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0114	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/86-07/15/86	0	1	
ZION0115	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/05/88-06/28/93	4	3	
ZION0118	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/11/86-09/11/86	0	1	
ZION0120	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/17/80-07/17/80	0	1	
ZION0122	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	0	1	
ZION0123	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/20/80-07/20/80	0	1	
ZION0126	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0128	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/80-07/19/80	0	1	
ZION0129	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/11/82-06/11/82	0	1	
ZION0130	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	0	1	
ZION0131	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/05/80-07/05/80	0	1	
ZION0132	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/23/86-08/23/86	0	1	
ZION0136	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/80-07/19/80	0	1	
ZION0137	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	16	40	
ZION0138	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0140	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-10/31/84	11	5	
ZION0142	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/02/80-07/02/80	0	1	
ZION0144	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/02/80-07/02/80	0	1	
ZION0149	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0153	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/25/88-01/25/88	0	1	
ZION0162	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/18/86-09/18/86	0	1	
ZION0163	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	0	1	
ZION0166	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	0	1	
ZION0168	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0169	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	0	1	
ZION0174	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0177	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/18/92-03/12/96	3	14	
ZION0178	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	6	19	
ZION0180	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0182	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/07/77-12/07/77	0	1	
ZION0184	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	0	1	
ZION0185	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/25/85-01/17/90	4	3	
ZION0186	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	14	102	
ZION0190	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0192	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	17	111	T,S
ZION0194	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/80-07/15/80	0	1	
ZION0198	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	0	1	
ZION0200	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	0	1	
ZION0201	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/17/78-11/12/89	11	4	
ZION0202	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/28/75-12/28/75	0	1	
ZION0205	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/18/79-04/14/82	2	11	
ZION0206	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/80-07/13/80	0	1	
ZION0208	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	0	1	
ZION0209	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	0	1	
ZION0210	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/09/77-12/09/77	0	1	
ZION0211	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	0	1	
ZION0212	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	0	2	
ZION0214	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0215	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/09/95	16	13	
ZION0216	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0218	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0219	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/80-07/13/80	0	1	
ZION0220	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	0	1	
ZION0221	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	0	1	
ZION0222	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/10/80-07/10/80	0	1	
ZION0224	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0226	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/80-07/15/80	0	1	
ZION0227	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0228	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	0	1	
ZION0229	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0230	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	0	1	
ZION0231	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/18/77-11/18/77	0	1	
ZION0232	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/06/88-09/06/88	0	1	
ZION0234	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0235	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/07/88-03/07/88	0	1	
ZION0236	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/74-01/18/74	0	1	
ZION0237	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/78-06/14/78	0	1	
ZION0238	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/10/77-12/10/77	0	1	
ZION0240	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/17/77-11/17/77	0	1	
ZION0241	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	0	11	
ZION0244	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0248	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0251	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0254	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/80-06/21/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0256	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	14	79	
ZION0257	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/80-06/21/80	0	1	
ZION0260	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/80-07/12/80	0	1	
ZION0261	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/26/80-06/26/80	0	1	
ZION0264	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	0	4	
ZION0265	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/16/77-11/16/77	0	1	
ZION0270	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	0	3	
ZION0272	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	0	3	
ZION0276	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	16	84	T
ZION0277	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-04/23/85	4	8	
ZION0278	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0279	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/83-06/21/83	0	1	
ZION0283	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0284	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/80-07/12/80	0	1	
ZION0285	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/23/80-06/23/80	0	1	
ZION0288	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/11/96-12/11/96	0	1	
ZION0291	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	8	4	
ZION0292	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/25/68-10/25/68	0	1	
ZION0295	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/12/78-04/12/78	0	1	
ZION0296	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/68-10/28/68	0	1	
ZION0297	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	8	4	
ZION0299	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	15	54	
ZION0302	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	0	11	
ZION0303	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0306	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	0	1	
ZION0307	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	0	1	
ZION0308	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	0	1	
ZION0309	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/16/64-03/16/64	0	1	
ZION0311	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/77-08/05/77	0	2	
ZION0312	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/25/93-06/25/93	0	1	
ZION0314	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	0	1	
ZION0315	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	0	1	
ZION0316	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	0	11	
ZION0320	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	0	1	
ZION0322	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	8	15	
ZION0324	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	9	
ZION0325	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/20/68-08/20/68	0	1	
ZION0326	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-05/22/91	4	13	
ZION0328	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-05/28/74	0	2	
ZION0330	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	14	101	
ZION0332	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0333	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	3	
ZION0334	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/09/96-10/30/96	0	4	
ZION0336	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/77-06/14/77	0	1	
ZION0338	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-10/06/86	8	3	
ZION0340	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/20/64-02/20/64	0	1	
ZION0346	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/19/78-09/19/78	0	1	
ZION0350	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/12/82-05/12/82	0	1	
ZION0352	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/79-06/25/93	14	3	
ZION0354	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/20/82-04/27/83	0	6	
ZION0355	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/10/64-03/10/64	0	1	
ZION0356	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/28/77-08/23/89	11	5	
ZION0358	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-06/28/84	6	3	
ZION0359	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/77-12/06/77	0	2	
ZION0360	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-06/28/84	6	3	
ZION0361	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/84-06/28/84	0	1	
ZION0363	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	0	1	
ZION0364	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0365	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0366	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/16/68-10/16/68	0	1	
ZION0367	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/62-07/14/62	0	1	
ZION0370	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/67-02/18/67	0	1	
ZION0372	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0373	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0374	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0375	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0022	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0035	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0092	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/03/82-08/20/82	0	2	
ZION0102	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/20/81-05/03/82	0	2	
ZION0113	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/20/81-08/23/82	1	4	
ZION0119	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	07/23/76-07/23/76	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0141	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-04/09/74	0	3	
ZION0147	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	0	2	
ZION0158	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	0	4	
ZION0167	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/13/77-08/05/77	0	2	
ZION0174	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0176	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	09/17/75-05/16/77	1	3	
ZION0180	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0183	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	4	
ZION0188	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0190	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0193	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0197	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0202	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/28/75-12/28/75	0	1	
ZION0204	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/17/81-08/17/81	0	1	
ZION0244	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/16/77-09/04/77	0	3	
ZION0248	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0249	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0252	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0255	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0270	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/16/74	0	3	
ZION0272	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	0	2	
ZION0278	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0283	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0303	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0328	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	0	2	
ZION0332	No	00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	0	4	
ZION0143	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/28/88-05/04/89	0	4	
ZION0146	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/16/88-05/04/89	0	4	
ZION0150	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/16/88-05/03/89	0	4	
ZION0154	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	09/28/88-05/04/89	0	3	
ZION0161	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/26/88-05/03/89	0	4	
ZION0165	Yes	00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	09/28/88-05/01/89	0	3	
ZION0003	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/21/77-06/21/77	0	1	
ZION0018	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/22/77-06/22/77	0	1	
ZION0019	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/22/77-06/22/77	0	1	
ZION0021	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/15/66-12/15/66	0	1	
ZION0022	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0028	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/09/77-05/27/86	8	3	
ZION0032	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/24/96-12/10/96	0	7	
ZION0035	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0039	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/01/77-05/01/77	0	1	
ZION0040	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/02/91-09/02/91	0	1	
ZION0042	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/28/93-06/28/93	0	1	
ZION0056	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/03/88-08/15/90	2	14	
ZION0078	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/15/78-09/15/78	0	1	
ZION0080	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	0	1	
ZION0082	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	0	1	
ZION0084	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/05/88-08/15/90	1	7	
ZION0090	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/02/88-03/23/88	0	2	
ZION0110	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/12/77-11/12/77	0	1	
ZION0112	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/12/77-11/12/77	0	1	
ZION0115	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/05/88-10/05/88	0	1	
ZION0119	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/23/76-07/23/76	0	1	
ZION0126	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	0	1	
ZION0137	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	01/18/77-11/10/93	16	40	
ZION0140	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-10/31/84	11	5	
ZION0153	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	01/25/88-01/25/88	0	1	
ZION0166	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	04/07/81-04/07/81	0	1	
ZION0167	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/13/77-08/05/77	0	2	
ZION0169	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	04/07/81-04/07/81	0	1	
ZION0174	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0176	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	09/17/75-05/16/77	1	3	
ZION0177	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/10/93-03/12/96	2	12	
ZION0178	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/11/90-07/31/96	6	19	
ZION0180	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0182	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/07/77-12/07/77	0	1	
ZION0185	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/25/85-01/17/90	4	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0186	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/26/82-12/11/96	14	102	
ZION0190	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0192	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/19/79-12/11/96	17	111	T,S
ZION0199	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	09/03/70-09/03/70	0	1	
ZION0201	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/17/78-11/12/89	11	4	
ZION0202	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/28/75-12/28/75	0	1	
ZION0205	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/18/79-04/14/82	2	11	
ZION0206	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/28/79	0	2	
ZION0210	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/09/77-12/09/77	0	1	
ZION0212	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/28/79	0	2	
ZION0215	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/14/91	12	10	
ZION0229	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	0	1	
ZION0231	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/18/77-11/18/77	0	1	
ZION0232	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/06/88-09/06/88	0	1	
ZION0234	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	0	1	
ZION0235	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/07/88-03/07/88	0	1	
ZION0236	No	00440	BICARBONATE ION (MG/L AS HCO3)	01/18/74-01/18/74	0	1	
ZION0237	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/14/78-06/14/78	0	1	
ZION0238	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/10/77-12/10/77	0	1	
ZION0240	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/17/77-11/17/77	0	1	
ZION0241	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/03/96-12/11/96	0	11	
ZION0244	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	05/16/77-09/04/77	0	3	
ZION0248	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0251	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	0	1	
ZION0256	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	14	79	
ZION0258	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/06/66-12/13/66	0	3	
ZION0259	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	06/08/64-06/08/64	0	1	
ZION0264	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/02/96-12/11/96	0	4	
ZION0265	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/16/77-11/16/77	0	1	
ZION0270	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0272	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0276	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-12/11/96	16	84	T
ZION0277	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-04/23/85	4	8	
ZION0278	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0279	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/21/83-06/21/83	0	1	
ZION0281	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/25/66-03/25/66	0	1	
ZION0283	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0288	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/11/96-12/11/96	0	1	
ZION0291	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/06/81-09/16/89	8	4	
ZION0292	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/25/68-10/25/68	0	1	
ZION0294	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/15/66-12/15/66	0	1	
ZION0295	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/12/78-04/12/78	0	1	
ZION0296	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/28/68-10/28/68	0	1	
ZION0297	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/06/81-09/16/89	8	4	
ZION0299	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/28/80-04/24/96	15	54	
ZION0302	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/02/96-12/11/96	0	11	
ZION0303	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0307	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/03/75-02/03/75	0	1	
ZION0308	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/21/79-02/21/79	0	1	
ZION0309	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/16/64-03/16/64	0	1	
ZION0311	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/14/77-08/05/77	0	2	
ZION0312	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/25/93-06/25/93	0	1	
ZION0315	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/03/75-02/03/75	0	1	
ZION0316	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/03/96-12/11/96	0	11	
ZION0322	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/08/91	4	11	
ZION0323	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/07/65-10/07/65	0	1	
ZION0324	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/03/90	3	9	
ZION0325	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/20/68-08/20/68	0	1	
ZION0326	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-05/22/91	4	13	
ZION0328	No	00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	0	2	
ZION0330	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	14	101	
ZION0331	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/07/67-03/07/67	0	1	
ZION0332	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	0	4	
ZION0333	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/03/90	3	3	
ZION0334	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/09/96-10/30/96	0	4	
ZION0336	No	00440	BICARBONATE ION (MG/L AS HCO3)	06/14/77-06/14/77	0	1	
ZION0338	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-10/06/86	8	3	
ZION0340	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/20/64-02/20/64	0	1	
ZION0343	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/04/65-11/04/65	0	1	
ZION0346	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/19/78-09/19/78	0	1	
ZION0352	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/24/79-06/25/93	14	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0354	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/20/82-04/27/83	0	6	
ZION0355	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/10/64-03/10/64	0	1	
ZION0356	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/28/77-08/23/89	11	5	
ZION0358	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-12/13/77	0	2	
ZION0359	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/05/77-12/06/77	0	2	
ZION0360	No	00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-11/11/80	2	2	
ZION0363	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/21/79-02/21/79	0	1	
ZION0364	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0365	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0366	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/16/68-10/16/68	0	1	
ZION0367	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/62-07/14/62	0	1	
ZION0370	No	00440	BICARBONATE ION (MG/L AS HCO3)	02/18/67-02/18/67	0	1	
ZION0371	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/30/66-03/30/66	0	1	
ZION0372	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0373	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0374	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0375	No	00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	0	1	
ZION0003	No	00445	CARBONATE ION (MG/L AS CO3)	06/21/77-06/21/77	0	1	
ZION0018	No	00445	CARBONATE ION (MG/L AS CO3)	06/22/77-06/22/77	0	1	
ZION0019	No	00445	CARBONATE ION (MG/L AS CO3)	06/22/77-06/22/77	0	1	
ZION0021	No	00445	CARBONATE ION (MG/L AS CO3)	12/15/66-12/15/66	0	1	
ZION0022	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0028	No	00445	CARBONATE ION (MG/L AS CO3)	05/17/78-05/17/78	0	1	
ZION0032	No	00445	CARBONATE ION (MG/L AS CO3)	04/24/96-12/10/96	0	7	
ZION0035	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0040	No	00445	CARBONATE ION (MG/L AS CO3)	09/02/91-09/02/91	0	1	
ZION0042	No	00445	CARBONATE ION (MG/L AS CO3)	06/28/93-06/28/93	0	1	
ZION0056	No	00445	CARBONATE ION (MG/L AS CO3)	02/03/88-08/15/90	2	14	
ZION0084	No	00445	CARBONATE ION (MG/L AS CO3)	10/05/88-08/15/90	1	7	
ZION0090	No	00445	CARBONATE ION (MG/L AS CO3)	02/02/88-03/23/88	0	2	
ZION0110	No	00445	CARBONATE ION (MG/L AS CO3)	11/12/77-11/12/77	0	1	
ZION0112	No	00445	CARBONATE ION (MG/L AS CO3)	11/12/77-11/12/77	0	1	
ZION0115	No	00445	CARBONATE ION (MG/L AS CO3)	10/05/88-10/05/88	0	1	
ZION0119	No	00445	CARBONATE ION (MG/L AS CO3)	07/23/76-07/23/76	0	1	
ZION0137	Yes	00445	CARBONATE ION (MG/L AS CO3)	01/18/77-11/10/93	16	40	
ZION0140	Yes	00445	CARBONATE ION (MG/L AS CO3)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-10/31/84	11	5	
ZION0167	No	00445	CARBONATE ION (MG/L AS CO3)	05/13/77-08/05/77	0	2	
ZION0174	Yes	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0176	Yes	00445	CARBONATE ION (MG/L AS CO3)	09/17/75-05/16/77	1	3	
ZION0177	No	00445	CARBONATE ION (MG/L AS CO3)	11/10/93-03/12/96	2	12	
ZION0178	No	00445	CARBONATE ION (MG/L AS CO3)	04/11/90-07/31/96	6	19	
ZION0180	Yes	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0186	No	00445	CARBONATE ION (MG/L AS CO3)	07/26/82-12/11/96	14	102	
ZION0190	Yes	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	
ZION0192	No	00445	CARBONATE ION (MG/L AS CO3)	04/19/79-12/11/96	17	110	T,S
ZION0199	Yes	00445	CARBONATE ION (MG/L AS CO3)	09/03/70-09/03/70	0	1	
ZION0201	No	00445	CARBONATE ION (MG/L AS CO3)	04/17/78-11/10/80	2	2	
ZION0202	No	00445	CARBONATE ION (MG/L AS CO3)	12/28/75-12/28/75	0	1	
ZION0205	No	00445	CARBONATE ION (MG/L AS CO3)	04/18/79-04/14/82	2	11	
ZION0206	No	00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/28/79	0	2	
ZION0212	No	00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/28/79	0	2	
ZION0215	No	00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/14/91	12	10	
ZION0229	No	00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	0	1	
ZION0231	No	00445	CARBONATE ION (MG/L AS CO3)	11/18/77-11/18/77	0	1	
ZION0234	No	00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	0	1	
ZION0236	No	00445	CARBONATE ION (MG/L AS CO3)	01/18/74-01/18/74	0	1	
ZION0237	No	00445	CARBONATE ION (MG/L AS CO3)	06/14/78-06/14/78	0	1	
ZION0238	No	00445	CARBONATE ION (MG/L AS CO3)	12/10/77-12/10/77	0	1	
ZION0240	No	00445	CARBONATE ION (MG/L AS CO3)	11/17/77-11/17/77	0	1	
ZION0241	No	00445	CARBONATE ION (MG/L AS CO3)	04/03/96-12/11/96	0	11	
ZION0244	No	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00445	CARBONATE ION (MG/L AS CO3)	05/16/77-09/04/77	0	3	
ZION0248	No	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	
ZION0251	No	00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	0	1	
ZION0256	No	00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	14	79	
ZION0258	No	00445	CARBONATE ION (MG/L AS CO3)	12/06/66-12/13/66	0	3	
ZION0259	Yes	00445	CARBONATE ION (MG/L AS CO3)	06/08/64-06/08/64	0	1	
ZION0264	No	00445	CARBONATE ION (MG/L AS CO3)	04/02/96-12/11/96	0	4	
ZION0265	No	00445	CARBONATE ION (MG/L AS CO3)	11/16/77-11/16/77	0	1	
ZION0270	No	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0272	No	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	
ZION0276	No	00445	CARBONATE ION (MG/L AS CO3)	06/17/80-12/11/96	16	84	T
ZION0277	No	00445	CARBONATE ION (MG/L AS CO3)	06/17/80-04/23/85	4	8	
ZION0278	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0279	No	00445	CARBONATE ION (MG/L AS CO3)	06/21/83-06/21/83	0	1	
ZION0281	No	00445	CARBONATE ION (MG/L AS CO3)	03/25/66-03/25/66	0	1	
ZION0283	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0288	No	00445	CARBONATE ION (MG/L AS CO3)	12/11/96-12/11/96	0	1	
ZION0292	No	00445	CARBONATE ION (MG/L AS CO3)	10/25/68-10/25/68	0	1	
ZION0294	No	00445	CARBONATE ION (MG/L AS CO3)	12/15/66-12/15/66	0	1	
ZION0295	No	00445	CARBONATE ION (MG/L AS CO3)	04/12/78-04/12/78	0	1	
ZION0296	No	00445	CARBONATE ION (MG/L AS CO3)	10/28/68-10/28/68	0	1	
ZION0299	No	00445	CARBONATE ION (MG/L AS CO3)	10/28/80-04/24/96	15	54	
ZION0302	No	00445	CARBONATE ION (MG/L AS CO3)	04/02/96-12/11/96	0	11	
ZION0303	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0308	No	00445	CARBONATE ION (MG/L AS CO3)	02/21/79-02/21/79	0	1	
ZION0309	No	00445	CARBONATE ION (MG/L AS CO3)	03/16/64-03/16/64	0	1	
ZION0311	No	00445	CARBONATE ION (MG/L AS CO3)	06/14/77-08/05/77	0	2	
ZION0312	No	00445	CARBONATE ION (MG/L AS CO3)	06/25/93-06/25/93	0	1	
ZION0316	No	00445	CARBONATE ION (MG/L AS CO3)	04/03/96-12/11/96	0	11	
ZION0322	No	00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/08/91	4	11	
ZION0324	No	00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/03/90	3	9	
ZION0325	No	00445	CARBONATE ION (MG/L AS CO3)	08/20/68-08/20/68	0	1	
ZION0326	No	00445	CARBONATE ION (MG/L AS CO3)	08/19/86-05/22/91	4	13	
ZION0328	No	00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	0	2	
ZION0330	No	00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	14	101	
ZION0331	No	00445	CARBONATE ION (MG/L AS CO3)	03/07/67-03/07/67	0	1	
ZION0332	No	00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	0	4	
ZION0333	No	00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/03/90	3	3	
ZION0334	No	00445	CARBONATE ION (MG/L AS CO3)	07/09/96-10/30/96	0	4	
ZION0336	No	00445	CARBONATE ION (MG/L AS CO3)	06/14/77-06/14/77	0	1	
ZION0343	No	00445	CARBONATE ION (MG/L AS CO3)	11/04/65-11/04/65	0	1	
ZION0352	No	00445	CARBONATE ION (MG/L AS CO3)	05/24/79-06/25/93	14	3	
ZION0354	No	00445	CARBONATE ION (MG/L AS CO3)	07/20/82-04/27/83	0	6	
ZION0355	No	00445	CARBONATE ION (MG/L AS CO3)	03/10/64-03/10/64	0	1	
ZION0356	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	0	1	
ZION0363	No	00445	CARBONATE ION (MG/L AS CO3)	02/21/79-02/21/79	0	1	
ZION0364	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	0	1	
ZION0365	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	0	1	
ZION0366	No	00445	CARBONATE ION (MG/L AS CO3)	10/16/68-10/16/68	0	1	
ZION0367	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/62-07/14/62	0	1	
ZION0370	No	00445	CARBONATE ION (MG/L AS CO3)	02/18/67-02/18/67	0	1	
ZION0371	No	00445	CARBONATE ION (MG/L AS CO3)	03/30/66-03/30/66	0	1	
ZION0374	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	0	1	
ZION0375	No	00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	0	1	
ZION0110	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/19/90-06/19/90	0	1	
ZION0110	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/19/90-06/19/90	0	1	
ZION0137	Yes	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/24/77-10/19/83	6	24	
ZION0139	Yes	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/31/77-12/12/78	1	4	
ZION0140	Yes	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	01/25/77-11/29/77	0	11	
ZION0141	Yes	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	10/31/84-10/31/84	0	1	
ZION0186	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/26/82-10/31/84	2	8	
ZION0192	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	04/19/79-08/28/84	5	16	
ZION0205	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	04/19/79-04/14/82	2	7	
ZION0217	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/22/79-08/23/79	0	2	
ZION0256	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/24/82-08/28/84	2	12	
ZION0276	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/17/80-08/28/84	4	13	
ZION0277	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/17/80-08/28/84	4	3	
ZION0279	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/21/83-06/21/83	0	1	
ZION0299	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/25/82-08/28/84	2	12	
ZION0308	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	01/10/78-02/24/82	4	23	
ZION0330	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/24/82-08/28/84	2	12	
ZION0354	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/20/82-04/27/83	0	6	
ZION0363	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/07/78-04/27/83	5	25	
ZION0022	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	0	5	
ZION0032	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/19/92-12/10/96	4	39	
ZION0034	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/19/92-12/06/95	3	25	
ZION0035	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	0	5	
ZION0038	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/92-12/06/95	3	21	
ZION0040	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/02/91-12/06/95	4	17	
ZION0042	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/28/93-06/16/94	0	8	
ZION0056	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/88-08/08/95	7	26	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0075	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/11/93-06/16/94	1	10	
ZION0084	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-08/08/95	6	21	
ZION0087	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/27/93-08/08/95	1	8	
ZION0090	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/02/88-08/15/90	2	3	
ZION0115	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-06/28/93	4	6	
ZION0137	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-11/10/93	14	26	
ZION0141	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/04/67-10/31/84	17	63	S
ZION0174	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	0	5	
ZION0177	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/18/92-03/12/96	3	14	
ZION0178	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/11/90-07/31/96	6	17	
ZION0179	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/07/91-08/07/91	0	1	
ZION0180	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	0	5	
ZION0186	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/26/82-12/11/96	14	89	
ZION0190	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	0	3	
ZION0192	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-12/11/96	17	97	T,S
ZION0195	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	0	2	
ZION0196	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	0	3	
ZION0205	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-04/14/82	2	7	
ZION0212	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/91-08/09/95	3	5	
ZION0215	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/91-08/09/95	3	5	
ZION0217	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/22/79-08/09/95	16	6	
ZION0241	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/03/96-12/11/96	0	11	
ZION0243	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	0	3	
ZION0244	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	0	3	
ZION0248	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	0	3	
ZION0253	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	0	2	
ZION0256	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	14	72	
ZION0264	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/02/96-12/11/96	0	4	
ZION0270	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/16/74	0	3	
ZION0272	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/16/74	0	3	
ZION0275	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	0	3	
ZION0276	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-12/11/96	16	69	
ZION0277	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-06/17/80	0	1	
ZION0278	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	0	5	
ZION0279	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/21/83-06/21/83	0	1	
ZION0283	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	0	5	
ZION0286	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	0	2	
ZION0288	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/11/96-12/11/96	0	1	
ZION0299	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/25/82-04/24/96	14	42	
ZION0302	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/02/96-12/11/96	0	11	
ZION0303	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	0	5	
ZION0308	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-02/24/82	3	15	
ZION0312	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/25/93-06/25/93	0	1	
ZION0316	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/03/96-12/11/96	0	11	
ZION0322	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	8	14	
ZION0324	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	8	13	
ZION0326	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	8	15	
ZION0328	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-05/28/74	0	2	
ZION0330	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	14	91	
ZION0332	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	0	5	
ZION0333	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	8	7	
ZION0334	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/09/96-10/30/96	0	4	
ZION0350	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/12/82-05/12/82	0	1	
ZION0352	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/90-06/25/93	2	2	
ZION0354	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/20/82-04/27/83	0	6	
ZION0363	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-04/27/83	4	21	
ZION0276	No	00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/01/86-10/01/86	0	1	
ZION0076	No	00600	NITROGEN, TOTAL (MG/L AS N)	06/03/92-10/05/92	0	10	
ZION0094	No	00600	NITROGEN, TOTAL (MG/L AS N)	06/03/92-10/05/92	0	9	
ZION0134	Yes	00600	NITROGEN, TOTAL (MG/L AS N)	05/20/92-09/18/92	0	6	
ZION0148	Yes	00600	NITROGEN, TOTAL (MG/L AS N)	05/21/92-10/06/92	0	11	
ZION0151	Yes	00600	NITROGEN, TOTAL (MG/L AS N)	05/21/92-10/02/92	0	11	
ZION0157	Yes	00600	NITROGEN, TOTAL (MG/L AS N)	06/16/92-10/06/92	0	5	
ZION0022	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0035	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0174	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0180	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	3	
ZION0181	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0189	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/23/82-08/23/82	0	1	
ZION0190	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0202	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0244	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0248	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0250	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/01/82-09/01/82	0	1	
ZION0268	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/02/82-09/02/82	0	1	
ZION0270	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0272	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0278	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0283	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0303	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0328	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	0	2	
ZION0332	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0353	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-08/17/81	0	1	
ZION0028	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/86-05/27/86	0	1	
ZION0029	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/85-07/22/85	0	1	
ZION0032	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/96-12/10/96	0	7	
ZION0040	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/02/91-09/02/91	0	1	
ZION0042	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/93-06/16/94	0	8	
ZION0056	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/03/88-08/08/95	7	35	
ZION0061	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0074	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0075	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/11/93-06/16/94	1	10	
ZION0078	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/15/78-09/15/78	0	1	
ZION0080	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0082	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0084	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-08/08/95	6	30	
ZION0087	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/10/93-08/08/95	1	7	
ZION0090	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/02/88-08/15/90	2	3	
ZION0115	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-06/28/93	4	7	
ZION0126	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0137	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/18/77-11/10/93	16	41	
ZION0139	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/31/77-12/12/78	1	4	
ZION0140	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/25/77-10/05/77	0	8	
ZION0141	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/84-10/31/84	0	1	
ZION0153	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/25/88-01/25/88	0	1	
ZION0177	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/18/92-03/17/93	0	2	
ZION0178	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/90-07/31/96	6	32	
ZION0179	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/07/91-08/07/91	0	1	
ZION0185	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/04/86-01/17/90	3	2	
ZION0186	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/26/82-12/11/96	14	102	
ZION0192	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-12/11/96	17	111	T,S
ZION0201	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/10/80-11/12/89	9	3	
ZION0205	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-04/14/82	2	11	
ZION0206	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	16	10	
ZION0215	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	16	37	
ZION0217	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	16	18	
ZION0232	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/06/88-09/06/88	0	1	
ZION0235	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/07/88-03/07/88	0	1	
ZION0241	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/03/96-12/11/96	0	11	
ZION0256	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	14	83	
ZION0264	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/02/96-12/11/96	0	4	
ZION0276	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-12/11/96	16	84	T
ZION0277	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-04/14/81	0	5	
ZION0279	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/21/83-06/21/83	0	1	
ZION0288	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/11/96-12/11/96	0	1	
ZION0291	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/06/81-09/16/89	8	3	
ZION0297	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/22/81-09/16/89	7	2	
ZION0299	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/28/80-04/24/96	15	54	
ZION0302	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/02/96-12/11/96	0	11	
ZION0308	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/10/78-02/24/82	4	17	
ZION0316	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/03/96-12/11/96	0	11	
ZION0322	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8	35	
ZION0324	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8	24	
ZION0326	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8	30	
ZION0330	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	14	100	
ZION0333	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8	8	
ZION0334	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/09/96-10/30/96	0	4	
ZION0338	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/06/86-10/06/86	0	1	
ZION0346	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/78-09/19/78	0	1	
ZION0352	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/79-09/04/90	11	2	
ZION0354	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/20/82-04/27/83	0	6	
ZION0356	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-08/23/89	9	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0360	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/11/80-11/11/80	0	1	
ZION0363	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/78-04/27/83	5	21	
ZION0364	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0365	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0372	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0373	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0374	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0375	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0022	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0035	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0056	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/16/88-06/14/90	1	9	
ZION0084	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-06/14/90	1	5	
ZION0115	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-10/05/88	0	1	
ZION0137	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	13	21	
ZION0140	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/84-10/31/84	0	1	
ZION0174	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0178	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/02/90-08/02/90	0	4	
ZION0180	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0186	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/26/82-09/05/90	7	37	
ZION0189	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/23/82-08/23/82	0	1	
ZION0190	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0192	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	11	45	
ZION0202	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	0	1	
ZION0205	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/18/79-04/14/81	1	9	
ZION0206	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	10	4	
ZION0215	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	10	14	
ZION0217	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/31/89-08/03/89	0	4	
ZION0244	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0248	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0250	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/01/82-09/01/82	0	1	
ZION0256	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	6	36	
ZION0268	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/02/82-09/02/82	0	1	
ZION0270	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0272	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0276	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	10	41	
ZION0277	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-04/23/85	4	6	
ZION0278	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0283	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0299	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	9	27	
ZION0303	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0308	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0322	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-05/31/89	2	13	
ZION0324	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	12	
ZION0326	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	16	
ZION0328	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	0	2	
ZION0330	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	6	33	
ZION0332	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0333	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	3	
ZION0352	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/24/79-05/24/79	0	1	
ZION0363	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0001	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/29/82-01/29/82	0	1	
ZION0028	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/78-05/27/86	8	2	
ZION0029	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/85-07/22/85	0	1	
ZION0056	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/88-08/15/90	2	7	
ZION0078	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/15/78-09/15/78	0	1	
ZION0080	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0082	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0084	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	1	3	
ZION0090	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/02/88-08/15/90	2	3	
ZION0115	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	1	2	
ZION0126	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	0	1	
ZION0137	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	8	15	
ZION0141	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/31/73-10/31/84	11	5	
ZION0153	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/25/88-01/25/88	0	1	
ZION0166	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/81-04/07/81	0	1	
ZION0169	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/81-10/29/85	4	3	
ZION0185	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/04/86-01/17/90	3	2	
ZION0186	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/26/82-04/19/88	5	13	
ZION0192	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/79-04/19/88	9	20	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0201	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/17/78-11/12/89	11	4	
ZION0205	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/79-04/14/81	1	9	
ZION0206	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0215	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	6	
ZION0232	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/06/88-09/06/88	0	1	
ZION0235	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/07/88-03/07/88	0	1	
ZION0237	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/14/78-06/14/78	0	1	
ZION0256	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/87-04/19/88	1	11	
ZION0276	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/19/88	7	16	
ZION0277	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/14/81	0	5	
ZION0291	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	8	4	
ZION0295	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/12/78-04/12/78	0	1	
ZION0297	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	8	4	
ZION0299	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/28/80-04/19/88	7	12	
ZION0308	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0322	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	4	
ZION0324	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	2	
ZION0326	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	2	
ZION0330	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/04/87-04/19/88	1	11	
ZION0338	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/28/80-10/06/86	6	2	
ZION0345	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/85-08/09/85	0	1	
ZION0346	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/19/78-09/19/78	0	1	
ZION0352	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/24/79-09/04/90	11	2	
ZION0356	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-08/23/89	9	4	
ZION0360	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/11/80-11/11/80	0	1	
ZION0363	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0364	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0365	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0372	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0373	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0374	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0375	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0022	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0035	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0056	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/16/88-06/14/90	1	9	
ZION0084	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-06/14/90	1	5	
ZION0115	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-10/05/88	0	1	
ZION0137	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	13	26	
ZION0139	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/31/77-03/31/77	0	1	
ZION0140	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/25/77-10/05/77	0	8	
ZION0141	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/84-10/31/84	0	1	
ZION0174	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0178	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/02/90-08/02/90	0	4	
ZION0180	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	0	5	
ZION0186	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	09/15/82-09/05/90	7	38	
ZION0190	Yes	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0192	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	11	45	
ZION0202	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	0	1	
ZION0205	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/18/79-04/14/81	1	9	
ZION0206	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	10	4	
ZION0215	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	10	14	
ZION0217	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/31/89-08/03/89	0	4	
ZION0244	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0248	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	0	3	
ZION0256	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	6	36	
ZION0270	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0272	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	0	3	
ZION0276	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	10	41	
ZION0277	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-04/23/85	4	6	
ZION0278	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0283	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0299	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	9	27	
ZION0303	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0308	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0322	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-05/31/89	2	13	
ZION0324	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	12	
ZION0326	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	16	
ZION0328	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	0	2	
ZION0330	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	6	33	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0332	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	0	5	
ZION0333	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	3	
ZION0352	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/24/79-05/24/79	0	1	
ZION0363	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0001	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/29/82-02/22/88	6	2	
ZION0012	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/21/89-07/21/89	0	1	
ZION0013	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	1	
ZION0028	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/09/77-05/17/78	0	2	
ZION0029	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/09/77-08/07/89	11	2	
ZION0047	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	3	14	
ZION0055	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	3	14	
ZION0056	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/03/88-08/15/90	2	7	
ZION0059	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	3	14	
ZION0072	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	3	14	
ZION0078	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/15/78-09/05/84	5	2	
ZION0080	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	5	2	
ZION0081	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/84-05/22/84	0	1	
ZION0082	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	5	2	
ZION0084	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	1	3	
ZION0090	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/02/88-08/15/90	2	3	
ZION0115	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	1	2	
ZION0126	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	5	2	
ZION0137	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	8	16	
ZION0141	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/31/73-10/31/84	11	5	
ZION0153	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/25/88-01/25/88	0	1	
ZION0166	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/81-04/07/81	0	1	
ZION0169	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/81-10/29/85	4	3	
ZION0185	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/03/83-01/17/90	6	6	
ZION0186	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/15/82-04/19/88	5	14	
ZION0192	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/79-04/19/88	9	20	
ZION0205	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/79-04/14/81	1	9	
ZION0206	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0215	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	0	6	
ZION0232	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/22/84-09/06/88	4	2	
ZION0235	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/07/88-03/07/88	0	1	
ZION0256	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/03/87-04/19/88	1	11	
ZION0276	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/19/88	7	16	
ZION0277	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/14/81	0	5	
ZION0290	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/07/84-07/06/87	3	2	
ZION0291	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	8	4	
ZION0295	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/12/78-03/12/86	7	2	
ZION0297	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	8	4	
ZION0299	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/28/80-04/19/88	7	12	
ZION0308	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0311	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/14/77-08/05/77	0	2	
ZION0322	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	4	
ZION0324	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	2	
ZION0326	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	0	2	
ZION0330	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/04/87-04/19/88	1	11	
ZION0333	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/05/88-10/05/88	0	1	
ZION0336	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/20/77-09/23/77	0	4	
ZION0338	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/28/80-04/28/80	0	1	
ZION0345	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/85-08/09/85	0	1	
ZION0346	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/19/78-09/19/78	0	1	
ZION0347	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/07/74-09/23/77	3	16	
ZION0349	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/02/74-06/19/79	4	20	
ZION0350	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/12/82-05/12/82	0	1	
ZION0352	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/24/79-09/04/90	11	2	
ZION0356	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/28/77-08/23/89	11	5	
ZION0358	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/06/77-12/13/77	0	2	
ZION0359	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/05/77-12/06/77	0	2	
ZION0360	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/06/77-11/11/80	2	2	
ZION0363	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	0	1	
ZION0364	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0365	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0372	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0374	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0375	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	0	1	
ZION0040	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/02/91-09/02/91	0	1	
ZION0042	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/28/93-06/16/94	0	8	
ZION0056	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/03/88-05/24/94	6	30	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0061	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0074	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0075	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/28/93-06/16/94	0	9	
ZION0076	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/03/92-10/05/92	0	10	
ZION0084	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/29/95	6	26	
ZION0087	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/93-08/08/95	1	6	
ZION0090	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/02/88-08/15/90	2	3	
ZION0094	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/03/92-10/05/92	0	9	
ZION0115	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/28/93	4	6	
ZION0134	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/20/92-09/18/92	0	6	
ZION0137	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/77-11/10/93	16	39	
ZION0139	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/31/77-12/12/78	1	4	
ZION0140	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/25/77-10/05/77	0	6	
ZION0141	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/31/84-10/31/84	0	1	
ZION0148	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/21/92-10/06/92	0	11	
ZION0151	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/21/92-10/02/92	0	11	
ZION0157	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/16/92-10/06/92	0	5	
ZION0177	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/18/92-03/17/93	0	2	
ZION0178	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/11/90-06/15/94	4	23	
ZION0179	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/07/91-08/07/91	0	1	
ZION0186	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/26/82-04/06/94	11	68	
ZION0192	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/06/94	14	78	
ZION0205	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/14/82	2	11	
ZION0206	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	12	6	
ZION0215	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	12	22	
ZION0217	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	12	10	
ZION0256	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	11	68	
ZION0276	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-03/17/93	12	72	
ZION0277	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-04/14/81	0	5	
ZION0279	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/21/83-06/21/83	0	1	
ZION0299	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/28/80-03/17/93	12	52	
ZION0308	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/10/78-02/24/82	4	17	
ZION0322	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	4	19	
ZION0324	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	4	16	
ZION0326	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	4	22	
ZION0330	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	11	66	
ZION0333	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-05/22/91	4	4	
ZION0352	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/79-09/04/90	11	2	
ZION0354	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/20/82-04/27/83	0	6	
ZION0363	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/11/78-04/27/83	5	21	
ZION0040	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/02/91-09/02/91	0	1	
ZION0061	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0074	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/13/75-09/25/75	0	4	
ZION0076	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/03/92-10/05/92	0	10	
ZION0094	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/03/92-10/05/92	0	9	
ZION0134	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/20/92-09/18/92	0	6	
ZION0137	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-10/30/91	13	27	
ZION0139	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-12/12/78	0	3	
ZION0148	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/21/92-10/06/92	0	11	
ZION0151	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/21/92-10/02/92	0	11	
ZION0157	Yes	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/16/92-10/06/92	0	5	
ZION0186	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/26/82-03/12/96	13	32	
ZION0192	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-03/12/96	16	42	
ZION0205	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-04/14/82	2	11	
ZION0206	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0212	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	0	2	
ZION0215	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	0	6	
ZION0217	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/23/79	0	2	
ZION0250	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/24/81-08/24/81	0	1	
ZION0256	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-10/29/91	9	12	
ZION0276	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-10/29/91	11	17	
ZION0277	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-04/14/81	0	5	
ZION0279	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/21/83-06/21/83	0	1	
ZION0299	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/28/80-06/21/83	2	14	
ZION0308	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-02/24/82	4	16	
ZION0312	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/25/93-06/25/93	0	1	
ZION0330	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-03/13/96	14	36	
ZION0341	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/24/81-08/24/81	0	1	
ZION0352	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/79-06/25/93	14	2	
ZION0354	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/20/82-04/27/83	0	6	
ZION0363	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/11/78-04/27/83	5	21	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0002	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	0	1	
ZION0003	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/21/77-06/21/77	0	1	
ZION0004	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/20/81-10/20/81	0	1	
ZION0005	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-07/30/81	0	1	
ZION0006	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-08/31/82	1	4	
ZION0007	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	0	1	
ZION0008	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/17/81-07/17/81	0	1	
ZION0009	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	0	1	
ZION0014	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-05/07/82	0	2	
ZION0015	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	0	2	
ZION0016	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	0	2	
ZION0017	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-05/07/82	0	2	
ZION0018	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/77-06/22/77	0	1	
ZION0019	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/77-06/22/77	0	1	
ZION0020	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	0	1	
ZION0021	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/31/82	1	4	
ZION0023	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	0	1	
ZION0024	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/17/81-10/17/81	0	1	
ZION0025	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	0	1	
ZION0027	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/29/81-08/29/81	0	1	
ZION0031	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	0	2	
ZION0032	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/24/96-12/10/96	0	7	
ZION0033	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	0	1	
ZION0037	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/12/81-08/31/82	0	3	
ZION0039	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/01/77-05/01/77	0	1	
ZION0042	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/28/93-06/16/94	0	8	
ZION0043	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	1	3	
ZION0044	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/16/81-09/13/86	4	2	
ZION0045	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	1	3	
ZION0048	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	0	1	
ZION0049	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/24/86-06/24/86	0	1	
ZION0050	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/19/86	4	2	
ZION0054	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/13/86-07/13/86	0	1	
ZION0056	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-08/08/95	4	19	
ZION0058	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/86-07/16/86	0	2	
ZION0060	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/86-09/10/86	0	1	
ZION0062	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/12/86-07/12/86	0	1	
ZION0064	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	0	1	
ZION0067	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	0	1	
ZION0068	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/86-06/22/86	0	1	
ZION0070	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/13/86-07/13/86	0	1	
ZION0071	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/17/86-07/17/86	0	1	
ZION0075	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/93-06/16/94	1	10	
ZION0077	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/12/86	4	3	
ZION0083	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/86-06/22/86	0	1	
ZION0084	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-08/08/95	4	22	
ZION0086	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/22/86-08/22/86	0	1	
ZION0087	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/93-08/08/95	1	7	
ZION0088	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	0	1	
ZION0089	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-07/14/86	4	3	
ZION0091	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/18/86-06/18/86	0	1	
ZION0092	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-08/20/82	0	2	
ZION0095	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	0	1	
ZION0096	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	0	2	
ZION0097	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	0	2	
ZION0098	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	0	2	
ZION0099	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	0	2	
ZION0100	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	0	1	
ZION0101	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/86	4	3	
ZION0102	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-05/03/82	0	2	
ZION0103	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/14/86-09/14/86	0	1	
ZION0104	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-07/16/86	4	6	
ZION0108	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/86-07/15/86	0	1	
ZION0110	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/19/90-06/19/90	0	1	
ZION0111	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/26/86-08/26/86	0	1	
ZION0113	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	1	4	
ZION0114	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/86-07/15/86	0	1	
ZION0115	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-06/28/93	2	4	
ZION0116	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/87-07/28/87	0	1	
ZION0117	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/87-09/18/87	0	1	
ZION0118	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/86-09/11/86	0	1	
ZION0121	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/87-09/18/87	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0125	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/20/81	0	1	
ZION0129	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/82-06/11/82	0	1	
ZION0132	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/04/91-11/10/93	2	7	
ZION0145	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	0	2	
ZION0156	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	0	4	
ZION0162	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/86-09/18/86	0	1	
ZION0173	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/04/82-08/23/82	0	2	
ZION0175	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/24/81	0	1	
ZION0177	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/18/92-03/17/93	0	2	
ZION0178	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/07/91-07/31/96	5	26	
ZION0179	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/07/91-08/07/91	0	1	
ZION0183	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	4	
ZION0186	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	5	28	
ZION0187	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	4	
ZION0188	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	5	
ZION0189	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	4	
ZION0192	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	5	28	
ZION0193	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	5	
ZION0197	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	5	
ZION0203	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	4	
ZION0204	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-08/17/81	0	1	
ZION0212	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	4	6	
ZION0213	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-08/17/81	0	1	
ZION0215	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	4	23	
ZION0217	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	4	12	
ZION0223	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-08/23/82	1	4	
ZION0229	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	0	1	
ZION0234	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	0	1	
ZION0236	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/18/74-01/18/74	0	1	
ZION0239	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/11/82	0	2	
ZION0241	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/03/96-12/11/96	0	11	
ZION0242	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	5	
ZION0249	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	0	5	
ZION0250	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	4	
ZION0251	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	0	1	
ZION0252	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	5	
ZION0255	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	5	
ZION0256	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	5	30	
ZION0258	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	1	4	
ZION0263	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-09/02/82	1	3	
ZION0264	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/02/96-12/11/96	0	4	
ZION0267	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/11/82-05/11/82	0	1	
ZION0268	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	4	
ZION0273	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-05/05/82	0	2	
ZION0276	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	5	26	
ZION0280	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	4	
ZION0288	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	12/11/96-12/11/96	0	1	
ZION0293	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	3	
ZION0299	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-04/24/96	5	12	
ZION0300	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/07/82-05/07/82	0	1	
ZION0301	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	3	
ZION0302	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/02/96-12/11/96	0	11	
ZION0304	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	4	
ZION0305	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	1	5	
ZION0307	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	02/03/75-02/03/75	0	1	
ZION0310	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-05/07/82	0	2	
ZION0313	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/11/82	0	2	
ZION0315	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	02/03/75-02/03/75	0	1	
ZION0316	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/03/96-12/11/96	0	11	
ZION0317	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/24/81	0	1	
ZION0318	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/31/81-08/23/82	0	5	
ZION0321	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-08/23/82	1	4	
ZION0322	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	4	22	
ZION0324	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	4	12	
ZION0326	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	4	14	
ZION0330	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	5	26	
ZION0331	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/31/81-08/23/82	0	4	
ZION0333	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	4	5	
ZION0334	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/09/96-10/30/96	0	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0341	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-05/06/82	0	2	
ZION0344	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-05/04/82	0	2	
ZION0348	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-05/04/82	0	2	
ZION0353	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/04/82	0	2	
ZION0362	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-05/06/82	0	2	
ZION0047	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	3	14	
ZION0055	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	3	14	
ZION0059	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	3	14	
ZION0072	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	3	14	
ZION0311	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/14/77-08/05/77	0	2	
ZION0336	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/20/77-09/23/77	0	4	
ZION0347	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	08/07/74-09/23/77	3	16	
ZION0349	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	07/02/74-06/19/79	4	20	
ZION0350	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/12/82-05/12/82	0	1	
ZION0003	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/21/77-06/21/77	0	1	
ZION0006	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-10/12/81	0	2	
ZION0015	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/03/82	0	2	
ZION0016	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-08/19/81	0	1	
ZION0018	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/22/77-06/22/77	0	1	
ZION0019	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/22/77-06/22/77	0	1	
ZION0020	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/03/82-05/03/82	0	1	
ZION0022	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	0	5	
ZION0023	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/03/82-05/03/82	0	1	
ZION0031	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/03/82	0	2	
ZION0035	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	0	5	
ZION0039	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/01/77-05/01/77	0	1	
ZION0043	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-10/08/81	0	2	
ZION0045	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-10/12/81	0	2	
ZION0077	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	0	2	
ZION0101	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	0	2	
ZION0104	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	0	3	
ZION0119	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	07/23/76-07/23/76	0	1	
ZION0125	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-08/20/81	0	1	
ZION0141	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/26/74	0	4	
ZION0145	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/04/82	0	2	
ZION0156	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/04/82	0	2	
ZION0167	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/13/77-08/05/77	0	2	
ZION0173	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	0	5	
ZION0176	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/17/75-05/16/77	1	3	
ZION0180	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	0	5	
ZION0187	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	0	2	
ZION0189	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	0	2	
ZION0190	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	0	3	
ZION0202	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/28/75-12/28/75	0	1	
ZION0203	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/04/82	0	2	
ZION0213	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-08/17/81	0	1	
ZION0223	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-08/23/82	1	4	
ZION0229	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	0	1	
ZION0234	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	0	1	
ZION0236	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	01/18/74-01/18/74	0	1	
ZION0239	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/11/82	0	2	
ZION0242	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/05/82	0	2	
ZION0244	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/16/77-09/04/77	0	3	
ZION0248	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	0	3	
ZION0250	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/05/82-09/01/82	0	2	
ZION0251	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	0	1	
ZION0258	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/05/82	0	2	
ZION0263	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/11/82	0	2	
ZION0267	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/11/82-05/11/82	0	1	
ZION0268	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	1	3	
ZION0270	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/16/74	0	3	
ZION0272	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/16/74	0	3	
ZION0273	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-05/05/82	0	2	
ZION0278	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	0	5	
ZION0280	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-05/05/82	0	2	
ZION0283	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	0	5	
ZION0293	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	1	3	
ZION0300	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/07/82-05/07/82	0	1	
ZION0301	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-08/25/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0303	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	0	5	
ZION0304	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	1	3	
ZION0305	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/07/82-09/02/82	0	2	
ZION0307	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/03/75-02/03/75	0	1	
ZION0310	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/28/81-05/07/82	0	2	
ZION0313	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/11/82	0	2	
ZION0315	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/03/75-02/03/75	0	1	
ZION0317	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-08/24/81	0	1	
ZION0318	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/11/82-05/07/82	0	2	
ZION0321	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/20/81-05/07/82	0	2	
ZION0328	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-05/28/74	0	2	
ZION0331	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/31/81-05/06/82	0	2	
ZION0332	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	0	5	
ZION0340	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/20/64-02/20/64	0	1	
ZION0341	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/06/82-05/06/82	0	1	
ZION0344	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/04/82	0	2	
ZION0348	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/04/82	0	2	
ZION0353	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/04/82	0	2	
ZION0355	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/10/64-03/10/64	0	1	
ZION0362	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/06/82	0	2	
ZION0367	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	07/14/62-07/14/62	0	1	
ZION0370	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/18/67-02/18/67	0	1	
ZION0022	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	0	5	
ZION0032	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/96-12/10/96	0	7	
ZION0035	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	0	5	
ZION0040	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/02/91-09/02/91	0	1	
ZION0042	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/28/93-06/16/94	0	8	
ZION0056	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/03/88-08/08/95	7	35	
ZION0061	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/13/75-09/25/75	0	4	
ZION0074	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/13/75-09/25/75	0	4	
ZION0075	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/11/93-06/16/94	1	10	
ZION0076	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/03/92-10/05/92	0	10	
ZION0084	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-08/08/95	6	30	
ZION0087	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/93-08/08/95	1	7	
ZION0090	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/02/88-08/15/90	2	3	
ZION0094	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/03/92-10/05/92	0	9	
ZION0115	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-06/28/93	4	7	
ZION0134	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/20/92-09/18/92	0	6	
ZION0137	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/24/77-11/10/93	16	38	
ZION0139	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/31/77-12/12/78	1	4	
ZION0140	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/25/77-10/05/77	0	5	
ZION0141	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/84-10/31/84	0	1	
ZION0148	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/21/92-10/06/92	0	11	
ZION0151	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/21/92-10/02/92	0	11	
ZION0157	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/16/92-10/06/92	0	5	
ZION0174	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	0	5	
ZION0177	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/18/92-03/17/93	0	2	
ZION0178	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/90-07/31/96	6	32	
ZION0179	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/07/91-08/07/91	0	1	
ZION0180	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	0	5	
ZION0186	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/26/82-12/11/96	14	102	
ZION0190	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	0	3	
ZION0192	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-12/11/96	17	111	T,S
ZION0205	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-04/14/82	2	11	
ZION0206	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/28/79	0	2	
ZION0212	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	16	10	
ZION0215	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	16	37	
ZION0217	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	16	18	
ZION0241	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/03/96-12/11/96	0	11	
ZION0244	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	0	3	
ZION0248	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	0	3	
ZION0256	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	14	83	
ZION0264	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/02/96-12/11/96	0	4	
ZION0270	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/16/74	0	3	
ZION0272	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/16/74	0	3	
ZION0276	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-12/11/96	16	84	T
ZION0277	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-04/14/81	0	5	
ZION0278	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	0	5	
ZION0279	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/21/83-06/21/83	0	1	
ZION0283	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	0	5	
ZION0288	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/11/96-12/11/96	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0299	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/28/80-04/24/96	15	54	
ZION0302	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/02/96-12/11/96	0	11	
ZION0303	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	0	5	
ZION0308	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/10/78-02/24/82	4	17	
ZION0312	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/25/93-06/25/93	0	1	
ZION0316	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/03/96-12/11/96	0	11	
ZION0322	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8	35	
ZION0324	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8	24	
ZION0326	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8	30	
ZION0328	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-05/28/74	0	2	
ZION0330	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	14	101	
ZION0332	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	0	5	
ZION0333	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8	8	
ZION0334	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/09/96-10/30/96	0	4	
ZION0352	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/23/79-06/25/93	14	3	
ZION0354	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/20/82-04/27/83	0	6	
ZION0363	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/78-04/27/83	5	21	
ZION0032	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/24/96-12/10/96	0	7	
ZION0042	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/28/93-06/16/94	0	8	
ZION0056	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-08/08/95	4	19	
ZION0075	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/11/93-06/16/94	1	10	
ZION0084	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-08/08/95	4	22	
ZION0087	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/10/93-08/08/95	1	7	
ZION0115	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-06/28/93	2	4	
ZION0137	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/04/91-11/10/93	2	7	
ZION0177	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	11/18/92-03/17/93	0	2	
ZION0178	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/02/90-07/31/96	5	30	
ZION0179	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/07/91-08/07/91	0	1	
ZION0186	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6	29	
ZION0192	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6	29	
ZION0212	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	4	6	
ZION0215	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	4	23	
ZION0217	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	4	12	
ZION0241	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/03/96-12/11/96	0	11	
ZION0256	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6	31	
ZION0264	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/02/96-12/11/96	0	4	
ZION0276	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6	27	
ZION0288	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/11/96-12/11/96	0	1	
ZION0299	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-04/24/96	5	13	
ZION0302	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/02/96-12/11/96	0	11	
ZION0316	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/03/96-12/11/96	0	11	
ZION0322	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/22/91-08/09/95	4	22	
ZION0324	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	5	16	
ZION0326	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	5	18	
ZION0330	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6	27	
ZION0333	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	5	6	
ZION0334	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/09/96-10/30/96	0	4	
ZION0003	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/21/77-06/21/77	0	1	
ZION0006	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-08/31/82	1	4	
ZION0015	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	0	2	
ZION0016	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	0	2	
ZION0019	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/22/77-06/22/77	0	1	
ZION0020	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	0	1	
ZION0021	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/31/82	1	4	
ZION0023	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	0	1	
ZION0031	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	0	2	
ZION0033	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	0	1	
ZION0037	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/12/81-08/31/82	0	3	
ZION0039	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/01/77-05/01/77	0	1	
ZION0043	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	1	3	
ZION0045	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	1	3	
ZION0056	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/16/88-06/14/90	1	9	
ZION0061	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/13/75-09/25/75	0	4	
ZION0074	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/13/75-09/25/75	0	4	
ZION0077	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	0	2	
ZION0084	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/05/88-06/14/90	1	5	
ZION0092	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-08/20/82	0	2	
ZION0101	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	0	2	
ZION0102	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	0	2	
ZION0104	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	1	4	
ZION0113	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	1	4	
ZION0115	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/05/88-10/05/88	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0125	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/20/81	0	1	
ZION0137	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/77-07/26/90	13	21	
ZION0140	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/77-09/07/77	0	3	
ZION0141	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/31/84-10/31/84	0	1	
ZION0145	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	0	2	
ZION0156	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	0	4	
ZION0173	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/04/82-08/23/82	0	2	
ZION0175	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/24/81	0	1	
ZION0178	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/11/90-04/11/90	0	2	
ZION0183	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	0	4	
ZION0186	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/26/82-07/26/90	7	44	
ZION0187	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	0	4	
ZION0188	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	0	5	
ZION0189	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/20/81-08/23/82	0	3	
ZION0192	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/19/79-06/13/90	11	51	
ZION0193	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/20/81-08/23/82	0	4	
ZION0197	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	5	
ZION0202	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/28/75-12/28/75	0	1	
ZION0203	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	4	
ZION0204	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-08/17/81	0	1	
ZION0205	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/18/79-04/14/81	1	9	
ZION0206	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/28/79	0	2	
ZION0212	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/03/89	10	4	
ZION0213	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-08/17/81	0	1	
ZION0215	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/03/89	10	14	
ZION0217	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/31/89-08/03/89	0	4	
ZION0223	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-08/23/82	1	4	
ZION0229	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	0	1	
ZION0234	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	0	1	
ZION0236	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/74-01/18/74	0	1	
ZION0239	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/11/82	0	2	
ZION0242	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	0	5	
ZION0249	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	0	5	
ZION0250	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	4	
ZION0251	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	0	1	
ZION0252	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	5	
ZION0255	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	5	
ZION0256	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/01/84-06/13/90	5	42	
ZION0258	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	1	4	
ZION0263	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-09/02/82	1	3	
ZION0267	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/11/82-05/11/82	0	1	
ZION0268	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	4	
ZION0273	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-05/05/82	0	2	
ZION0276	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/17/80-06/13/90	9	48	
ZION0277	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/17/80-04/14/81	0	5	
ZION0280	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	4	
ZION0293	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	3	
ZION0299	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/28/80-03/07/90	9	31	
ZION0300	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/07/82-05/07/82	0	1	
ZION0301	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	3	
ZION0304	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	4	
ZION0305	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	1	5	
ZION0307	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/03/75-02/03/75	0	1	
ZION0308	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/21/79-02/21/79	0	1	
ZION0310	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/28/81-05/07/82	0	2	
ZION0313	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/11/82	0	2	
ZION0315	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/03/75-02/03/75	0	1	
ZION0317	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/24/81	0	1	
ZION0318	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/31/81-08/23/82	0	5	
ZION0321	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-08/23/82	1	4	
ZION0322	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-05/31/89	2	13	
ZION0324	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-10/05/88	2	8	
ZION0326	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-05/31/89	2	12	
ZION0330	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/01/84-06/13/90	5	40	
ZION0331	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/31/81-08/23/82	0	4	
ZION0333	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-10/05/88	2	2	
ZION0341	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-05/06/82	0	2	
ZION0344	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-05/04/82	0	2	
ZION0348	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-05/04/82	0	2	
ZION0352	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/79-05/24/79	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0353	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/04/82	0	2	
ZION0362	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/06/82	0	2	
ZION0363	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/21/79-02/21/79	0	1	
ZION0022	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0035	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0056	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/03/88-09/10/93	5	13	
ZION0084	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/05/88-09/10/93	4	8	
ZION0090	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/02/88-08/15/90	2	2	
ZION0115	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/05/88-08/15/90	1	3	
ZION0137	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/77-07/26/90	13	26	
ZION0139	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/31/77-12/12/78	1	4	
ZION0140	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/31/77-10/05/77	0	5	
ZION0141	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/84-10/31/84	0	1	
ZION0174	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0178	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/11/90-04/11/90	0	2	
ZION0180	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0186	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/82-07/26/90	8	49	
ZION0190	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0192	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/20/80-06/13/90	10	58	
ZION0205	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/20/80-04/14/82	2	9	
ZION0212	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	0	2	
ZION0215	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	0	8	
ZION0217	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	0	4	
ZION0244	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0248	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0256	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/24/82-06/13/90	8	52	
ZION0270	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/16/74	0	3	
ZION0272	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/16/74	0	3	
ZION0276	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/17/80-06/13/90	9	56	
ZION0277	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/17/80-04/14/81	0	5	
ZION0278	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0279	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/21/83-06/21/83	0	1	
ZION0283	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0299	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/28/80-03/07/90	9	41	
ZION0303	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0308	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/10/78-02/21/79	1	5	
ZION0322	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-05/31/89	2	13	
ZION0324	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-10/05/88	2	8	
ZION0326	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-05/31/89	2	12	
ZION0328	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-05/28/74	0	2	
ZION0330	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/24/82-06/13/90	8	49	
ZION0332	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0333	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-10/05/88	2	2	
ZION0352	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/04/90-09/04/90	0	1	
ZION0354	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/20/82-04/27/83	0	6	
ZION0363	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/11/78-07/20/82	4	6	
ZION0022	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	0	5	
ZION0035	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	0	5	
ZION0174	Yes	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	0	5	
ZION0180	Yes	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	0	5	
ZION0190	Yes	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0244	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0248	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0270	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/16/74	0	3	
ZION0272	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/16/74	0	3	
ZION0278	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	0	5	
ZION0283	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	0	5	
ZION0303	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	0	5	
ZION0328	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-05/28/74	0	2	
ZION0332	No	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	0	5	
ZION0022	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0035	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0174	Yes	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0180	Yes	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	0	4	
ZION0190	Yes	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0244	No	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0248	No	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	0	3	
ZION0270	No	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/16/74	0	3	
ZION0272	No	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/16/74	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0278	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0283	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0303	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0328	No	00690	CARBON, TOTAL (MG/L AS C)	04/09/74-05/28/74	0	2	
ZION0332	No	00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	0	4	
ZION0276	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	10/01/86-10/01/86	0	1	
ZION0311	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	06/14/77-08/05/77	0	2	
ZION0336	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	06/14/77-06/14/77	0	1	
ZION0119	No	00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	07/23/76-07/23/76	0	1	
ZION0167	No	00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	05/13/77-08/05/77	0	2	
ZION0176	Yes	00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	09/17/75-05/16/77	1	3	
ZION0246	Yes	00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	05/16/77-09/04/77	0	3	
ZION0056	No	00745	SULFIDE, TOTAL (MG/L AS S)	03/23/88-08/15/90	2	3	
ZION0084	No	00745	SULFIDE, TOTAL (MG/L AS S)	08/15/90-08/15/90	0	1	
ZION0090	No	00745	SULFIDE, TOTAL (MG/L AS S)	03/23/88-03/23/88	0	1	
ZION0002	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	0	1	
ZION0003	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/21/77-06/21/77	0	1	
ZION0004	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/20/81-10/20/81	0	1	
ZION0005	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-07/30/81	0	1	
ZION0006	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-08/31/82	1	4	
ZION0007	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	0	1	
ZION0008	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/17/81-07/17/81	0	1	
ZION0009	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	0	1	
ZION0010	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/20/81-08/24/81	0	2	
ZION0011	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	0	1	
ZION0014	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-05/07/82	0	2	
ZION0015	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	0	2	
ZION0016	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	0	2	
ZION0017	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-05/07/82	0	2	
ZION0018	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0019	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0020	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	0	1	
ZION0021	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/15/66-08/31/82	15	5	
ZION0022	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0023	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	0	1	
ZION0024	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/17/81-10/17/81	0	1	
ZION0025	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	0	1	
ZION0027	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/29/81-08/29/81	0	1	
ZION0028	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/09/77-05/27/86	8	3	
ZION0029	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/09/77-07/22/85	7	2	
ZION0030	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/26/81	0	2	
ZION0031	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	0	2	
ZION0032	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/24/96-12/10/96	0	7	
ZION0033	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	0	1	
ZION0035	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0037	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/12/81-08/31/82	0	3	
ZION0039	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/01/77-05/01/77	0	1	
ZION0040	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/02/91-09/02/91	0	1	
ZION0042	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	0	8	
ZION0043	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	1	3	
ZION0044	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/16/81-11/16/81	0	1	
ZION0045	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	1	3	
ZION0046	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/26/81	0	2	
ZION0048	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	0	1	
ZION0050	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	0	1	
ZION0056	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/88-05/24/94	6	25	
ZION0064	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	0	1	
ZION0067	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	0	1	
ZION0073	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-03/04/82	0	2	
ZION0075	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	0	9	
ZION0077	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	0	2	
ZION0078	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/15/78-09/15/78	0	1	
ZION0080	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	
ZION0082	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	
ZION0084	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/05/88-09/09/94	5	19	
ZION0087	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/27/93-08/08/95	1	7	
ZION0088	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	0	1	
ZION0089	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/17/82	0	2	
ZION0090	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/02/88-03/23/88	0	2	
ZION0092	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-08/20/82	0	2	
ZION0095	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	0	1	
ZION0096	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0097	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	0	2	
ZION0098	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	0	2	
ZION0099	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	0	2	
ZION0100	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	0	1	
ZION0101	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	0	2	
ZION0102	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	0	2	
ZION0104	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/23/82	1	6	
ZION0110	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0112	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0113	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	1	4	
ZION0115	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/05/88-06/28/93	4	3	
ZION0119	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/23/76-07/23/76	0	1	
ZION0125	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/20/81	0	1	
ZION0126	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	0	1	
ZION0129	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/11/82-06/11/82	0	1	
ZION0137	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	16	40	
ZION0138	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-10/31/84	11	5	
ZION0145	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	0	2	
ZION0149	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	1	3	
ZION0153	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/25/88-01/25/88	0	1	
ZION0156	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	0	4	
ZION0166	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	0	1	
ZION0167	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/13/77-08/05/77	0	2	
ZION0168	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/17/75-05/16/77	1	3	
ZION0177	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/18/92-03/12/96	3	14	
ZION0178	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	6	21	
ZION0180	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	0	5	
ZION0182	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/07/77-12/07/77	0	1	
ZION0183	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	4	
ZION0185	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/25/85-01/17/90	4	3	
ZION0186	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	14	102	
ZION0187	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	4	
ZION0188	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0189	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0192	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0197	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0199	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/03/70-09/03/70	0	1	
ZION0201	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/17/78-11/12/89	11	4	
ZION0202	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/28/75-12/28/75	0	1	
ZION0203	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	1	4	
ZION0204	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-08/17/81	0	1	
ZION0205	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/18/79-04/14/82	2	11	
ZION0206	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	0	2	
ZION0210	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/09/77-12/09/77	0	1	
ZION0212	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	0	2	
ZION0213	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-08/17/81	0	1	
ZION0215	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/09/95	16	14	
ZION0223	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-08/23/82	1	4	
ZION0229	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0231	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/18/77-11/18/77	0	1	
ZION0232	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/06/88-09/06/88	0	1	
ZION0234	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0235	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/07/88-03/07/88	0	1	
ZION0236	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/74-01/18/74	0	1	
ZION0237	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/78-06/14/78	0	1	
ZION0238	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/77-12/10/77	0	1	
ZION0239	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/11/82	0	2	
ZION0240	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/17/77-11/17/77	0	1	
ZION0241	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	0	11	
ZION0242	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0244	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/16/77-09/04/77	0	3	
ZION0248	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	0	3	
ZION0249	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0250	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	1	4	
ZION0251	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0252	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0255	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0256	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	14	79	
ZION0258	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/66-09/01/82	15	7	
ZION0259	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/08/64-06/08/64	0	1	
ZION0263	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-09/02/82	1	3	
ZION0264	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	0	4	
ZION0265	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/16/77-11/16/77	0	1	
ZION0267	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/11/82-05/11/82	0	1	
ZION0268	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	4	
ZION0270	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	0	3	
ZION0272	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	0	3	
ZION0273	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-05/05/82	0	2	
ZION0276	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	16	84	T
ZION0277	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-04/23/85	4	8	
ZION0278	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0279	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/21/83-06/21/83	0	1	
ZION0280	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	4	
ZION0281	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/25/66-03/25/66	0	1	
ZION0283	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0288	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/11/96-12/11/96	0	1	
ZION0291	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	8	4	
ZION0292	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/25/68-02/27/70	1	2	
ZION0293	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	3	
ZION0294	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/15/66-12/15/66	0	1	
ZION0295	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/12/78-04/12/78	0	1	
ZION0296	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/68-10/28/68	0	1	
ZION0297	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	8	4	
ZION0299	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	15	54	
ZION0300	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	0	1	
ZION0301	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	3	
ZION0302	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	0	11	
ZION0303	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0304	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	4	
ZION0305	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	1	5	
ZION0307	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	0	1	
ZION0308	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	0	1	
ZION0309	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/16/64-03/16/64	0	1	
ZION0310	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-05/07/82	0	2	
ZION0311	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/77-08/05/77	0	2	
ZION0312	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/25/93-06/25/93	0	1	
ZION0313	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/11/82	0	2	
ZION0315	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	0	1	
ZION0316	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	0	11	
ZION0317	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/24/81	0	1	
ZION0318	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/31/81-08/23/82	0	5	
ZION0321	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-08/23/82	1	4	
ZION0322	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	8	16	
ZION0323	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/07/65-10/07/65	0	1	
ZION0324	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	10	
ZION0325	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/68-08/20/68	0	1	
ZION0326	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-05/22/91	4	14	
ZION0328	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/28/74-05/28/74	0	1	
ZION0330	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	14	101	
ZION0331	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/07/67-08/23/82	15	5	
ZION0332	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	0	5	
ZION0333	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	3	
ZION0334	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/09/96-10/30/96	0	4	
ZION0336	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/77-06/14/77	0	1	
ZION0338	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-10/06/86	8	3	
ZION0340	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/20/64-02/20/64	0	1	
ZION0341	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-05/06/82	0	2	
ZION0343	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/04/65-11/04/65	0	1	
ZION0344	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-05/04/82	0	2	
ZION0346	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/19/78-09/19/78	0	1	
ZION0348	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-05/04/82	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0352	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/79-06/25/93	14	3	
ZION0353	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/04/82	0	2	
ZION0354	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/20/82-04/27/83	0	6	
ZION0355	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/10/64-03/10/64	0	1	
ZION0356	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/28/77-08/23/89	11	5	
ZION0358	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-12/13/77	0	2	
ZION0359	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/05/77-12/06/77	0	2	
ZION0360	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-11/11/80	2	2	
ZION0362	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/06/82	0	2	
ZION0363	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	0	1	
ZION0364	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0365	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0366	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/16/68-10/16/68	0	1	
ZION0367	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/62-07/14/62	0	1	
ZION0370	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/18/67-02/18/67	0	1	
ZION0371	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/30/66-03/30/66	0	1	
ZION0372	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0373	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0374	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0375	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	0	1	
ZION0003	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/21/77-06/21/77	0	1	
ZION0014	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/07/82-05/07/82	0	1	
ZION0017	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/07/82-05/07/82	0	1	
ZION0018	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0019	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/22/77-06/22/77	0	1	
ZION0021	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/15/66-12/15/66	0	1	
ZION0039	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/01/77-05/01/77	0	1	
ZION0089	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/17/82-08/17/82	0	1	
ZION0092	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/03/82-08/20/82	0	2	
ZION0096	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0097	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0098	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0099	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	0	1	
ZION0102	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/81-05/03/82	0	2	
ZION0110	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0112	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/12/77-11/12/77	0	1	
ZION0113	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/81-08/23/82	1	4	
ZION0129	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/11/82-06/11/82	0	1	
ZION0138	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0147	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	0	2	
ZION0149	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0158	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	0	4	
ZION0168	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	0	1	
ZION0182	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/07/77-12/07/77	0	1	
ZION0183	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	4	
ZION0188	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0193	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0197	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0199	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	09/03/70-09/03/70	0	1	
ZION0202	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/28/75-12/28/75	0	1	
ZION0204	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/17/81-08/17/81	0	1	
ZION0210	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/09/77-12/09/77	0	1	
ZION0229	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0231	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/18/77-11/18/77	0	1	
ZION0234	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0236	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	01/18/74-01/18/74	0	1	
ZION0238	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/10/77-12/10/77	0	1	
ZION0240	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/17/77-11/17/77	0	1	
ZION0249	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	0	5	
ZION0251	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
ZION0252	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0255	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	1	5	
ZION0258	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/06/66-12/13/66	0	3	
ZION0259	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/08/64-06/08/64	0	1	
ZION0265	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/16/77-11/16/77	0	1	
ZION0281	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/25/66-03/25/66	0	1	
ZION0292	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/25/68-10/25/68	0	1	
ZION0294	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/15/66-12/15/66	0	1	
ZION0296	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/28/68-10/28/68	0	1	
ZION0307	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/03/75-02/03/75	0	1	
ZION0309	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/16/64-03/16/64	0	1	
ZION0315	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/03/75-02/03/75	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0323	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/07/65-10/07/65	0	1	
ZION0325	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/68-08/20/68	0	1	
ZION0331	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/07/67-03/07/67	0	1	
ZION0340	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/20/64-02/20/64	0	1	
ZION0343	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/04/65-11/04/65	0	1	
ZION0355	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/10/64-03/10/64	0	1	
ZION0366	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/16/68-10/16/68	0	1	
ZION0367	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/14/62-07/14/62	0	1	
ZION0370	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/18/67-02/18/67	0	1	
ZION0371	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/30/66-03/30/66	0	1	
ZION0002	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	0	1	
ZION0003	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/21/77-06/21/77	0	1	
ZION0004	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/20/81-10/20/81	0	1	
ZION0005	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-07/30/81	0	1	
ZION0006	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-08/31/82	1	4	
ZION0007	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	0	1	
ZION0008	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/17/81-07/17/81	0	1	
ZION0009	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	0	1	
ZION0010	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/20/81-08/24/81	0	2	
ZION0011	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	0	1	
ZION0014	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-05/07/82	0	2	
ZION0015	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	0	2	
ZION0016	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	0	2	
ZION0017	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-05/07/82	0	2	
ZION0018	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/77-06/22/77	0	1	
ZION0019	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/77-06/22/77	0	1	
ZION0020	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	0	1	
ZION0021	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/15/66-08/31/82	15	5	
ZION0022	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	0	5	
ZION0023	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	0	1	
ZION0024	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/17/81-10/17/81	0	1	
ZION0025	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	0	1	
ZION0027	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/29/81-08/29/81	0	1	
ZION0028	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/09/77-05/27/86	8	3	
ZION0029	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/09/77-07/22/85	7	2	
ZION0030	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-08/26/81	0	2	
ZION0031	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	0	2	
ZION0032	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/96-12/10/96	0	7	
ZION0033	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	0	1	
ZION0035	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	0	5	
ZION0037	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/12/81-08/31/82	0	3	
ZION0039	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/01/77-05/01/77	0	1	
ZION0040	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/02/91-09/02/91	0	1	
ZION0042	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/93-06/16/94	0	8	
ZION0043	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	1	3	
ZION0044	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/16/81-09/13/86	4	2	
ZION0045	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	1	3	
ZION0046	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-08/26/81	0	2	
ZION0048	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	0	1	
ZION0049	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/24/86-06/24/86	0	1	
ZION0050	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/19/86	4	2	
ZION0054	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/13/86-07/13/86	0	1	
ZION0056	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/88-05/24/94	6	25	
ZION0058	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/11/86-07/16/86	0	2	
ZION0060	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/10/86-09/10/86	0	1	
ZION0062	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/12/86-07/12/86	0	1	
ZION0064	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	0	1	
ZION0067	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	0	1	
ZION0068	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/86-06/22/86	0	1	
ZION0070	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/13/86-07/13/86	0	1	
ZION0071	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/17/86-07/17/86	0	1	
ZION0073	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-03/04/82	0	2	
ZION0075	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/93-06/16/94	0	9	
ZION0077	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/12/86	4	3	
ZION0078	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/15/78-09/15/78	0	1	
ZION0080	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	0	1	
ZION0082	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	0	1	
ZION0083	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/86-06/22/86	0	1	
ZION0084	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/05/88-09/09/94	5	19	
ZION0086	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/22/86-08/22/86	0	1	
ZION0087	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/27/93-08/08/95	1	7	
ZION0088	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0089	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-07/14/86	4	3	
ZION0090	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/02/88-03/23/88	0	2	
ZION0091	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/86-06/18/86	0	1	
ZION0092	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-08/20/82	0	2	
ZION0095	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	0	1	
ZION0096	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	0	2	
ZION0097	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	0	2	
ZION0098	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	0	2	
ZION0099	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	0	2	
ZION0100	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	0	1	
ZION0101	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/21/86	4	3	
ZION0102	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-05/03/82	0	2	
ZION0103	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/86-09/14/86	0	1	
ZION0104	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-07/16/86	5	8	
ZION0108	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/86-07/15/86	0	1	
ZION0110	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/12/77-06/19/90	12	2	
ZION0111	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/26/86-08/26/86	0	1	
ZION0112	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/12/77-11/12/77	0	1	
ZION0113	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	1	4	
ZION0114	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/86-07/15/86	0	1	
ZION0115	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/05/88-06/28/93	4	3	
ZION0116	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/28/87-07/28/87	0	1	
ZION0117	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/87-09/18/87	0	1	
ZION0118	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/11/86-09/11/86	0	1	
ZION0119	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/23/76-07/23/76	0	1	
ZION0121	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/87-09/18/87	0	1	
ZION0125	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/20/81	0	1	
ZION0126	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	0	1	
ZION0129	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/11/82-06/11/82	0	1	
ZION0132	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/77-11/10/93	16	40	
ZION0138	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-10/31/84	11	5	
ZION0143	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/88-05/04/89	0	4	
ZION0145	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	0	2	
ZION0146	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/88-05/04/89	0	4	
ZION0147	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	0	2	
ZION0149	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	1	3	
ZION0150	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/88-05/03/89	0	4	
ZION0153	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/25/88-01/25/88	0	1	
ZION0154	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/28/88-05/04/89	0	3	
ZION0156	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	0	4	
ZION0161	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/26/88-05/03/89	0	4	
ZION0162	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/86-09/18/86	0	1	
ZION0165	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/28/88-05/01/89	0	3	
ZION0166	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/07/81-04/07/81	0	1	
ZION0167	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/13/77-08/05/77	0	2	
ZION0168	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/17/75-05/16/77	1	3	
ZION0177	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/18/92-03/12/96	3	14	
ZION0178	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/11/90-07/31/96	6	21	
ZION0180	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	0	5	
ZION0182	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/07/77-12/07/77	0	1	
ZION0183	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	4	
ZION0185	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/25/85-01/17/90	4	3	
ZION0186	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/26/82-12/11/96	14	102	
ZION0187	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	4	
ZION0188	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	5	
ZION0189	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	0	3	
ZION0192	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	5	
ZION0197	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	1	5	
ZION0199	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/03/70-09/03/70	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0201	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/17/78-11/12/89	11	4	
ZION0202	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/28/75-12/28/75	0	1	
ZION0203	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	1	4	
ZION0204	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-08/17/81	0	1	
ZION0205	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/18/79-04/14/82	2	11	
ZION0206	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/28/79	0	2	
ZION0210	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/09/77-12/09/77	0	1	
ZION0212	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/28/79	0	2	
ZION0213	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-08/17/81	0	1	
ZION0215	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/09/95	16	14	
ZION0223	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-08/23/82	1	4	
ZION0229	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	0	1	
ZION0231	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/18/77-11/18/77	0	1	
ZION0232	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/06/88-09/06/88	0	1	
ZION0234	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	0	1	
ZION0235	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/07/88-03/07/88	0	1	
ZION0236	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/74-01/18/74	0	1	
ZION0237	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/14/78-06/14/78	0	1	
ZION0238	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/77-12/10/77	0	1	
ZION0239	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/11/82	0	2	
ZION0240	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/17/77-11/17/77	0	1	
ZION0241	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/03/96-12/11/96	0	11	
ZION0242	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	5	
ZION0244	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/16/77-09/04/77	0	3	
ZION0248	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	0	3	
ZION0249	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	0	5	
ZION0250	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	1	4	
ZION0251	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	0	1	
ZION0252	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	1	5	
ZION0255	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	1	5	
ZION0256	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	14	79	
ZION0258	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/66-09/01/82	15	7	
ZION0259	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/08/64-06/08/64	0	1	
ZION0263	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-09/02/82	1	3	
ZION0264	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/02/96-12/11/96	0	4	
ZION0265	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/16/77-11/16/77	0	1	
ZION0267	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/11/82-05/11/82	0	1	
ZION0268	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	4	
ZION0270	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/16/74	0	3	
ZION0272	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/16/74	0	3	
ZION0273	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-05/05/82	0	2	
ZION0276	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-12/11/96	16	84	T
ZION0277	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-04/23/85	4	8	
ZION0278	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	0	5	
ZION0279	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/21/83-06/21/83	0	1	
ZION0280	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	4	
ZION0281	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/25/66-03/25/66	0	1	
ZION0283	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	0	5	
ZION0288	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/11/96-12/11/96	0	1	
ZION0291	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/81-09/16/89	8	4	
ZION0292	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/25/68-10/25/68	0	1	
ZION0293	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	3	
ZION0294	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/15/66-12/15/66	0	1	
ZION0295	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/12/78-04/12/78	0	1	
ZION0296	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/68-10/28/68	0	1	
ZION0297	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/81-09/16/89	8	4	
ZION0299	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/80-04/24/96	15	54	
ZION0300	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/07/82-05/07/82	0	1	
ZION0301	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	3	
ZION0302	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/02/96-12/11/96	0	11	
ZION0303	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	0	5	
ZION0304	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	4	
ZION0305	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	1	5	
ZION0307	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/75-02/03/75	0	1	
ZION0308	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/21/79-02/21/79	0	1	
ZION0309	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/64-03/16/64	0	1	
ZION0310	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-05/07/82	0	2	
ZION0312	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/25/93-06/25/93	0	1	
ZION0313	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/11/82	0	2	
ZION0315	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/75-02/03/75	0	1	
ZION0316	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/03/96-12/11/96	0	11	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0317	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/24/81	0	1	
ZION0318	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/31/81-08/23/82	0	5	
ZION0321	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-08/23/82	1	4	
ZION0322	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/09/95	8	16	
ZION0323	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/07/65-10/07/65	0	1	
ZION0324	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/03/90	3	10	
ZION0325	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/68-08/20/68	0	1	
ZION0326	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-05/22/91	4	14	
ZION0328	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-05/28/74	0	2	
ZION0330	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	14	101	
ZION0331	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/07/67-08/23/82	15	5	
ZION0332	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	0	5	
ZION0333	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/03/90	3	3	
ZION0334	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/09/96-10/30/96	0	4	
ZION0338	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-10/06/86	8	3	
ZION0340	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/20/64-02/20/64	0	1	
ZION0341	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-05/06/82	0	2	
ZION0343	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/04/65-11/04/65	0	1	
ZION0344	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-05/04/82	0	2	
ZION0346	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/19/78-09/19/78	0	1	
ZION0348	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-05/04/82	0	2	
ZION0352	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/79-06/25/93	14	3	
ZION0353	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/04/82	0	2	
ZION0354	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/20/82-04/27/83	0	6	
ZION0355	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/10/64-03/10/64	0	1	
ZION0356	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/28/77-08/23/89	11	5	
ZION0358	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-06/28/84	6	3	
ZION0359	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/05/77-12/06/77	0	2	
ZION0360	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-06/28/84	6	3	
ZION0361	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/84-06/28/84	0	1	
ZION0362	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-05/06/82	0	2	
ZION0363	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/21/79-02/21/79	0	1	
ZION0364	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	0	1	
ZION0366	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/68-10/16/68	0	1	
ZION0367	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/62-07/14/62	0	1	
ZION0370	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/18/67-02/18/67	0	1	
ZION0371	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/30/66-03/30/66	0	1	
ZION0372	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	0	1	
ZION0373	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	0	1	
ZION0374	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	0	1	
ZION0375	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	0	1	
ZION0002	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	0	1	
ZION0003	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/77-06/21/77	0	1	
ZION0004	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/20/81-10/20/81	0	1	
ZION0005	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-07/30/81	0	1	
ZION0006	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-08/31/82	1	4	
ZION0007	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	0	1	
ZION0008	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/81-07/17/81	0	1	
ZION0009	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	0	1	
ZION0010	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/20/81-08/24/81	0	2	
ZION0011	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	0	1	
ZION0014	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-05/07/82	0	2	
ZION0015	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	0	2	
ZION0016	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	0	2	
ZION0017	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-05/07/82	0	2	
ZION0018	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/77-06/22/77	0	1	
ZION0019	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/77-06/22/77	0	1	
ZION0020	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	0	1	
ZION0021	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/15/66-08/31/82	15	5	
ZION0022	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	0	5	
ZION0023	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	0	1	
ZION0024	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/17/81-10/17/81	0	1	
ZION0025	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	0	1	
ZION0027	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/29/81-08/29/81	0	1	
ZION0028	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/09/77-05/27/86	8	3	
ZION0029	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/09/77-07/22/85	7	2	
ZION0030	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-08/26/81	0	2	
ZION0031	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	0	2	
ZION0032	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/96-12/10/96	0	7	
ZION0033	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	0	1	
ZION0035	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	0	5	
ZION0036	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/05/80-07/05/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0037	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/12/81-08/31/82	0	3	
ZION0039	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/01/77-05/01/77	0	1	
ZION0040	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/02/91-09/02/91	0	1	
ZION0041	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	0	1	
ZION0042	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/93-06/16/94	0	8	
ZION0043	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	1	3	
ZION0044	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/16/81-09/13/86	4	2	
ZION0045	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	1	3	
ZION0046	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-08/26/81	0	2	
ZION0048	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	0	1	
ZION0049	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/24/86-06/24/86	0	1	
ZION0050	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/19/86	4	2	
ZION0051	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/07/80-07/07/80	0	1	
ZION0052	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	0	1	
ZION0054	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/86-07/13/86	0	1	
ZION0056	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/88-05/24/94	6	25	
ZION0057	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	0	1	
ZION0058	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/11/86-07/16/86	0	2	
ZION0060	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/10/86-09/10/86	0	1	
ZION0062	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/86-07/12/86	0	1	
ZION0064	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	0	1	
ZION0065	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/01/80-07/01/80	0	1	
ZION0067	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	0	1	
ZION0068	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/86-06/22/86	0	1	
ZION0070	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/86-07/13/86	0	1	
ZION0071	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/86-07/17/86	0	1	
ZION0073	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-03/04/82	0	2	
ZION0075	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/93-06/16/94	0	9	
ZION0077	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/12/86	4	3	
ZION0078	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/15/78-09/15/78	0	1	
ZION0079	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	0	1	
ZION0080	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	0	1	
ZION0082	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	0	1	
ZION0083	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/86-06/22/86	0	1	
ZION0084	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/05/88-09/09/94	5	19	
ZION0086	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/22/86-08/22/86	0	1	
ZION0087	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/27/93-08/08/95	1	7	
ZION0088	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	0	1	
ZION0089	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-07/14/86	4	3	
ZION0090	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/02/88-03/23/88	0	2	
ZION0091	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/86-06/18/86	0	1	
ZION0092	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-08/20/82	0	2	
ZION0093	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	0	1	
ZION0095	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	0	1	
ZION0096	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	0	2	
ZION0097	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	0	2	
ZION0098	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	0	2	
ZION0099	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	0	2	
ZION0100	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	0	1	
ZION0101	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/86	4	3	
ZION0102	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-05/03/82	0	2	
ZION0103	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/86-09/14/86	0	1	
ZION0104	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-07/16/86	5	8	
ZION0105	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	0	1	
ZION0106	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/01/80-07/01/80	0	1	
ZION0107	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	0	1	
ZION0108	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/86-07/15/86	0	1	
ZION0109	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	0	1	
ZION0110	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/12/77-06/19/90	12	2	
ZION0111	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/26/86-08/26/86	0	1	
ZION0112	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/12/77-11/12/77	0	1	
ZION0113	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	1	4	
ZION0114	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/86-07/15/86	0	1	
ZION0115	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/05/88-06/28/93	4	3	
ZION0116	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/28/87-07/28/87	0	1	
ZION0117	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/87-09/18/87	0	1	
ZION0118	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/11/86-09/11/86	0	1	
ZION0119	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/23/76-07/23/76	0	1	
ZION0120	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/80-07/17/80	0	1	
ZION0121	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/87-09/18/87	0	1	
ZION0122	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	0	1	
ZION0123	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/20/80-07/20/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0125	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/20/81	0	1	
ZION0126	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	0	1	
ZION0128	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/19/80-07/19/80	0	1	
ZION0129	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/11/82-06/11/82	0	1	
ZION0130	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	0	1	
ZION0131	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/05/80-07/05/80	0	1	
ZION0132	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-11/10/93	16	40	
ZION0138	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-10/31/84	11	5	
ZION0142	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/02/80-07/02/80	0	1	
ZION0143	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/88-05/04/89	0	4	
ZION0144	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/02/80-07/02/80	0	1	
ZION0145	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	0	2	
ZION0146	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/88-05/04/89	0	4	
ZION0147	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	0	2	
ZION0149	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	1	3	
ZION0150	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/88-05/03/89	0	4	
ZION0153	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/25/88-01/25/88	0	1	
ZION0154	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/28/88-05/04/89	0	3	
ZION0156	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	0	4	
ZION0161	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/26/88-05/03/89	0	4	
ZION0162	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/86-09/18/86	0	1	
ZION0163	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	0	1	
ZION0165	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/28/88-05/01/89	0	3	
ZION0166	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/07/81-04/07/81	0	1	
ZION0167	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/13/77-08/05/77	0	2	
ZION0168	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/17/75-05/16/77	1	3	
ZION0177	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/18/92-03/12/96	3	14	
ZION0178	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/11/90-07/31/96	6	21	
ZION0180	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	0	5	
ZION0182	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/07/77-12/07/77	0	1	
ZION0183	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	4	
ZION0185	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/25/85-01/17/90	4	3	
ZION0186	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/82-12/11/96	14	102	
ZION0187	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	4	
ZION0188	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	5	
ZION0189	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	0	3	
ZION0192	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	5	
ZION0194	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/80-07/15/80	0	1	
ZION0197	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	1	5	
ZION0198	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	0	1	
ZION0199	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/03/70-09/03/70	0	1	
ZION0200	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	0	1	
ZION0201	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/17/78-11/12/89	11	4	
ZION0202	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/28/75-12/28/75	0	1	
ZION0203	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	1	4	
ZION0204	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-08/17/81	0	1	
ZION0205	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/18/79-04/14/82	2	11	
ZION0206	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/80-07/13/80	0	1	
ZION0208	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	0	1	
ZION0209	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	0	1	
ZION0210	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/09/77-12/09/77	0	1	
ZION0211	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	0	1	
ZION0212	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/28/79	0	2	
ZION0213	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-08/17/81	0	1	
ZION0215	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/09/95	16	14	
ZION0216	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	0	1	
ZION0218	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0219	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/80-07/13/80	0	1	
ZION0220	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	0	1	
ZION0221	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	0	1	
ZION0222	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/10/80-07/10/80	0	1	
ZION0223	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-08/23/82	1	4	
ZION0224	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0226	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/80-07/15/80	0	1	
ZION0227	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	0	1	
ZION0228	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	0	1	
ZION0229	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	0	1	
ZION0230	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	0	1	
ZION0231	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/18/77-11/18/77	0	1	
ZION0232	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/06/88-09/06/88	0	1	
ZION0234	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	0	1	
ZION0235	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/07/88-03/07/88	0	1	
ZION0236	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/74-01/18/74	0	1	
ZION0237	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/14/78-06/14/78	0	1	
ZION0238	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/77-12/10/77	0	1	
ZION0239	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/11/82	0	2	
ZION0240	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/17/77-11/17/77	0	1	
ZION0241	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/03/96-12/11/96	0	11	
ZION0242	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	5	
ZION0244	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/16/77-09/04/77	0	3	
ZION0248	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	0	3	
ZION0249	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	0	5	
ZION0250	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	1	4	
ZION0251	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	0	1	
ZION0252	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	1	5	
ZION0254	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/80-06/21/80	0	1	
ZION0255	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	1	5	
ZION0256	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	14	79	
ZION0257	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/80-06/21/80	0	1	
ZION0258	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/66-09/01/82	15	7	
ZION0259	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/08/64-06/08/64	0	1	
ZION0260	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/80-07/12/80	0	1	
ZION0261	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/26/80-06/26/80	0	1	
ZION0263	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-09/02/82	1	3	
ZION0264	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/02/96-12/11/96	0	4	
ZION0265	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/16/77-11/16/77	0	1	
ZION0267	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/11/82-05/11/82	0	1	
ZION0268	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	4	
ZION0270	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/16/74	0	3	
ZION0272	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/16/74	0	3	
ZION0273	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-05/05/82	0	2	
ZION0276	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-12/11/96	16	83	T
ZION0277	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-04/23/85	4	8	
ZION0278	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	0	5	
ZION0279	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/83-06/21/83	0	1	
ZION0280	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	4	
ZION0281	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/25/66-03/25/66	0	1	
ZION0283	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	0	5	
ZION0284	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/80-07/12/80	0	1	
ZION0285	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/23/80-06/23/80	0	1	
ZION0288	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/11/96-12/11/96	0	1	
ZION0291	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/81-09/16/89	8	4	
ZION0292	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/25/68-10/25/68	0	1	
ZION0293	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	3	
ZION0294	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/15/66-12/15/66	0	1	
ZION0295	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/12/78-04/12/78	0	1	
ZION0296	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/68-10/28/68	0	1	
ZION0297	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/81-09/16/89	8	4	
ZION0299	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/80-04/24/96	15	54	
ZION0300	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/07/82-05/07/82	0	1	
ZION0301	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	3	
ZION0302	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/02/96-12/11/96	0	11	
ZION0303	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	0	5	
ZION0304	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	4	
ZION0305	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	1	5	
ZION0306	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	0	1	
ZION0307	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/75-02/03/75	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0308	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/21/79-02/21/79	0	1	
ZION0309	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/64-03/16/64	0	1	
ZION0310	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-05/07/82	0	2	
ZION0312	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/25/93-06/25/93	0	1	
ZION0313	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/11/82	0	2	
ZION0314	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	0	1	
ZION0315	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/75-02/03/75	0	1	
ZION0316	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/03/96-12/11/96	0	11	
ZION0317	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/24/81	0	1	
ZION0318	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/31/81-08/23/82	0	5	
ZION0320	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	0	1	
ZION0321	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-08/23/82	1	4	
ZION0322	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/09/95	8	16	
ZION0323	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/07/65-10/07/65	0	1	
ZION0324	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/03/90	3	10	
ZION0325	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/68-08/20/68	0	1	
ZION0326	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-05/22/91	4	14	
ZION0328	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-05/28/74	0	2	
ZION0330	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	14	101	
ZION0331	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/07/67-08/23/82	15	5	
ZION0332	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	0	5	
ZION0333	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/03/90	3	3	
ZION0334	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/09/96-10/30/96	0	4	
ZION0338	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-10/06/86	8	3	
ZION0340	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/20/64-02/20/64	0	1	
ZION0341	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-05/06/82	0	2	
ZION0343	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/04/65-11/04/65	0	1	
ZION0344	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-05/04/82	0	2	
ZION0346	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/19/78-09/19/78	0	1	
ZION0348	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-05/04/82	0	2	
ZION0352	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/79-06/25/93	14	3	
ZION0353	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/04/82	0	2	
ZION0354	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/20/82-04/27/83	0	6	
ZION0355	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/10/64-03/10/64	0	1	
ZION0356	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/28/77-08/23/89	11	5	
ZION0358	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-12/13/77	0	2	
ZION0359	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/05/77-12/06/77	0	2	
ZION0360	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-11/11/80	2	2	
ZION0362	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-05/06/82	0	2	
ZION0363	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/21/79-02/21/79	0	1	
ZION0364	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0365	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0366	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/68-10/16/68	0	1	
ZION0367	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/62-07/14/62	0	1	
ZION0370	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/18/67-02/18/67	0	1	
ZION0371	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/30/66-03/30/66	0	1	
ZION0372	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0373	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0374	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0375	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	0	1	
ZION0001	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/22/88-02/22/88	0	1	
ZION0002	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	0	1	
ZION0003	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/77-06/21/77	0	1	
ZION0004	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/20/81-10/20/81	0	1	
ZION0005	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-07/30/81	0	1	
ZION0006	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-08/31/82	1	4	
ZION0007	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	0	1	
ZION0008	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/81-07/17/81	0	1	
ZION0009	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	0	1	
ZION0010	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/20/81-08/24/81	0	2	
ZION0011	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	0	1	
ZION0012	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/21/89-07/21/89	0	1	
ZION0013	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/23/87-06/23/87	0	1	
ZION0014	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-05/07/82	0	2	
ZION0015	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	0	2	
ZION0016	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	0	2	
ZION0017	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-05/07/82	0	2	
ZION0018	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/77-06/22/77	0	1	
ZION0019	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/77-06/22/77	0	1	
ZION0020	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	0	1	
ZION0021	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/15/66-08/31/82	15	5	
ZION0022	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0023	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	0	1	
ZION0024	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/17/81-10/17/81	0	1	
ZION0025	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	0	1	
ZION0027	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/29/81-08/29/81	0	1	
ZION0028	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/09/77-05/27/86	8	4	
ZION0029	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/09/77-08/07/89	11	3	
ZION0030	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-08/26/81	0	2	
ZION0031	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	0	2	
ZION0032	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/96-12/10/96	0	7	
ZION0033	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	0	1	
ZION0035	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	0	5	
ZION0036	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/80-07/05/80	0	1	
ZION0037	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/12/81-08/31/82	0	3	
ZION0039	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/01/77-05/01/77	0	1	
ZION0040	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/02/91-09/02/91	0	1	
ZION0041	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	0	1	
ZION0042	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/93-06/16/94	0	8	
ZION0043	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	1	3	
ZION0044	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/16/81-09/13/86	4	2	
ZION0045	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	1	3	
ZION0046	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-08/26/81	0	2	
ZION0048	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	0	1	
ZION0049	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/24/86-06/24/86	0	1	
ZION0050	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/19/86	4	2	
ZION0051	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/07/80-07/07/80	0	1	
ZION0052	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	0	1	
ZION0054	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/86-07/13/86	0	1	
ZION0056	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/88-05/24/94	6	25	
ZION0057	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	0	1	
ZION0058	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/11/86-07/16/86	0	2	
ZION0060	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/10/86-09/10/86	0	1	
ZION0062	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/86-07/12/86	0	1	
ZION0064	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	0	1	
ZION0065	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/01/80-07/01/80	0	1	
ZION0067	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	0	1	
ZION0068	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/86-06/22/86	0	1	
ZION0070	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/86-07/13/86	0	1	
ZION0071	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/86-07/17/86	0	1	
ZION0073	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-03/04/82	0	2	
ZION0075	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/93-06/16/94	0	9	
ZION0077	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/12/86	4	3	
ZION0078	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/15/78-09/15/78	0	1	
ZION0079	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	0	1	
ZION0080	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	0	1	
ZION0082	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	0	1	
ZION0083	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/86-06/22/86	0	1	
ZION0084	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/05/88-09/09/94	5	19	
ZION0086	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/22/86-08/22/86	0	1	
ZION0087	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/27/93-08/08/95	1	7	
ZION0088	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	0	1	
ZION0089	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-07/14/86	4	3	
ZION0090	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/02/88-03/23/88	0	2	
ZION0091	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/86-06/18/86	0	1	
ZION0092	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-08/20/82	0	2	
ZION0093	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	0	1	
ZION0095	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	0	1	
ZION0096	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	0	2	
ZION0097	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	0	2	
ZION0098	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	0	2	
ZION0099	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	0	2	
ZION0100	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	0	1	
ZION0101	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/86	4	3	
ZION0102	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-05/03/82	0	2	
ZION0103	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/86-09/14/86	0	1	
ZION0104	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-07/16/86	5	8	
ZION0105	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	0	1	
ZION0106	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/01/80-07/01/80	0	1	
ZION0107	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	0	1	
ZION0108	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/86-07/15/86	0	1	
ZION0109	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	0	1	
ZION0110	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/12/77-06/19/90	12	2	
ZION0111	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/26/86-08/26/86	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0112	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/12/77-11/12/77	0	1	
ZION0113	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	1	4	
ZION0114	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/86-07/15/86	0	1	
ZION0115	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/05/88-06/28/93	4	3	
ZION0116	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/28/87-07/28/87	0	1	
ZION0117	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/87-09/18/87	0	1	
ZION0118	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/11/86-09/11/86	0	1	
ZION0119	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/23/76-07/23/76	0	1	
ZION0120	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/80-07/17/80	0	1	
ZION0121	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/87-09/18/87	0	1	
ZION0122	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	0	1	
ZION0123	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/20/80-07/20/80	0	1	
ZION0125	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/20/81	0	1	
ZION0126	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	0	1	
ZION0128	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/19/80-07/19/80	0	1	
ZION0129	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/11/82-06/11/82	0	1	
ZION0130	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	0	1	
ZION0131	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/80-07/05/80	0	1	
ZION0132	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/23/86-08/23/86	0	1	
ZION0136	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/19/80-07/19/80	0	1	
ZION0137	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-11/10/93	16	40	
ZION0138	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-10/31/84	11	5	
ZION0142	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/02/80-07/02/80	0	1	
ZION0143	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/88-05/04/89	0	4	
ZION0144	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/02/80-07/02/80	0	1	
ZION0145	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	0	2	
ZION0146	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/88-05/04/89	0	4	
ZION0147	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	0	2	
ZION0149	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	1	3	
ZION0150	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/88-05/03/89	0	4	
ZION0153	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/25/88-01/25/88	0	1	
ZION0154	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/28/88-05/04/89	0	3	
ZION0156	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	0	4	
ZION0161	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/26/88-05/03/89	0	4	
ZION0162	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/86-09/18/86	0	1	
ZION0163	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	0	1	
ZION0164	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	0	1	
ZION0165	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/28/88-05/01/89	0	3	
ZION0166	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/07/81-04/07/81	0	1	
ZION0167	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/13/77-08/05/77	0	2	
ZION0168	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/17/75-05/16/77	1	3	
ZION0177	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/18/92-03/12/96	3	14	
ZION0178	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/90-07/31/96	6	20	
ZION0180	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	0	5	
ZION0182	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/07/77-12/07/77	0	1	
ZION0183	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	4	
ZION0184	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	0	1	
ZION0185	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/25/85-01/17/90	4	5	
ZION0186	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/82-12/11/96	14	101	
ZION0187	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	4	
ZION0188	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	5	
ZION0189	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	0	3	
ZION0192	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	5	
ZION0194	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/80-07/15/80	0	1	
ZION0197	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	1	5	
ZION0198	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	0	1	
ZION0199	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/03/70-09/03/70	0	1	
ZION0200	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	0	1	
ZION0201	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/17/78-11/12/89	11	4	
ZION0202	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/28/75-12/28/75	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0203	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	1	4	
ZION0204	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-08/17/81	0	1	
ZION0205	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/18/79-04/14/82	2	11	
ZION0206	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/28/79	0	2	
ZION0207	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/80-07/13/80	0	1	
ZION0208	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	0	1	
ZION0209	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	0	1	
ZION0210	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/09/77-12/09/77	0	1	
ZION0211	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	0	1	
ZION0212	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/28/79	0	2	
ZION0213	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-08/17/81	0	1	
ZION0214	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0215	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/09/95	16	13	
ZION0216	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0218	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0219	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/80-07/13/80	0	1	
ZION0220	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	0	1	
ZION0221	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	0	1	
ZION0222	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/10/80-07/10/80	0	1	
ZION0223	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-08/23/82	1	4	
ZION0224	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0225	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0226	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/80-07/15/80	0	1	
ZION0227	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0228	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	0	1	
ZION0229	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	0	1	
ZION0230	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	0	1	
ZION0231	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/18/77-11/18/77	0	1	
ZION0232	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/06/88-09/06/88	0	1	
ZION0234	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	0	1	
ZION0235	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/07/88-03/07/88	0	1	
ZION0236	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/74-01/18/74	0	1	
ZION0237	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/14/78-06/14/78	0	1	
ZION0238	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/77-12/10/77	0	1	
ZION0239	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/11/82	0	2	
ZION0240	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/17/77-11/17/77	0	1	
ZION0241	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/03/96-12/11/96	0	11	
ZION0242	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	5	
ZION0244	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/16/77-09/04/77	0	3	
ZION0248	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	0	3	
ZION0249	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	0	5	
ZION0250	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	1	4	
ZION0251	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	0	1	
ZION0252	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	1	5	
ZION0254	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/80-06/21/80	0	1	
ZION0255	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	1	5	
ZION0256	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	14	79	
ZION0257	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/80-06/21/80	0	1	
ZION0258	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/66-09/01/82	15	7	
ZION0259	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/08/64-06/08/64	0	1	
ZION0260	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/80-07/12/80	0	1	
ZION0261	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/26/80-06/26/80	0	1	
ZION0263	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-09/02/82	1	3	
ZION0264	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/02/96-12/11/96	0	4	
ZION0265	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/16/77-11/16/77	0	1	
ZION0267	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/11/82-05/11/82	0	1	
ZION0268	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	4	
ZION0270	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/16/74	0	3	
ZION0272	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/16/74	0	3	
ZION0273	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-05/05/82	0	2	
ZION0276	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-12/11/96	16	84	T
ZION0277	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-04/23/85	4	8	
ZION0278	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	0	5	
ZION0279	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/83-06/21/83	0	1	
ZION0280	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	4	
ZION0281	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/25/66-03/25/66	0	1	
ZION0283	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	0	5	
ZION0284	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/80-07/12/80	0	1	
ZION0285	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/23/80-06/23/80	0	1	
ZION0288	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/11/96-12/11/96	0	1	
ZION0290	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/87-07/06/87	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0291	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/81-09/16/89	8	4	
ZION0293	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	3	
ZION0294	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/15/66-12/15/66	0	1	
ZION0295	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/78-04/12/78	0	1	
ZION0297	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/81-09/16/89	8	4	
ZION0299	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/28/80-04/24/96	15	54	
ZION0300	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/07/82-05/07/82	0	1	
ZION0301	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	3	
ZION0302	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/02/96-12/11/96	0	11	
ZION0303	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	0	5	
ZION0304	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	4	
ZION0305	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	1	5	
ZION0306	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	0	1	
ZION0307	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/75-02/03/75	0	1	
ZION0308	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/21/79-02/21/79	0	1	
ZION0309	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/64-03/16/64	0	1	
ZION0310	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-05/07/82	0	2	
ZION0312	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/25/93-06/25/93	0	1	
ZION0313	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/11/82	0	2	
ZION0314	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	0	1	
ZION0315	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/75-02/03/75	0	1	
ZION0316	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/03/96-12/11/96	0	11	
ZION0317	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/24/81	0	1	
ZION0318	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/31/81-08/23/82	0	5	
ZION0320	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	0	1	
ZION0321	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-08/23/82	1	4	
ZION0322	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/09/95	8	15	
ZION0323	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/07/65-10/07/65	0	1	
ZION0324	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/03/90	3	10	
ZION0326	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-05/22/91	4	14	
ZION0328	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-05/28/74	0	2	
ZION0330	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	14	101	
ZION0331	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/07/67-08/23/82	15	5	
ZION0332	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	0	5	
ZION0333	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/03/90	3	3	
ZION0334	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/09/96-10/30/96	0	4	
ZION0337	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/83-07/05/83	0	1	
ZION0338	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-01/09/89	11	4	
ZION0340	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/20/64-02/20/64	0	1	
ZION0341	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-05/06/82	0	2	
ZION0343	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/04/65-11/04/65	0	1	
ZION0344	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-05/04/82	0	2	
ZION0346	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/19/78-09/19/78	0	1	
ZION0348	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-05/04/82	0	2	
ZION0352	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/79-06/25/93	14	3	
ZION0353	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/04/82	0	2	
ZION0354	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/20/82-04/27/83	0	6	
ZION0355	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/10/64-03/10/64	0	1	
ZION0356	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/28/77-08/23/89	11	5	
ZION0358	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-12/13/77	0	2	
ZION0359	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/05/77-12/06/77	0	2	
ZION0360	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-11/11/80	2	2	
ZION0362	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-05/06/82	0	2	
ZION0363	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/21/79-02/21/79	0	1	
ZION0364	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0365	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0367	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/62-07/14/62	0	1	
ZION0370	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	02/18/67-02/18/67	0	1	
ZION0371	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/30/66-03/30/66	0	1	
ZION0372	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0373	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0374	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0375	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	0	1	
ZION0002	No	00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	0	1	
ZION0003	No	00931	SODIUM ADSORPTION RATIO	06/21/77-06/21/77	0	1	
ZION0004	No	00931	SODIUM ADSORPTION RATIO	10/20/81-10/20/81	0	1	
ZION0005	No	00931	SODIUM ADSORPTION RATIO	07/30/81-07/30/81	0	1	
ZION0006	No	00931	SODIUM ADSORPTION RATIO	08/19/81-08/31/82	1	4	
ZION0007	No	00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	0	1	
ZION0008	No	00931	SODIUM ADSORPTION RATIO	07/17/81-07/17/81	0	1	
ZION0009	No	00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	0	1	
ZION0010	No	00931	SODIUM ADSORPTION RATIO	04/20/81-08/24/81	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0011	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	0	1	
ZION0014	No	00931	SODIUM ADSORPTION RATIO	07/30/81-05/07/82	0	2	
ZION0015	No	00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	0	2	
ZION0016	No	00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	0	2	
ZION0017	No	00931	SODIUM ADSORPTION RATIO	07/30/81-05/07/82	0	2	
ZION0018	No	00931	SODIUM ADSORPTION RATIO	06/22/77-06/22/77	0	1	
ZION0019	No	00931	SODIUM ADSORPTION RATIO	06/22/77-06/22/77	0	1	
ZION0020	No	00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	0	1	
ZION0021	No	00931	SODIUM ADSORPTION RATIO	12/15/66-08/31/82	15	5	
ZION0023	No	00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	0	1	
ZION0024	No	00931	SODIUM ADSORPTION RATIO	10/17/81-10/17/81	0	1	
ZION0025	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	0	1	
ZION0027	No	00931	SODIUM ADSORPTION RATIO	08/29/81-08/29/81	0	1	
ZION0030	No	00931	SODIUM ADSORPTION RATIO	04/22/81-08/26/81	0	2	
ZION0031	No	00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	0	2	
ZION0033	No	00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	0	1	
ZION0037	No	00931	SODIUM ADSORPTION RATIO	10/12/81-08/31/82	0	3	
ZION0039	No	00931	SODIUM ADSORPTION RATIO	05/01/77-05/01/77	0	1	
ZION0043	No	00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	1	3	
ZION0044	No	00931	SODIUM ADSORPTION RATIO	11/16/81-11/16/81	0	1	
ZION0045	No	00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	1	3	
ZION0046	No	00931	SODIUM ADSORPTION RATIO	04/22/81-08/26/81	0	2	
ZION0048	No	00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	0	1	
ZION0050	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	0	1	
ZION0064	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	0	1	
ZION0067	No	00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	0	1	
ZION0073	No	00931	SODIUM ADSORPTION RATIO	04/22/81-03/04/82	0	2	
ZION0077	No	00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	0	2	
ZION0088	No	00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	0	1	
ZION0089	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/17/82	0	2	
ZION0092	No	00931	SODIUM ADSORPTION RATIO	05/03/82-08/20/82	0	2	
ZION0095	No	00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	0	1	
ZION0096	No	00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	0	2	
ZION0097	No	00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	0	2	
ZION0098	No	00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	0	2	
ZION0099	No	00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	0	2	
ZION0100	No	00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	0	1	
ZION0101	No	00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	0	2	
ZION0102	No	00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	0	2	
ZION0104	No	00931	SODIUM ADSORPTION RATIO	04/22/81-08/23/82	1	6	
ZION0110	No	00931	SODIUM ADSORPTION RATIO	11/12/77-11/12/77	0	1	
ZION0112	No	00931	SODIUM ADSORPTION RATIO	11/12/77-11/12/77	0	1	
ZION0113	No	00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	1	4	
ZION0125	No	00931	SODIUM ADSORPTION RATIO	08/20/81-08/20/81	0	1	
ZION0129	No	00931	SODIUM ADSORPTION RATIO	06/11/82-06/11/82	0	1	
ZION0138	No	00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	1	3	
ZION0145	Yes	00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	0	2	
ZION0147	Yes	00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	0	2	
ZION0149	No	00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	1	3	
ZION0156	Yes	00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	0	4	
ZION0158	Yes	00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	0	4	
ZION0168	No	00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	1	3	
ZION0173	Yes	00931	SODIUM ADSORPTION RATIO	05/04/82-08/23/82	0	2	
ZION0175	Yes	00931	SODIUM ADSORPTION RATIO	08/24/81-08/24/81	0	1	
ZION0182	No	00931	SODIUM ADSORPTION RATIO	12/07/77-12/07/77	0	1	
ZION0183	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	4	
ZION0187	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	4	
ZION0188	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	5	
ZION0189	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	4	
ZION0193	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	5	
ZION0197	No	00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	1	5	
ZION0199	Yes	00931	SODIUM ADSORPTION RATIO	09/03/70-09/03/70	0	1	
ZION0202	No	00931	SODIUM ADSORPTION RATIO	12/28/75-12/28/75	0	1	
ZION0203	No	00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	1	4	
ZION0204	No	00931	SODIUM ADSORPTION RATIO	08/17/81-08/17/81	0	1	
ZION0210	No	00931	SODIUM ADSORPTION RATIO	12/09/77-12/09/77	0	1	
ZION0213	No	00931	SODIUM ADSORPTION RATIO	08/17/81-08/17/81	0	1	
ZION0223	No	00931	SODIUM ADSORPTION RATIO	08/18/81-08/23/82	1	4	
ZION0229	No	00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	0	1	
ZION0231	No	00931	SODIUM ADSORPTION RATIO	11/18/77-11/18/77	0	1	
ZION0234	No	00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	0	1	
ZION0236	No	00931	SODIUM ADSORPTION RATIO	01/18/74-01/18/74	0	1	

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

Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0238	No	00931	SODIUM ADSORPTION RATIO	12/10/77-12/10/77	0	1	
ZION0239	No	00931	SODIUM ADSORPTION RATIO	08/17/81-05/11/82	0	2	
ZION0240	No	00931	SODIUM ADSORPTION RATIO	11/17/77-11/17/77	0	1	
ZION0242	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	5	
ZION0249	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	0	5	
ZION0250	No	00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	1	4	
ZION0251	No	00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	0	1	
ZION0252	No	00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	1	5	
ZION0255	No	00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	1	5	
ZION0258	No	00931	SODIUM ADSORPTION RATIO	12/06/66-09/01/82	15	7	
ZION0259	Yes	00931	SODIUM ADSORPTION RATIO	06/08/64-06/08/64	0	1	
ZION0263	No	00931	SODIUM ADSORPTION RATIO	08/18/81-09/02/82	1	3	
ZION0265	No	00931	SODIUM ADSORPTION RATIO	11/16/77-11/16/77	0	1	
ZION0267	No	00931	SODIUM ADSORPTION RATIO	05/11/82-05/11/82	0	1	
ZION0268	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	4	
ZION0273	No	00931	SODIUM ADSORPTION RATIO	08/25/81-05/05/82	0	2	
ZION0280	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	4	
ZION0281	No	00931	SODIUM ADSORPTION RATIO	03/25/66-03/25/66	0	1	
ZION0292	No	00931	SODIUM ADSORPTION RATIO	10/25/68-10/25/68	0	1	
ZION0293	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	3	
ZION0294	No	00931	SODIUM ADSORPTION RATIO	12/15/66-12/15/66	0	1	
ZION0296	No	00931	SODIUM ADSORPTION RATIO	10/28/68-10/28/68	0	1	
ZION0300	No	00931	SODIUM ADSORPTION RATIO	05/07/82-05/07/82	0	1	
ZION0301	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	3	
ZION0304	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	4	
ZION0305	No	00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	1	5	
ZION0307	No	00931	SODIUM ADSORPTION RATIO	02/03/75-02/03/75	0	1	
ZION0309	No	00931	SODIUM ADSORPTION RATIO	03/16/64-03/16/64	0	1	
ZION0310	No	00931	SODIUM ADSORPTION RATIO	08/28/81-05/07/82	0	2	
ZION0313	No	00931	SODIUM ADSORPTION RATIO	08/17/81-05/11/82	0	2	
ZION0315	No	00931	SODIUM ADSORPTION RATIO	02/03/75-02/03/75	0	1	
ZION0317	No	00931	SODIUM ADSORPTION RATIO	08/24/81-08/24/81	0	1	
ZION0318	No	00931	SODIUM ADSORPTION RATIO	08/31/81-08/23/82	0	5	
ZION0321	No	00931	SODIUM ADSORPTION RATIO	08/19/81-08/23/82	1	4	
ZION0323	No	00931	SODIUM ADSORPTION RATIO	10/07/65-10/07/65	0	1	
ZION0325	No	00931	SODIUM ADSORPTION RATIO	08/20/68-08/20/68	0	1	
ZION0331	No	00931	SODIUM ADSORPTION RATIO	03/07/67-08/23/82	15	5	
ZION0340	No	00931	SODIUM ADSORPTION RATIO	02/20/64-02/20/64	0	1	
ZION0341	No	00931	SODIUM ADSORPTION RATIO	08/24/81-05/06/82	0	2	
ZION0343	No	00931	SODIUM ADSORPTION RATIO	11/04/65-11/04/65	0	1	
ZION0344	No	00931	SODIUM ADSORPTION RATIO	08/18/81-05/04/82	0	2	
ZION0348	No	00931	SODIUM ADSORPTION RATIO	08/18/81-05/04/82	0	2	
ZION0353	No	00931	SODIUM ADSORPTION RATIO	08/17/81-05/04/82	0	2	
ZION0355	No	00931	SODIUM ADSORPTION RATIO	03/10/64-03/10/64	0	1	
ZION0362	No	00931	SODIUM ADSORPTION RATIO	08/20/81-05/06/82	0	2	
ZION0366	No	00931	SODIUM ADSORPTION RATIO	10/16/68-10/16/68	0	1	
ZION0367	No	00931	SODIUM ADSORPTION RATIO	07/14/62-07/14/62	0	1	
ZION0370	No	00931	SODIUM ADSORPTION RATIO	02/18/67-02/18/67	0	1	
ZION0371	No	00931	SODIUM ADSORPTION RATIO	03/30/66-03/30/66	0	1	
ZION0002	No	00932	SODIUM, PERCENT	07/16/81-07/16/81	0	1	
ZION0003	No	00932	SODIUM, PERCENT	06/21/77-06/21/77	0	1	
ZION0004	No	00932	SODIUM, PERCENT	10/20/81-10/20/81	0	1	
ZION0005	No	00932	SODIUM, PERCENT	07/30/81-07/30/81	0	1	
ZION0006	No	00932	SODIUM, PERCENT	08/19/81-08/31/82	1	4	
ZION0007	No	00932	SODIUM, PERCENT	07/16/81-07/16/81	0	1	
ZION0008	No	00932	SODIUM, PERCENT	07/17/81-07/17/81	0	1	
ZION0009	No	00932	SODIUM, PERCENT	07/16/81-07/16/81	0	1	
ZION0010	No	00932	SODIUM, PERCENT	04/20/81-08/24/81	0	2	
ZION0011	No	00932	SODIUM, PERCENT	08/28/81-08/28/81	0	1	
ZION0014	No	00932	SODIUM, PERCENT	07/30/81-05/07/82	0	2	
ZION0015	No	00932	SODIUM, PERCENT	08/19/81-05/03/82	0	2	
ZION0016	No	00932	SODIUM, PERCENT	08/19/81-05/03/82	0	2	
ZION0017	No	00932	SODIUM, PERCENT	07/30/81-05/07/82	0	2	
ZION0018	No	00932	SODIUM, PERCENT	06/22/77-06/22/77	0	1	
ZION0019	No	00932	SODIUM, PERCENT	06/22/77-06/22/77	0	1	
ZION0020	No	00932	SODIUM, PERCENT	05/03/82-05/03/82	0	1	
ZION0021	No	00932	SODIUM, PERCENT	08/20/81-08/31/82	1	4	
ZION0023	No	00932	SODIUM, PERCENT	05/03/82-05/03/82	0	1	
ZION0024	No	00932	SODIUM, PERCENT	10/17/81-10/17/81	0	1	
ZION0025	No	00932	SODIUM, PERCENT	08/28/81-08/28/81	0	1	
ZION0027	No	00932	SODIUM, PERCENT	08/29/81-08/29/81	0	1	
ZION0030	No	00932	SODIUM, PERCENT	04/22/81-08/26/81	0	2	

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Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0031	No	00932	SODIUM, PERCENT	08/19/81-05/03/82	0	2	
ZION0033	No	00932	SODIUM, PERCENT	05/03/82-05/03/82	0	1	
ZION0037	No	00932	SODIUM, PERCENT	10/12/81-08/31/82	0	3	
ZION0039	No	00932	SODIUM, PERCENT	05/01/77-05/01/77	0	1	
ZION0043	No	00932	SODIUM, PERCENT	08/20/81-08/23/82	1	3	
ZION0044	No	00932	SODIUM, PERCENT	11/16/81-11/16/81	0	1	
ZION0045	No	00932	SODIUM, PERCENT	08/20/81-08/23/82	1	3	
ZION0046	No	00932	SODIUM, PERCENT	04/22/81-08/26/81	0	2	
ZION0048	No	00932	SODIUM, PERCENT	07/15/81-07/15/81	0	1	
ZION0050	No	00932	SODIUM, PERCENT	08/28/81-08/28/81	0	1	
ZION0064	No	00932	SODIUM, PERCENT	08/28/81-08/28/81	0	1	
ZION0067	No	00932	SODIUM, PERCENT	07/15/81-07/15/81	0	1	
ZION0073	No	00932	SODIUM, PERCENT	04/22/81-03/04/82	0	2	
ZION0077	No	00932	SODIUM, PERCENT	08/20/81-05/03/82	0	2	
ZION0088	No	00932	SODIUM, PERCENT	07/15/81-07/15/81	0	1	
ZION0089	No	00932	SODIUM, PERCENT	08/28/81-08/17/82	0	2	
ZION0095	No	00932	SODIUM, PERCENT	07/15/81-07/15/81	0	1	
ZION0096	No	00932	SODIUM, PERCENT	08/28/81-06/07/82	0	2	
ZION0097	No	00932	SODIUM, PERCENT	08/28/81-06/07/82	0	2	
ZION0098	No	00932	SODIUM, PERCENT	08/28/81-06/07/82	0	2	
ZION0099	No	00932	SODIUM, PERCENT	08/28/81-06/07/82	0	2	
ZION0100	No	00932	SODIUM, PERCENT	08/28/81-08/28/81	0	1	
ZION0101	No	00932	SODIUM, PERCENT	08/20/81-05/03/82	0	2	
ZION0104	No	00932	SODIUM, PERCENT	04/22/81-08/23/82	1	6	
ZION0110	No	00932	SODIUM, PERCENT	11/12/77-11/12/77	0	1	
ZION0112	No	00932	SODIUM, PERCENT	11/12/77-11/12/77	0	1	
ZION0125	No	00932	SODIUM, PERCENT	08/20/81-08/20/81	0	1	
ZION0129	No	00932	SODIUM, PERCENT	06/11/82-06/11/82	0	1	
ZION0138	No	00932	SODIUM, PERCENT	04/23/81-08/16/82	1	3	
ZION0145	Yes	00932	SODIUM, PERCENT	08/19/81-05/04/82	0	2	
ZION0149	No	00932	SODIUM, PERCENT	04/23/81-08/16/82	1	3	
ZION0156	Yes	00932	SODIUM, PERCENT	08/19/81-05/04/82	0	4	
ZION0168	No	00932	SODIUM, PERCENT	04/23/81-08/16/82	1	3	
ZION0173	Yes	00932	SODIUM, PERCENT	05/04/82-08/23/82	0	2	
ZION0175	Yes	00932	SODIUM, PERCENT	08/24/81-08/24/81	0	1	
ZION0182	No	00932	SODIUM, PERCENT	12/07/77-12/07/77	0	1	
ZION0187	No	00932	SODIUM, PERCENT	08/24/81-08/23/82	0	4	
ZION0189	No	00932	SODIUM, PERCENT	08/24/81-08/23/82	0	4	
ZION0202	No	00932	SODIUM, PERCENT	12/28/75-12/28/75	0	1	
ZION0203	No	00932	SODIUM, PERCENT	08/24/81-09/01/82	1	4	
ZION0210	No	00932	SODIUM, PERCENT	12/09/77-12/09/77	0	1	
ZION0213	No	00932	SODIUM, PERCENT	08/17/81-08/17/81	0	1	
ZION0223	No	00932	SODIUM, PERCENT	08/18/81-08/23/82	1	4	
ZION0229	No	00932	SODIUM, PERCENT	05/24/72-05/24/72	0	1	
ZION0231	No	00932	SODIUM, PERCENT	11/18/77-11/18/77	0	1	
ZION0234	No	00932	SODIUM, PERCENT	05/24/72-05/24/72	0	1	
ZION0236	No	00932	SODIUM, PERCENT	01/18/74-01/18/74	0	1	
ZION0238	No	00932	SODIUM, PERCENT	12/10/77-12/10/77	0	1	
ZION0239	No	00932	SODIUM, PERCENT	08/17/81-05/11/82	0	2	
ZION0240	No	00932	SODIUM, PERCENT	11/17/77-11/17/77	0	1	
ZION0242	No	00932	SODIUM, PERCENT	08/24/81-08/23/82	0	5	
ZION0250	No	00932	SODIUM, PERCENT	08/24/81-09/01/82	1	4	
ZION0251	No	00932	SODIUM, PERCENT	05/24/72-05/24/72	0	1	
ZION0258	No	00932	SODIUM, PERCENT	08/24/81-09/01/82	1	4	
ZION0259	Yes	00932	SODIUM, PERCENT	06/08/64-06/08/64	0	1	
ZION0263	No	00932	SODIUM, PERCENT	08/18/81-09/02/82	1	3	
ZION0265	No	00932	SODIUM, PERCENT	11/16/77-11/16/77	0	1	
ZION0267	No	00932	SODIUM, PERCENT	05/11/82-05/11/82	0	1	
ZION0268	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	4	
ZION0273	No	00932	SODIUM, PERCENT	08/25/81-05/05/82	0	2	
ZION0280	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	4	
ZION0293	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	3	
ZION0300	No	00932	SODIUM, PERCENT	05/07/82-05/07/82	0	1	
ZION0301	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	3	
ZION0304	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	4	
ZION0305	No	00932	SODIUM, PERCENT	08/25/81-09/02/82	1	5	
ZION0307	No	00932	SODIUM, PERCENT	02/03/75-02/03/75	0	1	
ZION0310	No	00932	SODIUM, PERCENT	08/28/81-05/07/82	0	2	
ZION0313	No	00932	SODIUM, PERCENT	08/17/81-05/11/82	0	2	
ZION0315	No	00932	SODIUM, PERCENT	02/03/75-02/03/75	0	1	
ZION0317	No	00932	SODIUM, PERCENT	08/24/81-08/24/81	0	1	
ZION0318	No	00932	SODIUM, PERCENT	08/31/81-08/23/82	0	5	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0321	No	00932	SODIUM, PERCENT	08/19/81-08/23/82	1	4	
ZION0331	No	00932	SODIUM, PERCENT	08/31/81-08/23/82	0	4	
ZION0341	No	00932	SODIUM, PERCENT	08/24/81-05/06/82	0	2	
ZION0344	No	00932	SODIUM, PERCENT	08/18/81-05/04/82	0	2	
ZION0348	No	00932	SODIUM, PERCENT	08/18/81-05/04/82	0	2	
ZION0353	No	00932	SODIUM, PERCENT	08/17/81-05/04/82	0	2	
ZION0362	No	00932	SODIUM, PERCENT	08/20/81-05/06/82	0	2	
ZION0292	No	00933	SODIUM,PLUS POTASSIUM (MG/L)	10/25/68-10/25/68	0	1	
ZION0296	No	00933	SODIUM,PLUS POTASSIUM (MG/L)	10/28/68-10/28/68	0	1	
ZION0325	No	00933	SODIUM,PLUS POTASSIUM (MG/L)	08/20/68-08/20/68	0	1	
ZION0366	No	00933	SODIUM,PLUS POTASSIUM (MG/L)	10/16/68-10/16/68	0	1	
ZION0002	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	0	1	
ZION0003	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/21/77-06/21/77	0	1	
ZION0004	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/20/81-10/20/81	0	1	
ZION0005	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-07/30/81	0	1	
ZION0006	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-08/31/82	1	4	
ZION0007	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	0	1	
ZION0008	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/17/81-07/17/81	0	1	
ZION0009	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	0	1	
ZION0010	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/20/81-08/24/81	0	2	
ZION0011	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	0	1	
ZION0014	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-05/07/82	0	2	
ZION0015	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	0	2	
ZION0016	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	0	2	
ZION0017	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-05/07/82	0	2	
ZION0018	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/77-06/22/77	0	1	
ZION0019	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/77-06/22/77	0	1	
ZION0020	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	0	1	
ZION0021	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/15/66-08/31/82	15	5	
ZION0022	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	0	5	
ZION0023	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	0	1	
ZION0024	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/17/81-10/17/81	0	1	
ZION0025	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	0	1	
ZION0027	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/29/81-08/29/81	0	1	
ZION0028	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/09/77-05/27/86	8	3	
ZION0029	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/09/77-07/22/85	7	2	
ZION0030	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-08/26/81	0	2	
ZION0031	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	0	2	
ZION0032	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/96-12/10/96	0	7	
ZION0033	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	0	1	
ZION0035	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	0	5	
ZION0037	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/12/81-08/31/82	0	3	
ZION0039	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/01/77-05/01/77	0	1	
ZION0040	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/02/91-09/02/91	0	1	
ZION0042	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/28/93-06/16/94	0	8	
ZION0043	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	1	3	
ZION0044	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/16/81-09/13/86	4	2	
ZION0045	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	1	3	
ZION0046	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-08/26/81	0	2	
ZION0048	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	0	1	
ZION0049	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/24/86-06/24/86	0	1	
ZION0050	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/19/86	4	2	
ZION0054	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/13/86-07/13/86	0	1	
ZION0056	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/88-05/24/94	6	25	
ZION0058	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/11/86-07/16/86	0	2	
ZION0060	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/10/86-09/10/86	0	1	
ZION0062	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/12/86-07/12/86	0	1	
ZION0064	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	0	1	
ZION0067	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	0	1	
ZION0068	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/86-06/22/86	0	1	
ZION0070	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/13/86-07/13/86	0	1	
ZION0071	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/17/86-07/17/86	0	1	
ZION0073	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-03/04/82	0	2	
ZION0075	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/28/93-06/16/94	0	9	
ZION0077	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/12/86	4	3	
ZION0078	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/15/78-09/15/78	0	1	
ZION0080	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	0	1	
ZION0082	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	0	1	
ZION0083	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/86-06/22/86	0	1	
ZION0084	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/05/88-09/09/94	5	19	
ZION0086	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/22/86-08/22/86	0	1	
ZION0087	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/27/93-08/08/95	1	7	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0088	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	0	1	
ZION0089	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-07/14/86	4	3	
ZION0090	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/02/88-03/23/88	0	2	
ZION0091	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/86-06/18/86	0	1	
ZION0092	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-08/20/82	0	2	
ZION0095	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	0	1	
ZION0096	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	0	2	
ZION0097	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	0	2	
ZION0098	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	0	2	
ZION0099	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	0	2	
ZION0100	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	0	1	
ZION0101	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/86	4	3	
ZION0102	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-05/03/82	0	2	
ZION0103	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/86-09/14/86	0	1	
ZION0104	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-07/16/86	5	8	
ZION0108	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/86-07/15/86	0	1	
ZION0110	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/12/77-06/19/90	12	2	
ZION0111	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/26/86-08/26/86	0	1	
ZION0112	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/12/77-11/12/77	0	1	
ZION0113	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	1	4	
ZION0114	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/86-07/15/86	0	1	
ZION0115	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/05/88-06/28/93	4	3	
ZION0116	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/28/87-07/28/87	0	1	
ZION0117	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/87-09/18/87	0	1	
ZION0118	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/11/86-09/11/86	0	1	
ZION0119	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/23/76-07/23/76	0	1	
ZION0121	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/87-09/18/87	0	1	
ZION0125	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/20/81	0	1	
ZION0126	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	0	1	
ZION0129	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/11/82-06/11/82	0	1	
ZION0132	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/77-11/10/93	16	40	
ZION0138	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-10/31/84	11	5	
ZION0143	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/88-05/04/89	0	4	
ZION0145	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	0	2	
ZION0146	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/88-05/04/89	0	4	
ZION0147	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	0	2	
ZION0149	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	1	3	
ZION0150	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/88-05/03/89	0	4	
ZION0153	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/25/88-01/25/88	0	1	
ZION0154	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/28/88-05/04/89	0	3	
ZION0156	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	0	4	
ZION0161	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/26/88-05/03/89	0	4	
ZION0162	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/86-09/18/86	0	1	
ZION0165	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/28/88-05/01/89	0	3	
ZION0166	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/07/81-04/07/81	0	1	
ZION0167	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/13/77-08/05/77	0	2	
ZION0168	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/17/75-05/16/77	1	3	
ZION0177	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/18/92-03/12/96	3	14	
ZION0178	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/11/90-07/31/96	6	20	
ZION0180	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	0	5	
ZION0182	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/07/77-12/07/77	0	1	
ZION0183	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	4	
ZION0185	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/25/85-01/17/90	4	3	
ZION0186	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/26/82-12/11/96	14	102	
ZION0187	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	4	
ZION0188	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	5	
ZION0189	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	0	3	
ZION0192	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	5	
ZION0197	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	1	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0199	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/03/70-09/03/70	0	1	
ZION0201	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/17/78-11/12/89	11	4	
ZION0202	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/28/75-12/28/75	0	1	
ZION0203	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	1	4	
ZION0204	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-08/17/81	0	1	
ZION0205	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/18/79-04/14/82	2	11	
ZION0206	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/28/79	0	2	
ZION0210	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/09/77-12/09/77	0	1	
ZION0212	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/28/79	0	2	
ZION0213	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-08/17/81	0	1	
ZION0215	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/09/95	16	13	
ZION0223	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-08/23/82	1	4	
ZION0229	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	0	1	
ZION0231	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/18/77-11/18/77	0	1	
ZION0232	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/06/88-09/06/88	0	1	
ZION0234	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	0	1	
ZION0235	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/07/88-03/07/88	0	1	
ZION0236	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/74-01/18/74	0	1	
ZION0237	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/14/78-06/14/78	0	1	
ZION0238	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/77-12/10/77	0	1	
ZION0239	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/11/82	0	2	
ZION0240	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/17/77-11/17/77	0	1	
ZION0241	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/03/96-12/11/96	0	11	
ZION0242	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	5	
ZION0244	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	0	3	
ZION0246	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/16/77-09/04/77	0	3	
ZION0248	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	0	3	
ZION0249	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	0	5	
ZION0250	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	1	4	
ZION0251	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	0	1	
ZION0252	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	1	5	
ZION0255	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	1	5	
ZION0256	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	14	79	
ZION0258	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/13/66-09/01/82	15	5	
ZION0259	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/08/64-06/08/64	0	1	
ZION0263	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-09/02/82	1	3	
ZION0264	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/02/96-12/11/96	0	4	
ZION0265	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/16/77-11/16/77	0	1	
ZION0267	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/11/82-05/11/82	0	1	
ZION0268	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	4	
ZION0270	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/16/74	0	3	
ZION0272	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/16/74	0	3	
ZION0273	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-05/05/82	0	2	
ZION0276	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-12/11/96	16	83	T
ZION0277	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-04/23/85	4	8	
ZION0278	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	0	5	
ZION0279	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/21/83-06/21/83	0	1	
ZION0280	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	4	
ZION0281	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/25/66-03/25/66	0	1	
ZION0283	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	0	5	
ZION0288	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/11/96-12/11/96	0	1	
ZION0291	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/81-09/16/89	8	4	
ZION0293	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	3	
ZION0294	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/15/66-12/15/66	0	1	
ZION0295	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/12/78-04/12/78	0	1	
ZION0297	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/81-09/16/89	8	4	
ZION0299	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/28/80-04/24/96	15	54	
ZION0300	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/07/82-05/07/82	0	1	
ZION0301	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	3	
ZION0302	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/02/96-12/11/96	0	11	
ZION0303	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	0	5	
ZION0304	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	4	
ZION0305	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	1	5	
ZION0307	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/75-02/03/75	0	1	
ZION0308	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/21/79-02/21/79	0	1	
ZION0309	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/64-03/16/64	0	1	
ZION0310	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-05/07/82	0	2	
ZION0312	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/25/93-06/25/93	0	1	
ZION0313	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/11/82	0	2	
ZION0315	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/75-02/03/75	0	1	
ZION0316	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/03/96-12/11/96	0	11	
ZION0317	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/24/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0318	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/31/81-08/23/82	0	5	
ZION0321	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-08/23/82	1	4	
ZION0322	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/09/95	8	15	
ZION0323	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/07/65-10/07/65	0	1	
ZION0324	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/03/90	3	10	
ZION0326	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-05/22/91	4	14	
ZION0328	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-05/28/74	0	2	
ZION0330	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	14	101	
ZION0331	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/07/67-08/23/82	15	5	
ZION0332	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	0	5	
ZION0333	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/03/90	3	3	
ZION0334	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/09/96-10/30/96	0	4	
ZION0338	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/28/80-10/06/86	6	2	
ZION0340	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/20/64-02/20/64	0	1	
ZION0341	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-05/06/82	0	2	
ZION0343	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/04/65-11/04/65	0	1	
ZION0344	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-05/04/82	0	2	
ZION0346	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/19/78-09/19/78	0	1	
ZION0348	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-05/04/82	0	2	
ZION0352	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/79-06/25/93	14	3	
ZION0353	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/04/82	0	2	
ZION0354	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/20/82-04/27/83	0	6	
ZION0355	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/10/64-03/10/64	0	1	
ZION0356	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/28/77-08/23/89	11	5	
ZION0358	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/77-12/13/77	0	2	
ZION0359	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/05/77-12/06/77	0	2	
ZION0360	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/77-11/11/80	2	2	
ZION0362	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-05/06/82	0	2	
ZION0363	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/21/79-02/21/79	0	1	
ZION0364	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0365	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0367	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/62-07/14/62	0	1	
ZION0370	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/18/67-02/18/67	0	1	
ZION0371	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/30/66-03/30/66	0	1	
ZION0372	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0373	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0374	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0375	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	0	1	
ZION0002	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	0	1	
ZION0003	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/21/77-06/21/77	0	1	
ZION0004	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/20/81-10/20/81	0	1	
ZION0005	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-07/30/81	0	1	
ZION0006	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-08/31/82	1	4	
ZION0007	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	0	1	
ZION0008	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/17/81-07/17/81	0	1	
ZION0009	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	0	1	
ZION0010	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/20/81-08/24/81	0	2	
ZION0011	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	0	1	
ZION0014	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-05/07/82	0	2	
ZION0015	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	0	2	
ZION0016	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	0	2	
ZION0017	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-05/07/82	0	2	
ZION0018	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/77-06/22/77	0	1	
ZION0019	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/77-06/22/77	0	1	
ZION0020	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	0	1	
ZION0021	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/15/66-08/31/82	15	5	
ZION0022	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	0	5	
ZION0023	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	0	1	
ZION0024	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/17/81-10/17/81	0	1	
ZION0025	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	0	1	
ZION0027	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/29/81-08/29/81	0	1	
ZION0030	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-08/26/81	0	2	
ZION0031	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	0	2	
ZION0033	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	0	1	
ZION0035	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	0	5	
ZION0037	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/12/81-08/31/82	0	3	
ZION0039	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/01/77-05/01/77	0	1	
ZION0043	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/23/82	1	3	
ZION0044	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/16/81-09/13/86	4	2	
ZION0045	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/23/82	1	3	
ZION0046	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-08/26/81	0	2	
ZION0048	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0049	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/24/86-06/24/86	0	1	
ZION0050	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/19/86	4	2	
ZION0054	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/13/86-07/13/86	0	1	
ZION0058	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/11/86-07/16/86	0	2	
ZION0060	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/10/86-09/10/86	0	1	
ZION0062	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/12/86-07/12/86	0	1	
ZION0064	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	0	1	
ZION0067	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	0	1	
ZION0068	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/86-06/22/86	0	1	
ZION0070	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/13/86-07/13/86	0	1	
ZION0071	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/17/86-07/17/86	0	1	
ZION0073	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-03/04/82	0	2	
ZION0077	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-06/12/86	4	3	
ZION0083	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/86-06/22/86	0	1	
ZION0086	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/22/86-08/22/86	0	1	
ZION0088	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	0	1	
ZION0089	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-07/14/86	4	3	
ZION0091	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/18/86-06/18/86	0	1	
ZION0095	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	0	1	
ZION0096	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	0	2	
ZION0097	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	0	2	
ZION0098	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	0	2	
ZION0099	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	0	2	
ZION0100	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	0	1	
ZION0101	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-06/21/86	4	3	
ZION0103	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/14/86-09/14/86	0	1	
ZION0104	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-07/16/86	5	8	
ZION0108	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/86-07/15/86	0	1	
ZION0110	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/12/77-06/19/90	12	2	
ZION0111	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/26/86-08/26/86	0	1	
ZION0112	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/12/77-11/12/77	0	1	
ZION0114	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/86-07/15/86	0	1	
ZION0116	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/28/87-07/28/87	0	1	
ZION0117	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/87-09/18/87	0	1	
ZION0118	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/11/86-09/11/86	0	1	
ZION0121	No	00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/87-09/18/87	0	1	
ZION0125	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/20/81	0	1	
ZION0129	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/11/82-06/11/82	0	1	
ZION0132	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/23/86-08/23/86	0	1	
ZION0137	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/77-09/15/87	10	32	
ZION0138	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	1	3	
ZION0140	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	03/01/77-05/03/77	0	2	
ZION0141	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-10/31/84	11	5	
ZION0145	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/04/82	0	2	
ZION0149	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	1	3	
ZION0156	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/04/82	0	4	
ZION0162	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/86-09/18/86	0	1	
ZION0168	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	1	3	
ZION0173	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	05/04/82-08/23/82	0	2	
ZION0174	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	0	5	
ZION0175	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/24/81	0	1	
ZION0180	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	0	4	
ZION0181	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	0	5	
ZION0182	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/07/77-12/07/77	0	1	
ZION0186	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/26/82-10/18/89	7	42	
ZION0187	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	0	4	
ZION0189	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	0	4	
ZION0190	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	0	3	
ZION0192	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/19/79-10/18/89	10	54	
ZION0199	Yes	00940	CHLORIDE,TOTAL IN WATER MG/L	09/03/70-09/03/70	0	1	
ZION0202	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/28/75-12/28/75	0	1	
ZION0203	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-09/01/82	1	4	
ZION0205	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/18/79-04/14/82	2	11	
ZION0206	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	0	2	
ZION0210	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/09/77-12/09/77	0	1	
ZION0212	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	0	2	
ZION0213	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-08/17/81	0	1	
ZION0215	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	0	6	
ZION0223	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-08/23/82	1	4	
ZION0229	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	0	1	
ZION0231	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/18/77-11/18/77	0	1	
ZION0234	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0236	No	00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/74-01/18/74	0	1	
ZION0238	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/10/77-12/10/77	0	1	
ZION0239	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/11/82	0	2	
ZION0240	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/17/77-11/17/77	0	1	
ZION0242	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	0	5	
ZION0244	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	0	3	
ZION0248	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	0	3	
ZION0250	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-09/01/82	1	4	
ZION0251	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	0	1	
ZION0256	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	7	46	
ZION0258	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/06/66-09/01/82	15	7	
ZION0263	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-09/02/82	1	3	
ZION0265	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/16/77-11/16/77	0	1	
ZION0267	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/11/82-05/11/82	0	1	
ZION0268	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	4	
ZION0270	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/16/74	0	3	
ZION0272	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/16/74	0	3	
ZION0273	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-05/05/82	0	2	
ZION0276	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-10/18/89	9	51	
ZION0277	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-04/23/85	4	8	
ZION0278	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	0	5	
ZION0279	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/21/83-06/21/83	0	1	
ZION0280	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	4	
ZION0281	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/25/66-03/25/66	0	1	
ZION0283	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	0	5	
ZION0292	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/25/68-02/27/70	1	2	
ZION0293	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	3	
ZION0294	No	00940	CHLORIDE,TOTAL IN WATER MG/L	12/15/66-12/15/66	0	1	
ZION0296	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/28/68-10/28/68	0	1	
ZION0299	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/28/80-04/13/89	8	38	
ZION0300	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/07/82-05/07/82	0	1	
ZION0301	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	3	
ZION0303	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	0	5	
ZION0304	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	4	
ZION0305	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	1	5	
ZION0307	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/03/75-02/03/75	0	1	
ZION0308	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/21/79-02/21/79	0	1	
ZION0309	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/16/64-03/16/64	0	1	
ZION0310	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-05/07/82	0	2	
ZION0311	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/14/77-08/05/77	0	2	
ZION0313	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/11/82	0	2	
ZION0315	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/03/75-02/03/75	0	1	
ZION0317	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/24/81	0	1	
ZION0318	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/31/81-08/23/82	0	5	
ZION0321	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-08/23/82	1	4	
ZION0322	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	0	8	
ZION0323	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/07/65-10/07/65	0	1	
ZION0324	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	0	6	
ZION0325	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/68-08/20/68	0	1	
ZION0326	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	0	6	
ZION0328	No	00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-05/28/74	0	2	
ZION0330	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	7	44	
ZION0331	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/07/67-08/23/82	15	5	
ZION0332	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	0	5	
ZION0333	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-10/05/88	2	2	
ZION0335	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/10/68-10/10/68	0	1	
ZION0336	No	00940	CHLORIDE,TOTAL IN WATER MG/L	06/14/77-06/14/77	0	1	
ZION0339	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/24/68-10/24/68	0	1	
ZION0340	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/20/64-10/30/68	4	2	
ZION0341	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-05/06/82	0	2	
ZION0343	No	00940	CHLORIDE,TOTAL IN WATER MG/L	11/04/65-11/04/65	0	1	
ZION0344	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-05/04/82	0	2	
ZION0348	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-05/04/82	0	2	
ZION0350	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/12/82-05/12/82	0	1	
ZION0352	No	00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/79-05/24/79	0	1	
ZION0353	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/04/82	0	2	
ZION0354	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/20/82-04/27/83	0	6	
ZION0355	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/10/64-03/10/64	0	1	
ZION0362	No	00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-05/06/82	0	2	
ZION0363	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/21/79-02/21/79	0	1	
ZION0366	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/16/68-10/16/68	0	1	
ZION0367	No	00940	CHLORIDE,TOTAL IN WATER MG/L	07/14/62-10/16/68	6	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0368	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/23/68-10/23/68	0	1	
ZION0369	No	00940	CHLORIDE,TOTAL IN WATER MG/L	10/23/68-10/23/68	0	1	
ZION0370	No	00940	CHLORIDE,TOTAL IN WATER MG/L	02/18/67-02/18/67	0	1	
ZION0371	No	00940	CHLORIDE,TOTAL IN WATER MG/L	03/30/66-10/16/68	2	2	
ZION0001	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/22/88-02/22/88	0	1	
ZION0012	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/21/89-07/21/89	0	1	
ZION0013	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/23/87-06/23/87	0	1	
ZION0028	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/09/77-05/27/86	8	4	
ZION0029	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/09/77-08/07/89	11	3	
ZION0032	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/96-12/10/96	0	7	
ZION0040	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/02/91-09/02/91	0	1	
ZION0042	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/28/93-06/16/94	0	8	
ZION0056	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/03/88-05/24/94	6	23	
ZION0075	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/28/93-06/16/94	0	9	
ZION0078	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/15/78-09/15/78	0	1	
ZION0080	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	0	1	
ZION0082	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	0	1	
ZION0084	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/05/88-09/09/94	5	18	
ZION0087	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/27/93-08/08/95	1	7	
ZION0090	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/02/88-03/23/88	0	2	
ZION0092	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/03/82-08/20/82	0	2	
ZION0102	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/20/81-05/03/82	0	2	
ZION0113	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/20/81-08/23/82	1	4	
ZION0115	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/05/88-06/28/93	4	3	
ZION0119	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/23/76-07/23/76	0	1	
ZION0126	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	0	1	
ZION0137	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-11/10/93	14	31	
ZION0141	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/31/84-10/31/84	0	1	
ZION0143	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/88-05/04/89	0	4	
ZION0146	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/88-05/04/89	0	4	
ZION0147	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/19/81-05/04/82	0	2	
ZION0150	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/88-05/03/89	0	4	
ZION0153	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	01/25/88-01/25/88	0	1	
ZION0154	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/17/88-05/04/89	0	4	
ZION0155	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/28/88-05/04/89	0	3	
ZION0158	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/19/81-05/04/82	0	4	
ZION0161	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/26/88-05/03/89	0	4	
ZION0165	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/28/88-05/01/89	0	3	
ZION0166	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/07/81-04/07/81	0	1	
ZION0167	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/13/77-08/05/77	0	2	
ZION0169	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/07/81-04/07/81	0	1	
ZION0176	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/17/75-05/16/77	1	3	
ZION0177	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/18/92-03/12/96	3	14	
ZION0178	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/11/90-07/31/96	6	19	
ZION0183	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	0	4	
ZION0185	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/83-01/17/90	6	6	
ZION0186	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/26/82-12/11/96	14	67	
ZION0188	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	0	5	
ZION0192	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/19/79-12/11/96	17	75	S
ZION0193	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	0	5	
ZION0195	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	0	2	
ZION0196	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	0	3	
ZION0197	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	1	5	
ZION0201	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/17/78-11/12/89	11	4	
ZION0204	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/17/81-08/17/81	0	1	
ZION0205	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/18/79-04/14/82	2	11	
ZION0206	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/28/79	0	2	
ZION0212	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/28/79	0	2	
ZION0215	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/09/95	16	13	
ZION0232	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/22/84-09/06/88	4	2	
ZION0235	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/07/88-03/07/88	0	1	
ZION0237	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/14/78-06/14/78	0	1	
ZION0241	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/96-12/11/96	0	11	
ZION0243	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	0	3	
ZION0246	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/16/77-09/04/77	0	3	
ZION0249	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	0	5	
ZION0252	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	1	5	
ZION0253	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	0	2	
ZION0255	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	1	5	
ZION0256	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	14	43	
ZION0259	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/08/64-06/08/64	0	1	
ZION0264	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/02/96-12/11/96	0	4	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0275	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	0	3	
ZION0276	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-12/11/96	16	48	
ZION0277	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-04/14/81	0	5	
ZION0279	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/21/83-06/21/83	0	1	
ZION0286	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	0	2	
ZION0288	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/11/96-12/11/96	0	1	
ZION0290	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/07/84-07/06/87	3	2	
ZION0291	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/81-09/16/89	8	4	
ZION0295	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/12/78-03/12/86	7	2	
ZION0297	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/81-09/16/89	8	4	
ZION0299	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/28/80-04/24/96	15	30	
ZION0302	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/02/96-12/11/96	0	11	
ZION0308	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-02/21/79	0	1	
ZION0312	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/25/93-06/25/93	0	1	
ZION0316	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/96-12/11/96	0	11	
ZION0322	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/08/91-08/09/95	4	6	
ZION0324	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-08/03/90	0	1	
ZION0326	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-05/22/91	0	3	
ZION0330	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	14	67	
ZION0333	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-08/03/90	0	1	
ZION0334	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/09/96-10/30/96	0	4	
ZION0337	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/05/83-07/05/83	0	1	
ZION0338	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-01/09/89	11	4	
ZION0346	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/19/78-09/19/78	0	1	
ZION0352	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/24/79-06/25/93	14	3	
ZION0354	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/20/82-04/27/83	0	6	
ZION0356	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/28/77-08/23/89	11	5	
ZION0358	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-07/13/83	5	3	
ZION0359	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/05/77-12/06/77	0	2	
ZION0360	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-07/12/83	5	3	
ZION0363	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-02/21/79	0	1	
ZION0364	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0365	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0372	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0373	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0374	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0375	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	0	1	
ZION0002	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	0	1	
ZION0003	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/21/77-06/21/77	0	1	
ZION0004	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/20/81-10/20/81	0	1	
ZION0005	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-07/30/81	0	1	
ZION0006	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-08/31/82	1	4	
ZION0007	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	0	1	
ZION0008	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/17/81-07/17/81	0	1	
ZION0009	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	0	1	
ZION0010	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/20/81-08/24/81	0	2	
ZION0011	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	0	1	
ZION0014	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-05/07/82	0	2	
ZION0015	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	0	2	
ZION0016	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	0	2	
ZION0017	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-05/07/82	0	2	
ZION0018	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/77-06/22/77	0	1	
ZION0019	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/77-06/22/77	0	1	
ZION0020	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	0	1	
ZION0021	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/15/66-08/31/82	15	5	
ZION0022	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	0	5	
ZION0023	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	0	1	
ZION0024	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/17/81-10/17/81	0	1	
ZION0025	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	0	1	
ZION0027	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/29/81-08/29/81	0	1	
ZION0030	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-08/26/81	0	2	
ZION0031	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	0	2	
ZION0033	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	0	1	
ZION0035	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	0	5	
ZION0037	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/12/81-08/31/82	0	3	
ZION0039	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/01/77-05/01/77	0	1	
ZION0043	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/23/82	1	3	
ZION0044	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/16/81-09/13/86	4	2	
ZION0045	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/23/82	1	3	
ZION0046	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-08/26/81	0	2	
ZION0048	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	0	1	
ZION0049	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/24/86-06/24/86	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0050	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/19/86	4	2	
ZION0054	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/13/86-07/13/86	0	1	
ZION0058	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/11/86-07/16/86	0	2	
ZION0060	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/10/86-09/10/86	0	1	
ZION0062	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/12/86-07/12/86	0	1	
ZION0064	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	0	1	
ZION0067	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	0	1	
ZION0068	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/86-06/22/86	0	1	
ZION0070	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/13/86-07/13/86	0	1	
ZION0071	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/17/86-07/17/86	0	1	
ZION0073	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-03/04/82	0	2	
ZION0077	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/12/86	4	3	
ZION0083	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/86-06/22/86	0	1	
ZION0086	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/22/86-08/22/86	0	1	
ZION0088	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	0	1	
ZION0089	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-07/14/86	4	3	
ZION0091	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/18/86-06/18/86	0	1	
ZION0095	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	0	1	
ZION0096	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	0	2	
ZION0097	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	0	2	
ZION0098	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	0	2	
ZION0099	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	0	2	
ZION0100	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	0	1	
ZION0101	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/86	4	3	
ZION0103	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/14/86-09/14/86	0	1	
ZION0104	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-07/16/86	5	8	
ZION0108	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/86-07/15/86	0	1	
ZION0110	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/12/77-06/19/90	12	2	
ZION0111	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/26/86-08/26/86	0	1	
ZION0112	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/12/77-11/12/77	0	1	
ZION0114	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/86-07/15/86	0	1	
ZION0116	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/28/87-07/28/87	0	1	
ZION0117	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/87-09/18/87	0	1	
ZION0118	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/11/86-09/11/86	0	1	
ZION0121	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/87-09/18/87	0	1	
ZION0125	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/20/81	0	1	
ZION0129	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/11/82-06/11/82	0	1	
ZION0132	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/23/86-08/23/86	0	1	
ZION0138	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	1	3	
ZION0141	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/26/74	0	4	
ZION0145	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/04/82	0	2	
ZION0149	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	1	3	
ZION0156	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/04/82	0	4	
ZION0162	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/86-09/18/86	0	1	
ZION0168	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	1	3	
ZION0173	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	0	5	
ZION0175	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/24/81	0	1	
ZION0180	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	0	4	
ZION0181	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	0	5	
ZION0182	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/07/77-12/07/77	0	1	
ZION0187	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	0	4	
ZION0189	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	0	3	
ZION0199	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/03/70-09/03/70	0	1	
ZION0202	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/28/75-12/28/75	0	1	
ZION0203	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-09/01/82	1	4	
ZION0210	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/09/77-12/09/77	0	1	
ZION0213	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-08/17/81	0	1	
ZION0223	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-08/23/82	1	4	
ZION0229	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	
ZION0231	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/18/77-11/18/77	0	1	
ZION0234	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	
ZION0236	No	00945	SULFATE, TOTAL (MG/L AS SO4)	01/18/74-01/18/74	0	1	
ZION0238	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/10/77-12/10/77	0	1	
ZION0239	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/11/82	0	2	
ZION0240	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/17/77-11/17/77	0	1	
ZION0242	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	0	5	
ZION0244	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	0	3	
ZION0248	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	0	3	
ZION0250	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-09/01/82	1	4	
ZION0251	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0258	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/06/66-09/01/82	15	7	
ZION0263	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-09/02/82	1	3	
ZION0265	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/16/77-11/16/77	0	1	
ZION0267	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/11/82-05/11/82	0	1	
ZION0268	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	4	
ZION0270	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/16/74	0	3	
ZION0272	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/16/74	0	3	
ZION0273	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-05/05/82	0	2	
ZION0278	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	0	5	
ZION0280	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	4	
ZION0281	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/25/66-03/25/66	0	1	
ZION0283	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	0	5	
ZION0292	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/25/68-10/25/68	0	1	
ZION0293	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	3	
ZION0294	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/15/66-12/15/66	0	1	
ZION0296	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/28/68-10/28/68	0	1	
ZION0300	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/07/82-05/07/82	0	1	
ZION0301	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	3	
ZION0303	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	0	5	
ZION0304	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	4	
ZION0305	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	1	5	
ZION0307	No	00945	SULFATE, TOTAL (MG/L AS SO4)	02/03/75-02/03/75	0	1	
ZION0309	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/64-03/16/64	0	1	
ZION0310	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-05/07/82	0	2	
ZION0313	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/11/82	0	2	
ZION0315	No	00945	SULFATE, TOTAL (MG/L AS SO4)	02/03/75-02/03/75	0	1	
ZION0317	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/24/81	0	1	
ZION0318	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/31/81-08/23/82	0	5	
ZION0321	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-08/23/82	1	4	
ZION0323	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/07/65-10/07/65	0	1	
ZION0325	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/68-08/20/68	0	1	
ZION0328	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-05/28/74	0	2	
ZION0331	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/07/67-08/23/82	15	5	
ZION0332	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	0	5	
ZION0340	No	00945	SULFATE, TOTAL (MG/L AS SO4)	02/20/64-02/20/64	0	1	
ZION0341	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-05/06/82	0	2	
ZION0343	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/04/65-11/04/65	0	1	
ZION0344	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-05/04/82	0	2	
ZION0348	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-05/04/82	0	2	
ZION0353	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/04/82	0	2	
ZION0355	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/10/64-03/10/64	0	1	
ZION0362	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-05/06/82	0	2	
ZION0366	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/16/68-10/16/68	0	1	
ZION0367	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/14/62-07/14/62	0	1	
ZION0370	No	00945	SULFATE, TOTAL (MG/L AS SO4)	02/18/67-02/18/67	0	1	
ZION0371	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/30/66-03/30/66	0	1	
ZION0001	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/29/82-02/22/88	6	2	
ZION0012	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/21/89-07/21/89	0	1	
ZION0013	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/23/87-06/23/87	0	1	
ZION0028	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/09/77-05/27/86	8	4	
ZION0029	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/09/77-08/07/89	11	3	
ZION0032	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/96-12/10/96	0	7	
ZION0040	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/02/91-09/02/91	0	1	
ZION0042	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/28/93-06/16/94	0	8	
ZION0056	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/03/88-05/24/94	6	25	
ZION0075	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/28/93-06/16/94	0	9	
ZION0078	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/15/78-09/05/84	5	2	
ZION0080	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	5	2	
ZION0081	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/84-05/22/84	0	1	
ZION0082	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	5	2	
ZION0084	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/05/88-09/09/94	5	19	
ZION0087	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/27/93-08/08/95	1	7	
ZION0090	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/02/88-03/23/88	0	2	
ZION0092	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/03/82-08/20/82	0	2	
ZION0102	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/20/81-05/03/82	0	2	
ZION0113	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/20/81-08/23/82	1	4	
ZION0115	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/05/88-06/28/93	4	3	
ZION0119	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/23/76-07/23/76	0	1	
ZION0126	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	5	2	
ZION0137	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/18/77-11/10/93	16	40	
ZION0140	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/31/84-10/31/84	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0143	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/88-05/04/89	0	4	
ZION0146	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/88-05/04/89	0	4	
ZION0147	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/81-05/04/82	0	2	
ZION0150	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/88-05/03/89	0	4	
ZION0153	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/25/88-01/25/88	0	1	
ZION0154	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/17/88-05/04/89	0	4	
ZION0155	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/28/88-05/04/89	0	3	
ZION0158	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/81-05/04/82	0	4	
ZION0161	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/26/88-05/03/89	0	4	
ZION0165	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/28/88-05/01/89	0	3	
ZION0166	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/07/81-04/07/81	0	1	
ZION0167	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/13/77-08/05/77	0	2	
ZION0169	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/07/81-10/29/85	4	3	
ZION0176	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/17/75-05/16/77	1	3	
ZION0177	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/18/92-03/12/96	3	14	
ZION0178	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/11/90-07/31/96	6	20	
ZION0183	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	0	4	
ZION0185	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/83-01/17/90	6	6	
ZION0186	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/26/82-12/11/96	14	102	
ZION0188	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	0	5	
ZION0192	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/19/79-12/11/96	17	111	T,S
ZION0193	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	0	5	
ZION0195	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	0	2	
ZION0196	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	0	3	
ZION0197	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	1	5	
ZION0201	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/17/78-11/12/89	11	4	
ZION0204	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/17/81-08/17/81	0	1	
ZION0205	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/18/79-04/14/82	2	11	
ZION0206	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/28/79	0	2	
ZION0212	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/28/79	0	2	
ZION0215	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/09/95	16	13	
ZION0232	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/22/84-09/06/88	4	2	
ZION0235	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/07/88-03/07/88	0	1	
ZION0237	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/78-06/14/78	0	1	
ZION0241	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/96-12/11/96	0	11	
ZION0243	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	0	3	
ZION0246	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/16/77-09/04/77	0	3	
ZION0249	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	0	5	
ZION0252	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	1	5	
ZION0253	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	0	2	
ZION0255	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	1	5	
ZION0256	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	14	79	
ZION0259	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/08/64-06/08/64	0	1	
ZION0264	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/02/96-12/11/96	0	4	
ZION0275	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	0	3	
ZION0276	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-12/11/96	16	84	T
ZION0277	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-04/23/85	4	8	
ZION0279	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/21/83-06/21/83	0	1	
ZION0286	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	0	2	
ZION0288	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/11/96-12/11/96	0	1	
ZION0290	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/07/84-07/06/87	3	2	
ZION0291	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/81-09/16/89	8	4	
ZION0295	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/12/78-03/12/86	7	2	
ZION0297	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/81-09/16/89	8	4	
ZION0299	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/28/80-04/24/96	15	54	
ZION0302	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/02/96-12/11/96	0	11	
ZION0308	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/21/79-10/28/80	1	2	
ZION0311	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/77-08/05/77	0	2	
ZION0312	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/25/93-06/25/93	0	1	
ZION0316	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/96-12/11/96	0	11	
ZION0322	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/09/95	8	15	
ZION0324	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/03/90	3	10	
ZION0326	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-05/22/91	4	14	
ZION0330	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	14	101	
ZION0333	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/03/90	3	3	
ZION0334	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/09/96-10/30/96	0	4	
ZION0336	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/77-06/14/77	0	1	
ZION0337	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/05/83-07/05/83	0	1	
ZION0338	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-01/09/89	11	4	
ZION0345	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/84-08/09/85	1	2	
ZION0346	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/19/78-05/03/84	5	2	
ZION0352	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/24/79-06/25/93	14	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0354	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/20/82-04/27/83	0	6	
ZION0356	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/28/77-08/23/89	11	5	
ZION0358	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-07/13/83	5	3	
ZION0359	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/05/77-12/06/77	0	2	
ZION0360	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-07/12/83	5	3	
ZION0363	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/21/79-02/21/79	0	1	
ZION0364	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0365	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0372	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0373	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0374	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0375	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	0	1	
ZION0001	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/29/82-02/22/88	6	2	
ZION0002	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	0	1	
ZION0003	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/21/77-06/21/77	0	1	
ZION0004	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/20/81-10/20/81	0	1	
ZION0005	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-07/30/81	0	1	
ZION0006	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-08/31/82	1	4	
ZION0007	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	0	1	
ZION0008	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/17/81-07/17/81	0	1	
ZION0009	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	0	1	
ZION0010	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/20/81-08/24/81	0	2	
ZION0011	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	0	1	
ZION0012	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/21/89-07/21/89	0	1	
ZION0013	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/23/87-06/23/87	0	1	
ZION0014	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-05/07/82	0	2	
ZION0015	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	0	2	
ZION0016	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	0	2	
ZION0017	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-05/07/82	0	2	
ZION0018	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/77-06/22/77	0	1	
ZION0019	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/77-06/22/77	0	1	
ZION0020	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	0	1	
ZION0021	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/15/66-08/31/82	15	5	
ZION0022	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0023	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	0	1	
ZION0024	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/17/81-10/17/81	0	1	
ZION0025	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	0	1	
ZION0027	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/29/81-08/29/81	0	1	
ZION0028	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/09/77-05/27/86	8	4	
ZION0029	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/09/77-08/07/89	11	3	
ZION0030	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-08/26/81	0	2	
ZION0031	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	0	2	
ZION0033	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	0	1	
ZION0035	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0037	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/12/81-08/31/82	0	3	
ZION0039	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/01/77-05/01/77	0	1	
ZION0043	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	1	3	
ZION0044	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/16/81-09/13/86	4	2	
ZION0045	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	1	3	
ZION0046	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-08/26/81	0	2	
ZION0048	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	0	1	
ZION0049	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/24/86-06/24/86	0	1	
ZION0050	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/19/86	4	2	
ZION0054	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/13/86-07/13/86	0	1	
ZION0058	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/11/86-07/16/86	0	2	
ZION0060	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/10/86-09/10/86	0	1	
ZION0062	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/12/86-07/12/86	0	1	
ZION0064	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	0	1	
ZION0067	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	0	1	
ZION0068	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/86-06/22/86	0	1	
ZION0070	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/13/86-07/13/86	0	1	
ZION0071	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/17/86-07/17/86	0	1	
ZION0073	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-03/04/82	0	2	
ZION0077	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-06/12/86	4	3	
ZION0078	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/15/78-09/15/78	0	1	
ZION0080	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	0	1	
ZION0082	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	0	1	
ZION0083	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/86-06/22/86	0	1	
ZION0086	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/22/86-08/22/86	0	1	
ZION0088	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	0	1	
ZION0089	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-07/14/86	4	3	
ZION0091	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/86-06/18/86	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0092	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-08/20/82	0	2	
ZION0095	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	0	1	
ZION0096	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	0	2	
ZION0097	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	0	2	
ZION0098	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	0	2	
ZION0099	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	0	2	
ZION0100	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	0	1	
ZION0101	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-06/21/86	4	3	
ZION0102	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-05/03/82	0	2	
ZION0103	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/86-09/14/86	0	1	
ZION0104	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-07/16/86	5	8	
ZION0108	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/86-07/15/86	0	1	
ZION0110	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/12/77-06/19/90	12	2	
ZION0111	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/26/86-08/26/86	0	1	
ZION0112	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/12/77-11/12/77	0	1	
ZION0113	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	1	4	
ZION0114	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/86-07/15/86	0	1	
ZION0116	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/28/87-07/28/87	0	1	
ZION0117	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/87-09/18/87	0	1	
ZION0118	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/11/86-09/11/86	0	1	
ZION0119	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/23/76-07/23/76	0	1	
ZION0121	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/87-09/18/87	0	1	
ZION0125	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/20/81	0	1	
ZION0126	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	0	1	
ZION0129	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/11/82-06/11/82	0	1	
ZION0132	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/18/77-10/26/82	5	20	
ZION0138	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-07/26/74	0	4	
ZION0145	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	0	2	
ZION0149	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	1	3	
ZION0153	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/25/88-01/25/88	0	1	
ZION0156	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	0	4	
ZION0162	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/86-09/18/86	0	1	
ZION0166	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/07/81-04/07/81	0	1	
ZION0167	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/13/77-08/05/77	0	2	
ZION0168	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0175	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/17/75-05/16/77	1	3	
ZION0180	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0182	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/07/77-12/07/77	0	1	
ZION0183	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	4	
ZION0185	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/03/83-01/17/90	6	6	
ZION0186	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/26/82-10/26/82	0	1	
ZION0187	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	4	
ZION0188	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	5	
ZION0189	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0192	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/19/79-04/14/81	1	9	
ZION0193	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	5	
ZION0195	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	0	2	
ZION0196	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	0	3	
ZION0197	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	1	5	
ZION0199	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/03/70-09/03/70	0	1	
ZION0201	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/17/78-11/12/89	11	4	
ZION0202	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/28/75-12/28/75	0	1	
ZION0203	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	1	4	
ZION0204	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-08/17/81	0	1	
ZION0205	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/18/79-04/14/81	1	9	
ZION0206	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	0	2	
ZION0210	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/09/77-12/09/77	0	1	
ZION0212	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	0	2	
ZION0213	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-08/17/81	0	1	
ZION0215	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	0	6	
ZION0223	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-08/23/82	1	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0229	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	0	1	
ZION0231	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/18/77-11/18/77	0	1	
ZION0232	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/84-09/06/88	4	2	
ZION0234	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	0	1	
ZION0235	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/07/88-03/07/88	0	1	
ZION0236	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/18/74-01/18/74	0	1	
ZION0237	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/78-06/14/78	0	1	
ZION0238	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/77-12/10/77	0	1	
ZION0239	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/11/82	0	2	
ZION0240	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/17/77-11/17/77	0	1	
ZION0242	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	5	
ZION0243	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	0	3	
ZION0244	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/16/77-09/04/77	0	3	
ZION0248	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0249	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	0	5	
ZION0250	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	1	4	
ZION0251	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	0	1	
ZION0252	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	1	5	
ZION0253	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	0	2	
ZION0255	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	1	5	
ZION0258	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/13/66-09/01/82	15	5	
ZION0259	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/08/64-06/08/64	0	1	
ZION0263	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-09/02/82	1	3	
ZION0265	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/16/77-11/16/77	0	1	
ZION0267	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/11/82-05/11/82	0	1	
ZION0268	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	4	
ZION0270	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0272	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0273	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-05/05/82	0	2	
ZION0275	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	0	3	
ZION0276	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/17/80-04/14/81	0	5	
ZION0277	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/17/80-04/14/81	0	5	
ZION0278	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0280	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	4	
ZION0281	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/25/66-03/25/66	0	1	
ZION0283	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0286	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	0	2	
ZION0290	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/07/84-07/06/87	3	2	
ZION0291	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/81-09/16/89	8	4	
ZION0293	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	3	
ZION0294	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/15/66-12/15/66	0	1	
ZION0295	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/12/78-03/12/86	7	2	
ZION0297	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/81-09/16/89	8	4	
ZION0299	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/28/80-04/14/81	0	4	
ZION0300	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/07/82-05/07/82	0	1	
ZION0301	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	3	
ZION0303	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0304	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	4	
ZION0305	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	1	5	
ZION0307	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/75-02/03/75	0	1	
ZION0308	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/21/79-02/21/79	0	1	
ZION0309	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/16/64-03/16/64	0	1	
ZION0310	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-05/07/82	0	2	
ZION0311	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/77-08/05/77	0	2	
ZION0313	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/11/82	0	2	
ZION0315	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/75-02/03/75	0	1	
ZION0317	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/24/81	0	1	
ZION0318	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/31/81-08/23/82	0	5	
ZION0321	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-08/23/82	1	4	
ZION0323	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/07/65-10/07/65	0	1	
ZION0328	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	0	2	
ZION0331	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/07/67-08/23/82	15	5	
ZION0332	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	0	4	
ZION0336	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/77-06/14/77	0	1	
ZION0337	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/05/83-07/05/83	0	1	
ZION0338	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-01/09/89	11	4	
ZION0340	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/20/64-02/20/64	0	1	
ZION0341	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-05/06/82	0	2	
ZION0343	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/04/65-11/04/65	0	1	
ZION0344	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-05/04/82	0	2	
ZION0346	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/19/78-09/19/78	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0348	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-05/04/82	0	2	
ZION0352	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/79-05/24/79	0	1	
ZION0353	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/04/82	0	2	
ZION0355	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/10/64-03/10/64	0	1	
ZION0356	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/28/77-08/23/89	11	5	
ZION0358	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-07/13/83	5	3	
ZION0359	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/05/77-12/06/77	0	2	
ZION0360	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-07/12/83	5	3	
ZION0362	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-05/06/82	0	2	
ZION0363	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/21/79-02/21/79	0	1	
ZION0364	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0365	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0367	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/62-07/14/62	0	1	
ZION0370	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/18/67-02/18/67	0	1	
ZION0371	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/30/66-03/30/66	0	1	
ZION0372	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0373	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0374	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0375	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	0	1	
ZION0002	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	0	1	
ZION0003	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/21/77-06/21/77	0	1	
ZION0004	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/81-10/20/81	0	1	
ZION0005	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-07/30/81	0	1	
ZION0006	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-08/31/82	1	4	
ZION0007	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	0	1	
ZION0008	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/17/81-07/17/81	0	1	
ZION0009	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	0	1	
ZION0010	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/20/81-08/24/81	0	2	
ZION0011	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	0	1	
ZION0014	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-05/07/82	0	2	
ZION0015	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	0	2	
ZION0016	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	0	2	
ZION0017	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-05/07/82	0	2	
ZION0018	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/77-06/22/77	0	1	
ZION0019	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/77-06/22/77	0	1	
ZION0020	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	0	1	
ZION0021	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/15/66-08/31/82	15	5	
ZION0022	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0023	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	0	1	
ZION0024	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/17/81-10/17/81	0	1	
ZION0025	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	0	1	
ZION0027	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/29/81-08/29/81	0	1	
ZION0028	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/09/77-05/27/86	8	3	
ZION0029	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/09/77-07/22/85	7	2	
ZION0030	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-08/26/81	0	2	
ZION0031	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	0	2	
ZION0033	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	0	1	
ZION0035	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0037	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/12/81-08/31/82	0	3	
ZION0039	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/01/77-05/01/77	0	1	
ZION0042	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-06/16/94	0	7	
ZION0043	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	1	3	
ZION0044	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/16/81-09/13/86	4	2	
ZION0045	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	1	3	
ZION0046	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-08/26/81	0	2	
ZION0048	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	0	1	
ZION0049	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/24/86-06/24/86	0	1	
ZION0050	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/19/86	4	2	
ZION0054	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/13/86-07/13/86	0	1	
ZION0056	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-05/24/94	0	8	
ZION0058	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/11/86-07/16/86	0	2	
ZION0060	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/10/86-09/10/86	0	1	
ZION0062	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/12/86-07/12/86	0	1	
ZION0064	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	0	1	
ZION0067	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	0	1	
ZION0068	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/86-06/22/86	0	1	
ZION0070	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/13/86-07/13/86	0	1	
ZION0071	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/17/86-07/17/86	0	1	
ZION0073	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-03/04/82	0	2	
ZION0075	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/28/93-06/16/94	0	9	
ZION0077	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/12/86	4	3	
ZION0078	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/15/78-09/15/78	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0080	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	0	1	
ZION0082	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	0	1	
ZION0083	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/86-06/22/86	0	1	
ZION0084	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-09/09/94	1	10	
ZION0086	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/22/86-08/22/86	0	1	
ZION0087	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/27/93-08/08/95	1	7	
ZION0088	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	0	1	
ZION0089	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-07/14/86	4	3	
ZION0091	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/18/86-06/18/86	0	1	
ZION0092	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-08/20/82	0	2	
ZION0095	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	0	1	
ZION0096	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	0	2	
ZION0097	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	0	2	
ZION0098	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	0	2	
ZION0099	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	0	2	
ZION0100	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	0	1	
ZION0101	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/21/86	4	3	
ZION0102	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-05/03/82	0	2	
ZION0103	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/86-09/14/86	0	1	
ZION0104	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-07/16/86	5	8	
ZION0108	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/86-07/15/86	0	1	
ZION0110	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/12/77-06/19/90	12	2	
ZION0111	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/26/86-08/26/86	0	1	
ZION0112	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/12/77-11/12/77	0	1	
ZION0113	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	1	4	
ZION0114	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/86-07/15/86	0	1	
ZION0115	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/28/93-06/28/93	0	1	
ZION0116	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/28/87-07/28/87	0	1	
ZION0117	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/87-09/18/87	0	1	
ZION0118	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/11/86-09/11/86	0	1	
ZION0119	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/23/76-07/23/76	0	1	
ZION0121	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/87-09/18/87	0	1	
ZION0125	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/20/81	0	1	
ZION0126	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	0	1	
ZION0129	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/11/82-06/11/82	0	1	
ZION0132	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/23/86-08/23/86	0	1	
ZION0137	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/18/77-10/26/82	5	20	
ZION0138	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	1	3	
ZION0140	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/01/77-05/03/77	0	2	
ZION0141	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-07/26/74	0	4	
ZION0145	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	0	2	
ZION0147	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	0	2	
ZION0149	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	1	3	
ZION0153	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/25/88-01/25/88	0	1	
ZION0156	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	0	4	
ZION0158	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	0	4	
ZION0162	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/86-09/18/86	0	1	
ZION0166	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/07/81-04/07/81	0	1	
ZION0167	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/13/77-08/05/77	0	2	
ZION0168	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	1	3	
ZION0169	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/07/81-04/07/81	0	1	
ZION0173	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/04/82-08/23/82	0	2	
ZION0174	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0175	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/24/81	0	1	
ZION0176	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/17/75-05/16/77	1	3	
ZION0178	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/23/91-05/23/91	0	2	
ZION0180	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	3	
ZION0181	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0182	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/07/77-12/07/77	0	1	
ZION0183	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	4	
ZION0185	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/04/86-01/17/90	3	2	
ZION0186	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/26/82-10/26/82	0	1	
ZION0187	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	4	
ZION0188	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	5	
ZION0189	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	4	
ZION0190	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0192	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/19/79-04/14/81	1	9	
ZION0193	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	5	
ZION0197	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	1	5	
ZION0199	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/03/70-09/03/70	0	1	
ZION0201	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/17/78-11/12/89	11	4	
ZION0202	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/28/75-12/28/75	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0203	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	1	4	
ZION0204	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-08/17/81	0	1	
ZION0205	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/18/79-04/14/81	1	9	
ZION0206	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/28/79	0	2	
ZION0210	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/09/77-12/09/77	0	1	
ZION0212	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/28/79	0	2	
ZION0213	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-08/17/81	0	1	
ZION0215	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/14/91	12	10	
ZION0223	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-08/23/82	1	4	
ZION0229	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	0	1	
ZION0231	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/18/77-11/18/77	0	1	
ZION0232	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/06/88-09/06/88	0	1	
ZION0234	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	0	1	
ZION0235	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/07/88-03/07/88	0	1	
ZION0236	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/18/74-01/18/74	0	1	
ZION0237	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/14/78-06/14/78	0	1	
ZION0238	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/10/77-12/10/77	0	1	
ZION0239	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/11/82	0	2	
ZION0240	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/17/77-11/17/77	0	1	
ZION0242	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	5	
ZION0244	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0246	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/16/77-09/04/77	0	3	
ZION0248	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0249	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	0	5	
ZION0250	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	1	4	
ZION0251	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	0	1	
ZION0252	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	1	5	
ZION0255	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	1	5	
ZION0258	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/13/66-09/01/82	15	5	
ZION0259	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/08/64-06/08/64	0	1	
ZION0263	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-09/02/82	1	3	
ZION0265	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/16/77-11/16/77	0	1	
ZION0267	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/11/82-05/11/82	0	1	
ZION0268	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	4	
ZION0270	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0272	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0273	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-05/05/82	0	2	
ZION0276	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/17/80-04/14/81	0	5	
ZION0277	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/17/80-04/14/81	0	5	
ZION0278	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0280	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	4	
ZION0281	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/25/66-03/25/66	0	1	
ZION0283	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0291	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/81-09/16/89	8	4	
ZION0292	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/25/68-10/25/68	0	1	
ZION0293	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	3	
ZION0294	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/15/66-12/15/66	0	1	
ZION0295	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/12/78-04/12/78	0	1	
ZION0296	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/28/68-10/28/68	0	1	
ZION0297	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/81-09/16/89	8	4	
ZION0299	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/28/80-04/14/81	0	4	
ZION0300	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/07/82-05/07/82	0	1	
ZION0301	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	3	
ZION0303	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0304	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	4	
ZION0305	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	1	5	
ZION0307	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/03/75-02/03/75	0	1	
ZION0308	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/21/79-02/21/79	0	1	
ZION0309	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/64-03/16/64	0	1	
ZION0310	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-05/07/82	0	2	
ZION0313	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/11/82	0	2	
ZION0315	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/03/75-02/03/75	0	1	
ZION0317	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/24/81	0	1	
ZION0318	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/31/81-08/23/82	0	5	
ZION0321	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-08/23/82	1	4	
ZION0322	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/08/91-08/08/91	0	2	
ZION0325	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/68-08/20/68	0	1	
ZION0326	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/91-05/22/91	0	2	
ZION0328	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	0	2	
ZION0331	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/07/67-08/23/82	15	5	
ZION0332	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	0	4	
ZION0338	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-10/06/86	8	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0340	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/20/64-02/20/64	0	1	
ZION0341	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-05/06/82	0	2	
ZION0344	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-05/04/82	0	2	
ZION0346	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/19/78-09/19/78	0	1	
ZION0348	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-05/04/82	0	2	
ZION0352	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/79-05/24/79	0	1	
ZION0353	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/04/82	0	2	
ZION0355	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/10/64-03/10/64	0	1	
ZION0356	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/28/77-08/23/89	11	5	
ZION0358	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-12/13/77	0	2	
ZION0359	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/05/77-12/06/77	0	2	
ZION0360	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-11/11/80	2	2	
ZION0362	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-05/06/82	0	2	
ZION0363	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/21/79-02/21/79	0	1	
ZION0364	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0365	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0366	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/68-10/16/68	0	1	
ZION0367	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/62-07/14/62	0	1	
ZION0370	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	02/18/67-02/18/67	0	1	
ZION0372	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0373	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0374	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0375	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	0	1	
ZION0022	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	0	5	
ZION0028	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/17/78-05/17/78	0	1	
ZION0032	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	0	2	
ZION0035	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	0	5	
ZION0110	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-06/19/90	0	1	
ZION0119	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/26/74	0	4	
ZION0167	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/17/75-05/16/77	1	3	
ZION0177	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	11/10/93-03/12/96	2	12	
ZION0178	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/15/94-06/15/94	0	2	
ZION0180	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	0	5	
ZION0185	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/06/86-08/06/86	0	1	
ZION0186	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	4	25	
ZION0190	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	0	3	
ZION0192	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	4	24	
ZION0195	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	0	1	
ZION0196	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	0	1	
ZION0201	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/17/78-04/17/78	0	1	
ZION0202	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/28/75-12/28/75	0	1	
ZION0215	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/01/93-08/09/95	1	2	
ZION0223	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/23/82-08/23/82	0	1	
ZION0237	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/78-06/14/78	0	1	
ZION0241	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	0	3	
ZION0244	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/16/77-09/04/77	0	3	
ZION0248	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	0	3	
ZION0256	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	4	9	
ZION0263	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	0	1	
ZION0270	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/16/74	0	3	
ZION0272	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/16/74	0	3	
ZION0275	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	0	1	
ZION0276	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/92-10/30/96	4	8	
ZION0278	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	0	5	
ZION0283	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	0	5	
ZION0293	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	0	1	
ZION0295	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/12/78-04/12/78	0	1	
ZION0299	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/92-03/17/93	0	5	
ZION0301	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	0	1	
ZION0302	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	0	3	
ZION0303	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	0	5	
ZION0305	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	0	1	
ZION0311	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/77-08/05/77	0	2	
ZION0312	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/25/93-06/25/93	0	1	
ZION0316	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0322	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/09/95	2	2	
ZION0324	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/04/93	0	1	
ZION0326	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/04/93	0	1	
ZION0328	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-05/28/74	0	2	
ZION0330	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/19/92-10/30/96	4	23	
ZION0332	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	0	5	
ZION0334	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/09/96-10/30/96	0	3	
ZION0336	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/77-06/14/77	0	1	
ZION0352	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/25/93-06/25/93	0	1	
ZION0001	No	01002	ARSENIC, TOTAL (UG/L AS AS)	12/01/81-02/22/88	6	2	
ZION0012	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/21/89-07/21/89	0	1	
ZION0013	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/23/87-06/23/87	0	1	
ZION0028	No	01002	ARSENIC, TOTAL (UG/L AS AS)	10/19/82-05/27/86	3	2	
ZION0029	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/22/85-08/07/89	4	2	
ZION0040	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/02/91-09/02/91	0	1	
ZION0078	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/15/78-09/15/78	0	1	
ZION0080	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	0	1	
ZION0082	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	0	1	
ZION0126	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	10/17/78-07/31/91	12	30	
ZION0141	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01002	ARSENIC, TOTAL (UG/L AS AS)	04/07/81-04/07/81	0	1	
ZION0178	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/90-08/07/91	1	7	
ZION0185	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/03/83-01/17/90	6	4	
ZION0186	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/26/82-09/18/91	9	55	
ZION0192	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/19/79-09/18/91	12	64	
ZION0195	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	0	2	
ZION0196	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	0	3	
ZION0201	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/10/80-11/12/89	9	3	
ZION0205	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/79-04/14/82	2	11	
ZION0206	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/28/79	0	2	
ZION0212	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/28/79	0	2	
ZION0215	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/14/91	12	10	
ZION0232	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/22/84-09/06/88	4	2	
ZION0235	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/07/88-03/07/88	0	1	
ZION0243	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	0	3	
ZION0253	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	0	2	
ZION0256	No	01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	9	56	
ZION0275	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	0	3	
ZION0276	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-09/18/91	11	60	
ZION0277	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-04/14/81	0	5	
ZION0279	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/21/83-06/21/83	0	1	
ZION0286	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	0	2	
ZION0290	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/07/84-07/06/87	3	2	
ZION0291	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/06/81-09/16/89	8	4	
ZION0295	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/12/86-03/12/86	0	1	
ZION0297	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/06/81-09/16/89	8	4	
ZION0299	No	01002	ARSENIC, TOTAL (UG/L AS AS)	10/28/80-02/27/91	10	43	
ZION0308	No	01002	ARSENIC, TOTAL (UG/L AS AS)	02/21/79-02/21/79	0	1	
ZION0322	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/08/91	4	10	
ZION0324	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/03/90	3	9	
ZION0326	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-05/22/91	4	12	
ZION0330	No	01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	9	55	
ZION0333	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/03/90	3	3	
ZION0337	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/05/83-07/05/83	0	1	
ZION0338	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/80-01/09/89	8	3	
ZION0346	No	01002	ARSENIC, TOTAL (UG/L AS AS)	09/19/78-09/19/78	0	1	
ZION0352	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/24/79-05/24/79	0	1	
ZION0354	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/20/82-04/27/83	0	6	
ZION0356	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-08/23/89	9	4	
ZION0358	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/13/83-07/13/83	0	1	
ZION0360	No	01002	ARSENIC, TOTAL (UG/L AS AS)	11/11/80-07/12/83	2	2	
ZION0363	No	01002	ARSENIC, TOTAL (UG/L AS AS)	02/21/79-02/21/79	0	1	
ZION0364	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0365	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0372	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0373	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0374	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0375	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	0	1	
ZION0195	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0196	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	0	1	
ZION0275	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	0	1	
ZION0022	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	0	5	
ZION0028	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	11/09/77-05/17/78	0	2	
ZION0029	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	11/09/77-11/09/77	0	1	
ZION0032	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	0	2	
ZION0035	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	0	5	
ZION0110	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-06/19/90	0	1	
ZION0119	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/26/74	0	4	
ZION0162	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	09/18/86-09/18/86	0	1	
ZION0167	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	09/17/75-05/16/77	1	3	
ZION0177	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	11/10/93-03/12/96	2	12	
ZION0178	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/15/94-07/31/96	2	3	
ZION0180	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	0	5	
ZION0183	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	0	1	
ZION0185	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/06/86-08/06/86	0	1	
ZION0186	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	4	25	
ZION0188	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	0	3	
ZION0192	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	4	24	
ZION0193	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	0	1	
ZION0201	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/17/78-04/17/78	0	1	
ZION0202	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/28/75-12/28/75	0	1	
ZION0237	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/14/78-06/14/78	0	1	
ZION0241	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	0	3	
ZION0244	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/16/77-09/04/77	0	3	
ZION0248	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	0	3	
ZION0249	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	0	1	
ZION0255	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	0	1	
ZION0256	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	4	9	
ZION0270	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/16/74	0	3	
ZION0272	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/16/74	0	3	
ZION0276	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/20/92-10/30/96	4	8	
ZION0278	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	0	5	
ZION0283	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	0	5	
ZION0295	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/12/78-04/12/78	0	1	
ZION0299	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/20/92-03/17/93	0	5	
ZION0302	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	0	3	
ZION0303	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	0	5	
ZION0311	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/14/77-08/05/77	0	2	
ZION0312	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/25/93-06/25/93	0	1	
ZION0316	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	0	3	
ZION0328	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-05/28/74	0	2	
ZION0330	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	05/19/92-10/30/96	4	23	
ZION0332	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	0	5	
ZION0334	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	07/09/96-10/30/96	0	3	
ZION0352	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	06/25/93-06/25/93	0	1	
ZION0356	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	11/28/77-11/28/77	0	1	
ZION0358	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/77-12/13/77	0	2	
ZION0359	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/05/77-12/06/77	0	2	
ZION0360	No	01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/77-12/06/77	0	1	
ZION0001	No	01007	BARIUM, TOTAL (UG/L AS BA)	12/01/81-02/22/88	6	2	
ZION0012	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/21/89-07/21/89	0	1	
ZION0013	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/23/87-06/23/87	0	1	
ZION0028	No	01007	BARIUM, TOTAL (UG/L AS BA)	10/19/82-05/27/86	3	2	
ZION0029	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/22/85-08/07/89	4	2	
ZION0040	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/02/91-09/02/91	0	1	
ZION0078	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/15/78-09/15/78	0	1	
ZION0080	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	0	1	
ZION0082	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	0	1	
ZION0126	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	09/06/78-07/31/91	12	31	
ZION0141	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	04/07/81-04/07/81	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0169	Yes	01007	BARIUM, TOTAL (UG/L AS BA)	04/07/81-04/07/81	0	1	
ZION0178	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/11/90-08/07/91	1	7	
ZION0185	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/03/83-01/17/90	6	4	
ZION0186	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/26/82-09/18/91	9	55	
ZION0192	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/19/79-09/18/91	12	64	
ZION0201	No	01007	BARIUM, TOTAL (UG/L AS BA)	11/10/80-11/12/89	9	3	
ZION0205	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/18/79-04/14/82	2	11	
ZION0206	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/28/79	0	2	
ZION0212	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/28/79	0	2	
ZION0215	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/14/91	12	10	
ZION0232	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/22/84-09/06/88	4	2	
ZION0235	No	01007	BARIUM, TOTAL (UG/L AS BA)	03/07/88-03/07/88	0	1	
ZION0256	No	01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	9	56	
ZION0276	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-09/18/91	11	60	
ZION0277	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-04/14/81	0	5	
ZION0279	No	01007	BARIUM, TOTAL (UG/L AS BA)	06/21/83-06/21/83	0	1	
ZION0290	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/07/84-07/06/87	3	2	
ZION0291	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/06/81-09/16/89	8	4	
ZION0295	No	01007	BARIUM, TOTAL (UG/L AS BA)	03/12/86-03/12/86	0	1	
ZION0297	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/06/81-09/16/89	8	4	
ZION0299	No	01007	BARIUM, TOTAL (UG/L AS BA)	10/28/80-02/27/91	10	43	
ZION0308	No	01007	BARIUM, TOTAL (UG/L AS BA)	02/21/79-02/21/79	0	1	
ZION0322	No	01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/08/91	4	10	
ZION0324	No	01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/03/90	3	9	
ZION0326	No	01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-05/22/91	4	12	
ZION0330	No	01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	9	55	
ZION0333	No	01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/03/90	3	3	
ZION0337	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/05/83-07/05/83	0	1	
ZION0338	No	01007	BARIUM, TOTAL (UG/L AS BA)	04/28/80-01/09/89	8	3	
ZION0346	No	01007	BARIUM, TOTAL (UG/L AS BA)	09/19/78-09/19/78	0	1	
ZION0352	No	01007	BARIUM, TOTAL (UG/L AS BA)	05/24/79-05/24/79	0	1	
ZION0354	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/20/82-04/27/83	0	6	
ZION0356	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-08/23/89	9	4	
ZION0358	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/13/83-07/13/83	0	1	
ZION0360	No	01007	BARIUM, TOTAL (UG/L AS BA)	11/11/80-07/12/83	2	2	
ZION0363	No	01007	BARIUM, TOTAL (UG/L AS BA)	02/21/79-02/21/79	0	1	
ZION0364	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0365	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0372	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0373	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0374	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0375	No	01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	0	1	
ZION0162	Yes	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	09/18/86-09/18/86	0	1	
ZION0183	No	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	0	1	
ZION0188	No	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	0	1	
ZION0193	No	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	0	1	
ZION0249	No	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	0	1	
ZION0255	No	01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	0	1	
ZION0183	No	01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	0	1	
ZION0188	No	01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	0	1	
ZION0193	No	01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	0	1	
ZION0249	No	01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	0	1	
ZION0255	No	01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	0	1	
ZION0003	No	01020	BORON, DISSOLVED (UG/L AS B)	06/21/77-06/21/77	0	1	
ZION0004	No	01020	BORON, DISSOLVED (UG/L AS B)	10/20/81-10/20/81	0	1	
ZION0005	No	01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	0	1	
ZION0006	No	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-08/31/82	1	4	
ZION0010	No	01020	BORON, DISSOLVED (UG/L AS B)	04/20/81-08/24/81	0	2	
ZION0011	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0014	No	01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	0	1	
ZION0015	No	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	0	2	
ZION0016	No	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	0	2	
ZION0017	No	01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	0	1	
ZION0018	No	01020	BORON, DISSOLVED (UG/L AS B)	06/22/77-06/22/77	0	1	
ZION0019	No	01020	BORON, DISSOLVED (UG/L AS B)	06/22/77-06/22/77	0	1	
ZION0020	No	01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	0	1	
ZION0021	No	01020	BORON, DISSOLVED (UG/L AS B)	12/15/66-08/31/82	15	5	
ZION0022	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	0	5	
ZION0023	No	01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	0	1	
ZION0024	No	01020	BORON, DISSOLVED (UG/L AS B)	10/17/81-10/17/81	0	1	
ZION0025	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0027	No	01020	BORON, DISSOLVED (UG/L AS B)	08/29/81-08/29/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0028	No	01020	BORON, DISSOLVED (UG/L AS B)	11/09/77-05/17/78	0	2	
ZION0029	No	01020	BORON, DISSOLVED (UG/L AS B)	11/09/77-11/09/77	0	1	
ZION0030	No	01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/26/81	0	2	
ZION0031	No	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	0	2	
ZION0033	No	01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	0	1	
ZION0035	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	0	5	
ZION0037	No	01020	BORON, DISSOLVED (UG/L AS B)	10/12/81-08/31/82	0	3	
ZION0039	No	01020	BORON, DISSOLVED (UG/L AS B)	05/01/77-05/01/77	0	1	
ZION0043	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	1	3	
ZION0044	No	01020	BORON, DISSOLVED (UG/L AS B)	11/16/81-11/16/81	0	1	
ZION0045	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	1	3	
ZION0046	No	01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/26/81	0	2	
ZION0050	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0064	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0073	No	01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-03/04/82	0	2	
ZION0077	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	0	2	
ZION0078	No	01020	BORON, DISSOLVED (UG/L AS B)	09/15/78-09/15/78	0	1	
ZION0080	No	01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	0	1	
ZION0082	No	01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	0	1	
ZION0089	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0092	No	01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-08/20/82	0	2	
ZION0096	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0097	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0098	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0099	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0100	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	0	1	
ZION0101	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	0	2	
ZION0102	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	0	2	
ZION0104	No	01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/23/82	1	6	
ZION0110	No	01020	BORON, DISSOLVED (UG/L AS B)	11/12/77-11/12/77	0	1	
ZION0112	No	01020	BORON, DISSOLVED (UG/L AS B)	11/12/77-11/12/77	0	1	
ZION0113	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	1	4	
ZION0119	No	01020	BORON, DISSOLVED (UG/L AS B)	07/23/76-07/23/76	0	1	
ZION0125	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/20/81	0	1	
ZION0126	No	01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01020	BORON, DISSOLVED (UG/L AS B)	01/18/77-10/26/82	5	20	
ZION0138	No	01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	1	3	
ZION0140	Yes	01020	BORON, DISSOLVED (UG/L AS B)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/26/74	0	4	
ZION0145	Yes	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	0	2	
ZION0147	Yes	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	0	2	
ZION0149	No	01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	1	3	
ZION0156	Yes	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	0	4	
ZION0158	Yes	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	0	4	
ZION0166	Yes	01020	BORON, DISSOLVED (UG/L AS B)	04/07/81-04/07/81	0	1	
ZION0167	No	01020	BORON, DISSOLVED (UG/L AS B)	05/13/77-08/05/77	0	2	
ZION0168	No	01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	1	3	
ZION0169	Yes	01020	BORON, DISSOLVED (UG/L AS B)	04/07/81-04/07/81	0	1	
ZION0173	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/04/82-08/23/82	0	2	
ZION0174	Yes	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	0	5	
ZION0175	Yes	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/24/81	0	1	
ZION0176	Yes	01020	BORON, DISSOLVED (UG/L AS B)	09/17/75-05/16/77	1	3	
ZION0180	Yes	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	0	5	
ZION0182	No	01020	BORON, DISSOLVED (UG/L AS B)	12/07/77-12/07/77	0	1	
ZION0183	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	4	
ZION0186	No	01020	BORON, DISSOLVED (UG/L AS B)	10/26/82-10/26/82	0	1	
ZION0187	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	4	
ZION0188	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	5	
ZION0189	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	4	
ZION0190	Yes	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	0	3	
ZION0192	No	01020	BORON, DISSOLVED (UG/L AS B)	04/19/79-04/14/81	1	9	
ZION0193	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	5	
ZION0197	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	1	5	
ZION0199	Yes	01020	BORON, DISSOLVED (UG/L AS B)	09/03/70-09/03/70	0	1	
ZION0201	No	01020	BORON, DISSOLVED (UG/L AS B)	04/17/78-11/10/80	2	3	
ZION0202	No	01020	BORON, DISSOLVED (UG/L AS B)	12/28/75-12/28/75	0	1	
ZION0203	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	1	4	
ZION0204	No	01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-08/17/81	0	1	
ZION0205	No	01020	BORON, DISSOLVED (UG/L AS B)	04/18/79-04/14/81	1	9	
ZION0206	No	01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	0	2	
ZION0210	No	01020	BORON, DISSOLVED (UG/L AS B)	12/09/77-12/09/77	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0212	No	01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	0	2	
ZION0213	No	01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-08/17/81	0	1	
ZION0215	No	01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	0	6	
ZION0223	No	01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-08/23/82	1	4	
ZION0231	No	01020	BORON, DISSOLVED (UG/L AS B)	11/18/77-11/18/77	0	1	
ZION0236	No	01020	BORON, DISSOLVED (UG/L AS B)	01/18/74-01/18/74	0	1	
ZION0237	No	01020	BORON, DISSOLVED (UG/L AS B)	06/14/78-06/14/78	0	1	
ZION0238	No	01020	BORON, DISSOLVED (UG/L AS B)	12/10/77-12/10/77	0	1	
ZION0239	No	01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/11/82	0	2	
ZION0240	No	01020	BORON, DISSOLVED (UG/L AS B)	11/17/77-11/17/77	0	1	
ZION0242	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	5	
ZION0244	No	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01020	BORON, DISSOLVED (UG/L AS B)	05/16/77-09/04/77	0	3	
ZION0248	No	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	0	3	
ZION0249	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	0	5	
ZION0250	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	1	4	
ZION0252	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	1	5	
ZION0255	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	1	5	
ZION0258	No	01020	BORON, DISSOLVED (UG/L AS B)	12/13/66-09/01/82	15	5	
ZION0259	Yes	01020	BORON, DISSOLVED (UG/L AS B)	06/08/64-06/08/64	0	1	
ZION0263	No	01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-09/02/82	1	3	
ZION0265	No	01020	BORON, DISSOLVED (UG/L AS B)	11/16/77-11/16/77	0	1	
ZION0267	No	01020	BORON, DISSOLVED (UG/L AS B)	05/11/82-05/11/82	0	1	
ZION0268	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	4	
ZION0270	No	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/16/74	0	3	
ZION0272	No	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/16/74	0	3	
ZION0273	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-05/05/82	0	2	
ZION0276	No	01020	BORON, DISSOLVED (UG/L AS B)	06/17/80-04/14/81	0	5	
ZION0277	No	01020	BORON, DISSOLVED (UG/L AS B)	06/17/80-04/14/81	0	5	
ZION0278	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	0	5	
ZION0280	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	4	
ZION0281	No	01020	BORON, DISSOLVED (UG/L AS B)	03/25/66-03/25/66	0	1	
ZION0283	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	0	5	
ZION0291	No	01020	BORON, DISSOLVED (UG/L AS B)	07/06/81-12/22/81	0	3	
ZION0292	No	01020	BORON, DISSOLVED (UG/L AS B)	10/25/68-10/25/68	0	1	
ZION0293	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	3	
ZION0294	No	01020	BORON, DISSOLVED (UG/L AS B)	12/15/66-12/15/66	0	1	
ZION0295	No	01020	BORON, DISSOLVED (UG/L AS B)	04/12/78-04/12/78	0	1	
ZION0296	No	01020	BORON, DISSOLVED (UG/L AS B)	10/28/68-10/28/68	0	1	
ZION0297	No	01020	BORON, DISSOLVED (UG/L AS B)	07/06/81-12/22/81	0	3	
ZION0299	No	01020	BORON, DISSOLVED (UG/L AS B)	10/28/80-04/14/81	0	4	
ZION0300	No	01020	BORON, DISSOLVED (UG/L AS B)	05/07/82-05/07/82	0	1	
ZION0301	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	3	
ZION0303	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	0	5	
ZION0304	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	4	
ZION0305	No	01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	1	5	
ZION0307	No	01020	BORON, DISSOLVED (UG/L AS B)	02/03/75-02/03/75	0	1	
ZION0308	No	01020	BORON, DISSOLVED (UG/L AS B)	02/21/79-02/21/79	0	1	
ZION0309	No	01020	BORON, DISSOLVED (UG/L AS B)	03/16/64-03/16/64	0	1	
ZION0310	No	01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-05/07/82	0	2	
ZION0313	No	01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/11/82	0	2	
ZION0315	No	01020	BORON, DISSOLVED (UG/L AS B)	02/03/75-02/03/75	0	1	
ZION0317	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/24/81	0	1	
ZION0318	No	01020	BORON, DISSOLVED (UG/L AS B)	08/31/81-08/23/82	0	5	
ZION0321	No	01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-08/23/82	1	4	
ZION0323	No	01020	BORON, DISSOLVED (UG/L AS B)	10/07/65-10/07/65	0	1	
ZION0328	No	01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-05/28/74	0	2	
ZION0331	No	01020	BORON, DISSOLVED (UG/L AS B)	03/07/67-08/23/82	15	5	
ZION0332	No	01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	0	5	
ZION0338	No	01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-04/28/80	2	2	
ZION0340	No	01020	BORON, DISSOLVED (UG/L AS B)	02/20/64-02/20/64	0	1	
ZION0341	No	01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-05/06/82	0	2	
ZION0343	No	01020	BORON, DISSOLVED (UG/L AS B)	11/04/65-11/04/65	0	1	
ZION0344	No	01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-05/04/82	0	2	
ZION0346	No	01020	BORON, DISSOLVED (UG/L AS B)	09/19/78-09/19/78	0	1	
ZION0348	No	01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-05/04/82	0	2	
ZION0352	No	01020	BORON, DISSOLVED (UG/L AS B)	05/24/79-05/24/79	0	1	
ZION0353	No	01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/04/82	0	2	
ZION0355	No	01020	BORON, DISSOLVED (UG/L AS B)	03/10/64-03/10/64	0	1	
ZION0356	No	01020	BORON, DISSOLVED (UG/L AS B)	11/28/77-08/23/89	11	4	
ZION0358	No	01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-12/13/77	0	2	
ZION0359	No	01020	BORON, DISSOLVED (UG/L AS B)	12/05/77-12/06/77	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0360	No	01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-11/11/80	2	2	
ZION0362	No	01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/06/82	0	2	
ZION0363	No	01020	BORON, DISSOLVED (UG/L AS B)	02/21/79-02/21/79	0	1	
ZION0364	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0365	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0366	No	01020	BORON, DISSOLVED (UG/L AS B)	10/16/68-10/16/68	0	1	
ZION0367	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/62-07/14/62	0	1	
ZION0370	No	01020	BORON, DISSOLVED (UG/L AS B)	02/18/67-02/18/67	0	1	
ZION0371	No	01020	BORON, DISSOLVED (UG/L AS B)	03/30/66-03/30/66	0	1	
ZION0372	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0373	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0374	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0375	No	01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	0	1	
ZION0022	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	0	5	
ZION0028	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/17/78-05/17/78	0	1	
ZION0032	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	0	2	
ZION0035	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	0	5	
ZION0110	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-06/19/90	0	1	
ZION0119	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/26/74	0	4	
ZION0162	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/18/86-09/18/86	0	1	
ZION0167	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/17/75-05/16/77	1	3	
ZION0177	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	11/10/93-03/12/96	2	12	
ZION0178	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/15/94-07/31/96	2	3	
ZION0180	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	0	5	
ZION0183	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	0	1	
ZION0185	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/06/86-08/06/86	0	1	
ZION0186	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	4	25	
ZION0188	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	0	3	
ZION0192	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	4	24	
ZION0193	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	0	1	
ZION0201	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/17/78-04/17/78	0	1	
ZION0202	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/28/75-12/28/75	0	1	
ZION0215	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/01/93-08/09/95	1	2	
ZION0223	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/23/82-08/23/82	0	1	
ZION0237	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/78-06/14/78	0	1	
ZION0241	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	0	3	
ZION0244	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/16/77-09/04/77	0	3	
ZION0248	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	0	3	
ZION0249	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	0	1	
ZION0255	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	0	1	
ZION0256	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	4	9	
ZION0263	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	0	1	
ZION0270	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/16/74	0	3	
ZION0272	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/16/74	0	3	
ZION0276	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/92-10/30/96	4	8	
ZION0278	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	0	5	
ZION0283	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	0	5	
ZION0293	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	0	1	
ZION0295	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/12/78-04/12/78	0	1	
ZION0299	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/92-03/17/93	0	5	
ZION0301	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	0	1	
ZION0302	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	0	3	
ZION0303	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	0	5	
ZION0305	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	0	1	
ZION0311	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/77-08/05/77	0	2	
ZION0312	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/25/93-06/25/93	0	1	
ZION0316	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	0	3	
ZION0322	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/09/95	2	2	
ZION0324	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/04/93	0	1	
ZION0326	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/04/93	0	1	
ZION0328	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-05/28/74	0	2	
ZION0330	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/19/92-10/30/96	4	23	
ZION0332	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	0	5	
ZION0334	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/09/96-10/30/96	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0336	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/77-06/14/77	0	1	
ZION0352	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/25/93-06/25/93	0	1	
ZION0001	No	01027	CADMIUM, TOTAL (UG/L AS CD)	12/01/81-02/22/88	6	2	
ZION0012	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/21/89-07/21/89	0	1	
ZION0013	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/23/87-06/23/87	0	1	
ZION0028	No	01027	CADMIUM, TOTAL (UG/L AS CD)	10/19/82-05/27/86	3	2	
ZION0029	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/22/85-08/07/89	4	2	
ZION0040	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/02/91-09/02/91	0	1	
ZION0078	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/15/78-09/15/78	0	1	
ZION0080	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	0	1	
ZION0082	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	0	1	
ZION0126	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-07/31/91	12	29	
ZION0141	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01027	CADMIUM, TOTAL (UG/L AS CD)	04/07/81-04/07/81	0	1	
ZION0178	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/90-08/07/91	1	7	
ZION0185	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/03/83-01/17/90	6	4	
ZION0186	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/26/82-09/18/91	9	55	
ZION0192	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/19/79-09/18/91	12	64	
ZION0201	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/10/80-11/12/89	9	3	
ZION0205	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/79-04/14/82	2	11	
ZION0206	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/28/79	0	2	
ZION0212	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/28/79	0	2	
ZION0215	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/14/91	12	10	
ZION0232	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/22/84-09/06/88	4	2	
ZION0235	No	01027	CADMIUM, TOTAL (UG/L AS CD)	03/07/88-03/07/88	0	1	
ZION0256	No	01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	9	56	
ZION0276	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-09/18/91	11	60	
ZION0277	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-04/14/81	0	5	
ZION0279	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/21/83-06/21/83	0	1	
ZION0290	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/07/84-07/06/87	3	2	
ZION0291	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/06/81-09/16/89	8	4	
ZION0295	No	01027	CADMIUM, TOTAL (UG/L AS CD)	03/12/86-03/12/86	0	1	
ZION0297	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/06/81-09/16/89	8	4	
ZION0299	No	01027	CADMIUM, TOTAL (UG/L AS CD)	10/28/80-02/27/91	10	43	
ZION0308	No	01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-02/21/79	0	1	
ZION0322	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/08/91	4	10	
ZION0324	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/03/90	3	9	
ZION0326	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-05/22/91	4	12	
ZION0330	No	01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	9	55	
ZION0333	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/03/90	3	3	
ZION0337	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/05/83-07/05/83	0	1	
ZION0338	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/28/80-01/09/89	8	3	
ZION0346	No	01027	CADMIUM, TOTAL (UG/L AS CD)	09/19/78-09/19/78	0	1	
ZION0352	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/79-05/24/79	0	1	
ZION0354	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/20/82-04/27/83	0	6	
ZION0356	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-08/23/89	9	4	
ZION0358	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/13/83-07/13/83	0	1	
ZION0360	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/11/80-07/12/83	2	2	
ZION0363	No	01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-02/21/79	0	1	
ZION0364	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0365	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0372	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0373	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0374	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0375	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	0	1	
ZION0028	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/17/78-05/17/78	0	1	
ZION0032	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	0	2	
ZION0110	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-06/19/90	0	1	
ZION0119	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/07/78-11/10/93	15	4	
ZION0167	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/13/77-08/05/77	0	2	
ZION0176	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/17/75-05/16/77	1	3	
ZION0177	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	11/10/93-03/12/96	2	12	
ZION0178	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/15/94-06/15/94	0	2	
ZION0183	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	0	1	
ZION0186	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	4	25	
ZION0188	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	0	1	
ZION0192	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	4	24	
ZION0193	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0201	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	04/17/78-04/17/78	0	1	
ZION0202	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/28/75-12/28/75	0	1	
ZION0223	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/23/82-08/23/82	0	1	
ZION0237	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/78-06/14/78	0	1	
ZION0241	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	0	3	
ZION0246	Yes	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/16/77-09/04/77	0	3	
ZION0249	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	0	1	
ZION0255	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	0	1	
ZION0256	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	4	9	
ZION0263	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	0	1	
ZION0276	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/92-10/30/96	4	8	
ZION0293	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	0	1	
ZION0295	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	04/12/78-04/12/78	0	1	
ZION0299	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/92-03/17/93	0	5	
ZION0301	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	0	1	
ZION0302	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	0	3	
ZION0305	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	0	1	
ZION0311	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/77-08/05/77	0	2	
ZION0312	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/25/93-06/25/93	0	1	
ZION0316	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	0	3	
ZION0330	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/19/92-10/30/96	4	23	
ZION0334	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/09/96-10/30/96	0	3	
ZION0336	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/77-06/14/77	0	1	
ZION0352	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/25/93-06/25/93	0	1	
ZION0022	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	0	5	
ZION0028	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/17/78-05/17/78	0	1	
ZION0029	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/22/85-07/22/85	0	1	
ZION0035	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	0	5	
ZION0078	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/15/78-09/15/78	0	1	
ZION0080	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0082	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0116	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/28/87-07/28/87	0	1	
ZION0126	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	01/18/77-10/26/82	5	16	
ZION0140	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/26/74	0	4	
ZION0153	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/07/81-04/07/81	0	1	
ZION0174	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	0	5	
ZION0180	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	0	5	
ZION0185	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	08/06/86-01/17/90	3	3	
ZION0186	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/26/82-10/26/82	0	1	
ZION0190	Yes	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	0	3	
ZION0192	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/19/79-04/14/81	1	9	
ZION0201	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/17/78-11/12/89	11	4	
ZION0202	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	12/28/75-12/28/75	0	1	
ZION0205	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/18/79-04/14/81	1	9	
ZION0206	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	0	2	
ZION0212	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	0	2	
ZION0215	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	0	6	
ZION0232	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/06/88-09/06/88	0	1	
ZION0235	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	03/07/88-03/07/88	0	1	
ZION0237	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/14/78-06/14/78	0	1	
ZION0244	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	0	3	
ZION0248	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	0	3	
ZION0270	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/16/74	0	3	
ZION0272	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/16/74	0	3	
ZION0276	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/17/80-04/14/81	0	5	
ZION0277	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/17/80-04/14/81	0	5	
ZION0278	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	0	5	
ZION0283	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	0	5	
ZION0291	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/06/81-09/16/89	8	4	
ZION0295	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/12/78-04/12/78	0	1	
ZION0297	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/06/81-09/16/89	8	4	
ZION0299	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/28/80-04/14/81	0	4	
ZION0303	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	0	5	
ZION0308	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	02/21/79-02/21/79	0	1	
ZION0328	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-05/28/74	0	2	
ZION0332	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	0	5	
ZION0338	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/28/80-10/06/86	6	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0346	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/19/78-09/19/78	0	1	
ZION0352	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/24/79-05/24/79	0	1	
ZION0356	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-08/23/89	9	3	
ZION0360	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	11/11/80-11/11/80	0	1	
ZION0363	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	02/21/79-02/21/79	0	1	
ZION0364	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0365	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0372	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0373	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0374	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0375	No	01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0001	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	12/01/81-02/22/88	6	2	
ZION0012	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/21/89-07/21/89	0	1	
ZION0013	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/23/87-06/23/87	0	1	
ZION0028	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/19/82-05/27/86	3	2	
ZION0029	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/22/85-08/07/89	4	2	
ZION0040	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/02/91-09/02/91	0	1	
ZION0078	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/15/78-09/15/78	0	1	
ZION0080	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0082	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0126	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-07/31/91	12	29	
ZION0141	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/81-04/07/81	0	1	
ZION0178	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/90-08/07/91	1	7	
ZION0185	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/03/83-01/17/90	6	4	
ZION0186	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/26/82-09/18/91	9	55	
ZION0192	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/19/79-09/18/91	12	64	
ZION0201	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	11/10/80-11/12/89	9	3	
ZION0205	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/18/79-04/14/82	2	11	
ZION0206	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/28/79	0	2	
ZION0212	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/28/79	0	2	
ZION0215	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/14/91	12	10	
ZION0232	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/22/84-09/06/88	4	2	
ZION0235	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/07/88-03/07/88	0	1	
ZION0256	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	9	56	
ZION0276	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-09/18/91	11	60	
ZION0277	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-04/14/81	0	5	
ZION0279	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/21/83-06/21/83	0	1	
ZION0290	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/07/84-07/06/87	3	2	
ZION0291	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/06/81-09/16/89	8	4	
ZION0295	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/12/86-03/12/86	0	1	
ZION0297	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/06/81-09/16/89	8	4	
ZION0299	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/28/80-02/27/91	10	43	
ZION0308	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-02/21/79	0	1	
ZION0322	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/08/91	4	10	
ZION0324	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/03/90	3	9	
ZION0326	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-05/22/91	4	12	
ZION0330	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	9	55	
ZION0333	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/03/90	3	3	
ZION0337	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/05/83-07/05/83	0	1	
ZION0338	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/28/80-01/09/89	8	3	
ZION0346	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/78-09/19/78	0	1	
ZION0352	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/24/79-05/24/79	0	1	
ZION0354	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/20/82-04/27/83	0	6	
ZION0356	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-08/23/89	9	4	
ZION0358	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/13/83-07/13/83	0	1	
ZION0360	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	11/11/80-07/12/83	2	2	
ZION0363	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-02/21/79	0	1	
ZION0364	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0365	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0372	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0373	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0374	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0375	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	0	1	
ZION0162	Yes	01035	COBALT, DISSOLVED (UG/L AS CO)	09/18/86-09/18/86	0	1	
ZION0183	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	0	1	
ZION0188	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	0	1	
ZION0193	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	0	1	
ZION0249	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0255	No	01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	0	1	
ZION0022	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	0	5	
ZION0028	No	01040	COPPER, DISSOLVED (UG/L AS CU)	11/09/77-05/17/78	0	2	
ZION0029	No	01040	COPPER, DISSOLVED (UG/L AS CU)	11/09/77-11/09/77	0	1	
ZION0032	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	0	2	
ZION0035	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	0	5	
ZION0110	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-06/19/90	0	1	
ZION0119	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/26/74	0	4	
ZION0162	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	09/18/86-09/18/86	0	1	
ZION0167	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	09/17/75-05/16/77	1	3	
ZION0177	No	01040	COPPER, DISSOLVED (UG/L AS CU)	11/10/93-03/12/96	2	12	
ZION0178	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/15/94-07/31/96	2	3	
ZION0180	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	0	5	
ZION0183	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	0	1	
ZION0185	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/06/86-08/06/86	0	1	
ZION0186	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	4	25	
ZION0188	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	0	3	
ZION0192	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	4	24	
ZION0193	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	0	1	
ZION0201	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/17/78-04/17/78	0	1	
ZION0202	No	01040	COPPER, DISSOLVED (UG/L AS CU)	12/28/75-12/28/75	0	1	
ZION0215	No	01040	COPPER, DISSOLVED (UG/L AS CU)	09/01/93-08/09/95	1	2	
ZION0223	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/23/82-08/23/82	0	1	
ZION0237	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/78-06/14/78	0	1	
ZION0241	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	0	3	
ZION0244	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01040	COPPER, DISSOLVED (UG/L AS CU)	05/16/77-09/04/77	0	3	
ZION0248	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	0	3	
ZION0249	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	0	1	
ZION0255	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	0	1	
ZION0256	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	4	9	
ZION0263	No	01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	0	1	
ZION0270	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/16/74	0	3	
ZION0272	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/16/74	0	3	
ZION0276	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/92-10/30/96	4	8	
ZION0278	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	0	5	
ZION0283	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	0	5	
ZION0293	No	01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	0	1	
ZION0295	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/12/78-04/12/78	0	1	
ZION0299	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/92-03/17/93	0	5	
ZION0301	No	01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	0	1	
ZION0302	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	0	3	
ZION0303	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	0	5	
ZION0305	No	01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	0	1	
ZION0309	No	01040	COPPER, DISSOLVED (UG/L AS CU)	03/16/64-03/16/64	0	1	
ZION0311	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/77-08/05/77	0	2	
ZION0312	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/25/93-06/25/93	0	1	
ZION0316	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	0	3	
ZION0322	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/09/95	2	2	
ZION0324	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/04/93	0	1	
ZION0326	No	01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/04/93	0	1	
ZION0328	No	01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-05/28/74	0	2	
ZION0330	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/19/92-10/30/96	4	23	
ZION0332	No	01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	0	5	
ZION0334	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/09/96-10/30/96	0	3	
ZION0336	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/77-06/14/77	0	1	
ZION0340	No	01040	COPPER, DISSOLVED (UG/L AS CU)	02/20/64-02/20/64	0	1	
ZION0352	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/25/93-06/25/93	0	1	
ZION0355	No	01040	COPPER, DISSOLVED (UG/L AS CU)	03/10/64-03/10/64	0	1	
ZION0356	No	01040	COPPER, DISSOLVED (UG/L AS CU)	11/28/77-11/28/77	0	1	
ZION0358	No	01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/77-12/13/77	0	2	
ZION0359	No	01040	COPPER, DISSOLVED (UG/L AS CU)	12/05/77-12/06/77	0	2	
ZION0360	No	01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/77-12/06/77	0	1	
ZION0367	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/14/62-07/14/62	0	1	
ZION0370	No	01040	COPPER, DISSOLVED (UG/L AS CU)	02/18/67-02/18/67	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0001	No	01042	COPPER, TOTAL (UG/L AS CU)	12/01/81-02/22/88	6	2	
ZION0012	No	01042	COPPER, TOTAL (UG/L AS CU)	07/21/89-07/21/89	0	1	
ZION0013	No	01042	COPPER, TOTAL (UG/L AS CU)	06/23/87-06/23/87	0	1	
ZION0028	No	01042	COPPER, TOTAL (UG/L AS CU)	10/19/82-05/27/86	3	2	
ZION0029	No	01042	COPPER, TOTAL (UG/L AS CU)	07/22/85-08/07/89	4	2	
ZION0040	No	01042	COPPER, TOTAL (UG/L AS CU)	09/02/91-09/02/91	0	1	
ZION0078	No	01042	COPPER, TOTAL (UG/L AS CU)	09/15/78-09/15/78	0	1	
ZION0080	No	01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	0	1	
ZION0082	No	01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	0	1	
ZION0126	No	01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01042	COPPER, TOTAL (UG/L AS CU)	09/06/78-07/31/91	12	31	
ZION0141	Yes	01042	COPPER, TOTAL (UG/L AS CU)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01042	COPPER, TOTAL (UG/L AS CU)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01042	COPPER, TOTAL (UG/L AS CU)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01042	COPPER, TOTAL (UG/L AS CU)	04/07/81-04/07/81	0	1	
ZION0178	No	01042	COPPER, TOTAL (UG/L AS CU)	04/11/90-08/07/91	1	7	
ZION0185	No	01042	COPPER, TOTAL (UG/L AS CU)	04/03/83-01/17/90	6	4	
ZION0186	No	01042	COPPER, TOTAL (UG/L AS CU)	07/26/82-09/18/91	9	55	
ZION0192	No	01042	COPPER, TOTAL (UG/L AS CU)	04/19/79-09/18/91	12	64	
ZION0201	No	01042	COPPER, TOTAL (UG/L AS CU)	11/10/80-11/12/89	9	3	
ZION0205	No	01042	COPPER, TOTAL (UG/L AS CU)	04/18/79-04/14/82	2	11	
ZION0206	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/28/79	0	2	
ZION0212	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/28/79	0	2	
ZION0215	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/14/91	12	10	
ZION0232	No	01042	COPPER, TOTAL (UG/L AS CU)	06/22/84-09/06/88	4	2	
ZION0235	No	01042	COPPER, TOTAL (UG/L AS CU)	03/07/88-03/07/88	0	1	
ZION0256	No	01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	9	56	
ZION0276	No	01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-09/18/91	11	60	
ZION0277	No	01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-04/14/81	0	5	
ZION0279	No	01042	COPPER, TOTAL (UG/L AS CU)	06/21/83-06/21/83	0	1	
ZION0290	No	01042	COPPER, TOTAL (UG/L AS CU)	05/07/84-07/06/87	3	2	
ZION0291	No	01042	COPPER, TOTAL (UG/L AS CU)	07/06/81-09/16/89	8	4	
ZION0295	No	01042	COPPER, TOTAL (UG/L AS CU)	03/12/86-03/12/86	0	1	
ZION0297	No	01042	COPPER, TOTAL (UG/L AS CU)	07/06/81-09/16/89	8	4	
ZION0299	No	01042	COPPER, TOTAL (UG/L AS CU)	10/28/80-02/27/91	10	43	
ZION0308	No	01042	COPPER, TOTAL (UG/L AS CU)	02/21/79-02/21/79	0	1	
ZION0322	No	01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/08/91	4	10	
ZION0324	No	01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/03/90	3	9	
ZION0326	No	01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-05/22/91	4	12	
ZION0330	No	01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	9	55	
ZION0333	No	01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/03/90	3	3	
ZION0337	No	01042	COPPER, TOTAL (UG/L AS CU)	07/05/83-07/05/83	0	1	
ZION0338	No	01042	COPPER, TOTAL (UG/L AS CU)	04/28/80-01/09/89	8	3	
ZION0346	No	01042	COPPER, TOTAL (UG/L AS CU)	09/19/78-09/19/78	0	1	
ZION0352	No	01042	COPPER, TOTAL (UG/L AS CU)	05/24/79-05/24/79	0	1	
ZION0354	No	01042	COPPER, TOTAL (UG/L AS CU)	07/20/82-04/27/83	0	6	
ZION0356	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-08/23/89	9	4	
ZION0358	No	01042	COPPER, TOTAL (UG/L AS CU)	07/13/83-07/13/83	0	1	
ZION0360	No	01042	COPPER, TOTAL (UG/L AS CU)	11/11/80-07/12/83	2	2	
ZION0363	No	01042	COPPER, TOTAL (UG/L AS CU)	02/21/79-02/21/79	0	1	
ZION0364	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0365	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0372	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0373	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0374	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0375	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	0	1	
ZION0010	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/20/81-04/20/81	0	1	
ZION0030	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0046	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0073	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-03/04/82	0	2	
ZION0104	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-04/22/81	0	1	
ZION0138	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	1	2	
ZION0149	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	1	2	
ZION0168	No	01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	1	2	
ZION0010	No	01045	IRON, TOTAL (UG/L AS FE)	04/20/81-08/24/81	0	2	
ZION0022	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0030	No	01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0035	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0046	No	01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0073	No	01045	IRON, TOTAL (UG/L AS FE)	04/22/81-03/04/82	0	2	
ZION0104	No	01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0138	No	01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	1	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0141	Yes	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-07/26/74	0	4	
ZION0149	No	01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	1	3	
ZION0168	No	01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	1	3	
ZION0174	Yes	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0180	Yes	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	3	
ZION0181	Yes	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0190	Yes	01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0195	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	0	2	
ZION0196	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	0	3	
ZION0202	No	01045	IRON, TOTAL (UG/L AS FE)	12/28/75-12/28/75	0	1	
ZION0243	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	0	3	
ZION0244	No	01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0248	No	01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0253	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	0	2	
ZION0270	No	01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0272	No	01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0275	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	0	3	
ZION0278	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0283	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0286	No	01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	0	2	
ZION0303	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0311	No	01045	IRON, TOTAL (UG/L AS FE)	06/14/77-08/05/77	0	2	
ZION0328	No	01045	IRON, TOTAL (UG/L AS FE)	05/28/74-05/28/74	0	1	
ZION0332	No	01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	0	4	
ZION0336	No	01045	IRON, TOTAL (UG/L AS FE)	06/14/77-06/14/77	0	1	
ZION0002	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	0	1	
ZION0003	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/21/77-06/21/77	0	1	
ZION0004	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/20/81-10/20/81	0	1	
ZION0005	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-07/30/81	0	1	
ZION0007	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	0	1	
ZION0008	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/17/81-07/17/81	0	1	
ZION0009	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	0	1	
ZION0010	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/20/81-08/24/81	0	2	
ZION0011	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	0	1	
ZION0014	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-05/07/82	0	2	
ZION0017	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-05/07/82	0	2	
ZION0018	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/22/77-06/22/77	0	1	
ZION0019	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/22/77-06/22/77	0	1	
ZION0022	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	0	5	
ZION0024	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/17/81-10/17/81	0	1	
ZION0025	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	0	1	
ZION0027	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/29/81-08/29/81	0	1	
ZION0028	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/09/77-05/17/78	0	2	
ZION0029	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/09/77-11/09/77	0	1	
ZION0030	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0032	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	0	2	
ZION0035	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	0	5	
ZION0044	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/16/81-09/13/86	4	2	
ZION0046	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-08/26/81	0	2	
ZION0048	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	0	1	
ZION0049	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/24/86-06/24/86	0	1	
ZION0050	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/19/86	4	2	
ZION0054	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/13/86-07/13/86	0	1	
ZION0058	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/11/86-07/16/86	0	2	
ZION0060	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/10/86-09/10/86	0	1	
ZION0062	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/12/86-07/12/86	0	1	
ZION0064	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	0	1	
ZION0067	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	0	1	
ZION0068	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/22/86-06/22/86	0	1	
ZION0070	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/13/86-07/13/86	0	1	
ZION0071	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/17/86-07/17/86	0	1	
ZION0073	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-03/04/82	0	2	
ZION0077	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/12/86-06/12/86	0	1	
ZION0083	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/22/86-06/22/86	0	1	
ZION0086	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/22/86-08/22/86	0	1	
ZION0088	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	0	1	
ZION0089	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-07/14/86	4	3	
ZION0091	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/18/86-06/18/86	0	1	
ZION0095	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	0	1	
ZION0096	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	0	2	
ZION0097	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	0	2	
ZION0098	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0099	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	0	2	
ZION0100	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	0	1	
ZION0101	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/21/86-06/21/86	0	1	
ZION0103	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/14/86-09/14/86	0	1	
ZION0104	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-07/16/86	5	4	
ZION0108	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/86-07/15/86	0	1	
ZION0110	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/12/77-06/19/90	12	2	
ZION0111	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/26/86-08/26/86	0	1	
ZION0112	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/12/77-11/12/77	0	1	
ZION0114	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/15/86-07/15/86	0	1	
ZION0116	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/28/87-07/28/87	0	1	
ZION0117	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/18/87-09/18/87	0	1	
ZION0118	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/11/86-09/11/86	0	1	
ZION0119	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/23/76-07/23/76	0	1	
ZION0121	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/18/87-09/18/87	0	1	
ZION0129	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/11/82-06/11/82	0	1	
ZION0132	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/23/86-08/23/86	0	1	
ZION0137	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	01/18/77-11/10/93	16	5	
ZION0138	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	1	3	
ZION0140	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/26/74	0	4	
ZION0149	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	1	3	
ZION0162	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	09/18/86-09/18/86	0	1	
ZION0167	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/13/77-08/05/77	0	2	
ZION0168	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	1	3	
ZION0174	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	09/17/75-05/16/77	1	3	
ZION0177	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/10/93-03/12/96	2	12	
ZION0178	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/15/94-06/15/94	0	2	
ZION0180	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	0	5	
ZION0183	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	0	1	
ZION0185	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/06/86-08/06/86	0	1	
ZION0186	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	4	25	
ZION0188	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	0	3	
ZION0192	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	4	24	
ZION0193	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	0	1	
ZION0195	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	0	1	
ZION0196	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	0	1	
ZION0201	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/17/78-04/17/78	0	1	
ZION0202	No	01046	IRON, DISSOLVED (UG/L AS FE)	12/28/75-12/28/75	0	1	
ZION0223	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/23/82-08/23/82	0	1	
ZION0229	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	0	1	
ZION0231	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/18/77-11/18/77	0	1	
ZION0234	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	0	1	
ZION0236	No	01046	IRON, DISSOLVED (UG/L AS FE)	01/18/74-01/18/74	0	1	
ZION0237	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/14/78-06/14/78	0	1	
ZION0240	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/17/77-11/17/77	0	1	
ZION0241	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	0	3	
ZION0244	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	05/16/77-09/04/77	0	3	
ZION0248	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	0	3	
ZION0249	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	0	1	
ZION0251	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	0	1	
ZION0255	No	01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	0	1	
ZION0256	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	4	9	
ZION0259	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/08/64-06/08/64	0	1	
ZION0263	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	0	1	
ZION0265	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/16/77-11/16/77	0	1	
ZION0270	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/16/74	0	3	
ZION0272	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/16/74	0	3	
ZION0275	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	0	1	
ZION0276	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/20/92-10/30/96	4	8	
ZION0278	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	0	5	
ZION0283	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	0	5	
ZION0293	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	0	1	
ZION0295	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/12/78-04/12/78	0	1	
ZION0299	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/20/92-03/17/93	0	5	
ZION0301	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	0	1	
ZION0302	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	0	3	
ZION0303	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0305	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	0	1	
ZION0312	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/25/93-06/25/93	0	1	
ZION0316	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	0	3	
ZION0328	No	01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-05/28/74	0	2	
ZION0330	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/19/92-10/30/96	4	23	
ZION0332	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	0	5	
ZION0334	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/09/96-10/30/96	0	3	
ZION0338	No	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/06/77	0	1	
ZION0352	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/25/93-06/25/93	0	1	
ZION0356	No	01046	IRON, DISSOLVED (UG/L AS FE)	11/28/77-08/23/89	11	3	
ZION0358	No	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/13/77	0	2	
ZION0359	No	01046	IRON, DISSOLVED (UG/L AS FE)	12/05/77-12/06/77	0	2	
ZION0360	No	01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/06/77	0	1	
ZION0022	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	0	5	
ZION0028	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/17/78-05/17/78	0	1	
ZION0032	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	0	2	
ZION0035	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	0	5	
ZION0110	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-06/19/90	0	1	
ZION0119	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/26/74	0	4	
ZION0162	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	09/18/86-09/18/86	0	1	
ZION0167	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	09/17/75-05/16/77	1	3	
ZION0177	No	01049	LEAD, DISSOLVED (UG/L AS PB)	11/10/93-03/12/96	2	12	
ZION0178	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/15/94-07/31/96	2	3	
ZION0180	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	0	5	
ZION0185	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/06/86-08/06/86	0	1	
ZION0186	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	4	25	
ZION0190	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	0	3	
ZION0192	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	4	24	
ZION0195	No	01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	0	1	
ZION0196	No	01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	0	1	
ZION0201	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/17/78-04/17/78	0	1	
ZION0202	No	01049	LEAD, DISSOLVED (UG/L AS PB)	12/28/75-12/28/75	0	1	
ZION0215	No	01049	LEAD, DISSOLVED (UG/L AS PB)	09/01/93-08/09/95	1	2	
ZION0223	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/23/82-08/23/82	0	1	
ZION0237	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/78-06/14/78	0	1	
ZION0241	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	0	3	
ZION0244	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01049	LEAD, DISSOLVED (UG/L AS PB)	05/16/77-09/04/77	0	3	
ZION0248	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	0	3	
ZION0256	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	4	9	
ZION0263	No	01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	0	1	
ZION0270	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/16/74	0	3	
ZION0272	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/16/74	0	3	
ZION0275	No	01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	0	1	
ZION0276	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/01/86-10/30/96	10	9	
ZION0278	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	0	5	
ZION0283	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	0	4	
ZION0293	No	01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	0	1	
ZION0295	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/12/78-04/12/78	0	1	
ZION0299	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/20/92-03/17/93	0	5	
ZION0301	No	01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	0	1	
ZION0302	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	0	3	
ZION0303	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	0	5	
ZION0305	No	01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	0	1	
ZION0309	No	01049	LEAD, DISSOLVED (UG/L AS PB)	03/16/64-03/16/64	0	1	
ZION0311	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/77-08/05/77	0	2	
ZION0312	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/25/93-06/25/93	0	1	
ZION0316	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	0	3	
ZION0322	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/09/95	2	2	
ZION0324	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/04/93	0	1	
ZION0326	No	01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/04/93	0	1	
ZION0328	No	01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-05/28/74	0	2	
ZION0330	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/19/92-10/30/96	4	23	
ZION0332	No	01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	0	5	
ZION0334	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/09/96-10/30/96	0	3	
ZION0336	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/77-06/14/77	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0340	No	01049	LEAD, DISSOLVED (UG/L AS PB)	02/20/64-02/20/64	0	1	
ZION0352	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/25/93-06/25/93	0	1	
ZION0355	No	01049	LEAD, DISSOLVED (UG/L AS PB)	03/10/64-03/10/64	0	1	
ZION0367	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/14/62-07/14/62	0	1	
ZION0370	No	01049	LEAD, DISSOLVED (UG/L AS PB)	02/18/67-02/18/67	0	1	
ZION0001	No	01051	LEAD, TOTAL (UG/L AS PB)	12/01/81-02/22/88	6	2	
ZION0012	No	01051	LEAD, TOTAL (UG/L AS PB)	07/21/89-07/21/89	0	1	
ZION0013	No	01051	LEAD, TOTAL (UG/L AS PB)	06/23/87-06/23/87	0	1	
ZION0028	No	01051	LEAD, TOTAL (UG/L AS PB)	10/19/82-05/27/86	3	2	
ZION0029	No	01051	LEAD, TOTAL (UG/L AS PB)	07/22/85-08/07/89	4	2	
ZION0040	No	01051	LEAD, TOTAL (UG/L AS PB)	09/02/91-09/02/91	0	1	
ZION0078	No	01051	LEAD, TOTAL (UG/L AS PB)	09/15/78-09/15/78	0	1	
ZION0080	No	01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	0	1	
ZION0082	No	01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	0	1	
ZION0126	No	01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-07/31/91	12	29	
ZION0141	Yes	01051	LEAD, TOTAL (UG/L AS PB)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01051	LEAD, TOTAL (UG/L AS PB)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01051	LEAD, TOTAL (UG/L AS PB)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01051	LEAD, TOTAL (UG/L AS PB)	04/07/81-04/07/81	0	1	
ZION0178	No	01051	LEAD, TOTAL (UG/L AS PB)	04/11/90-08/07/91	1	7	
ZION0185	No	01051	LEAD, TOTAL (UG/L AS PB)	04/03/83-01/17/90	6	4	
ZION0186	No	01051	LEAD, TOTAL (UG/L AS PB)	07/26/82-09/18/91	9	55	
ZION0192	No	01051	LEAD, TOTAL (UG/L AS PB)	04/19/79-09/18/91	12	64	
ZION0195	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	0	2	
ZION0196	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	0	3	
ZION0201	No	01051	LEAD, TOTAL (UG/L AS PB)	11/10/80-11/12/89	9	3	
ZION0205	No	01051	LEAD, TOTAL (UG/L AS PB)	04/18/79-04/14/82	2	11	
ZION0206	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/28/79	0	2	
ZION0212	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/28/79	0	2	
ZION0215	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/14/91	12	10	
ZION0232	No	01051	LEAD, TOTAL (UG/L AS PB)	06/22/84-09/06/88	4	2	
ZION0235	No	01051	LEAD, TOTAL (UG/L AS PB)	03/07/88-03/07/88	0	1	
ZION0243	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	0	3	
ZION0253	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	0	2	
ZION0256	No	01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	9	56	
ZION0275	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	0	3	
ZION0276	No	01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-09/18/91	11	60	
ZION0277	No	01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-04/14/81	0	5	
ZION0279	No	01051	LEAD, TOTAL (UG/L AS PB)	06/21/83-06/21/83	0	1	
ZION0286	No	01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	0	2	
ZION0290	No	01051	LEAD, TOTAL (UG/L AS PB)	05/07/84-07/06/87	3	2	
ZION0291	No	01051	LEAD, TOTAL (UG/L AS PB)	07/06/81-09/16/89	8	4	
ZION0295	No	01051	LEAD, TOTAL (UG/L AS PB)	03/12/86-03/12/86	0	1	
ZION0297	No	01051	LEAD, TOTAL (UG/L AS PB)	07/06/81-09/16/89	8	4	
ZION0299	No	01051	LEAD, TOTAL (UG/L AS PB)	10/28/80-02/27/91	10	43	
ZION0308	No	01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-02/21/79	0	1	
ZION0322	No	01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/08/91	4	10	
ZION0324	No	01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/03/90	3	9	
ZION0326	No	01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-05/22/91	4	12	
ZION0330	No	01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	9	55	
ZION0333	No	01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/03/90	3	3	
ZION0337	No	01051	LEAD, TOTAL (UG/L AS PB)	07/05/83-07/05/83	0	1	
ZION0338	No	01051	LEAD, TOTAL (UG/L AS PB)	04/28/80-01/09/89	8	3	
ZION0346	No	01051	LEAD, TOTAL (UG/L AS PB)	09/19/78-09/19/78	0	1	
ZION0352	No	01051	LEAD, TOTAL (UG/L AS PB)	05/24/79-05/24/79	0	1	
ZION0354	No	01051	LEAD, TOTAL (UG/L AS PB)	07/20/82-04/27/83	0	6	
ZION0356	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-08/23/89	9	4	
ZION0358	No	01051	LEAD, TOTAL (UG/L AS PB)	07/13/83-07/13/83	0	1	
ZION0360	No	01051	LEAD, TOTAL (UG/L AS PB)	11/11/80-07/12/83	2	2	
ZION0363	No	01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-02/21/79	0	1	
ZION0364	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0365	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0372	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0373	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0374	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0375	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	0	1	
ZION0195	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	0	1	
ZION0196	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	0	1	
ZION0275	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	0	1	
ZION0195	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	0	1	
ZION0196	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0275	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	0	1	
ZION0010	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/20/81-08/24/81	0	2	
ZION0030	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0046	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0073	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-03/04/82	0	2	
ZION0104	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0138	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0149	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0168	No	01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0001	No	01055	MANGANESE, TOTAL (UG/L AS MN)	12/01/81-02/22/88	6	2	
ZION0010	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/20/81-08/24/81	0	2	
ZION0012	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/21/89-07/21/89	0	1	
ZION0013	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/23/87-06/23/87	0	1	
ZION0028	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/19/82-05/27/86	3	2	
ZION0029	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/22/85-08/07/89	4	2	
ZION0030	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0040	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/02/91-09/02/91	0	1	
ZION0046	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0073	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-03/04/82	0	2	
ZION0078	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/15/78-09/15/78	0	1	
ZION0080	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	0	1	
ZION0082	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	0	1	
ZION0104	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0126	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	09/06/78-07/31/91	12	31	
ZION0138	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0141	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	10/31/84-10/31/84	0	1	
ZION0149	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0153	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/81-04/07/81	0	1	
ZION0168	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0169	Yes	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/81-04/07/81	0	1	
ZION0178	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/11/90-08/07/91	1	7	
ZION0185	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/03/83-01/17/90	6	4	
ZION0186	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/26/82-09/18/91	9	55	
ZION0192	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/19/79-09/18/91	12	64	
ZION0195	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	0	2	
ZION0196	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	0	3	
ZION0201	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/10/80-11/12/89	9	3	
ZION0205	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/18/79-04/14/82	2	11	
ZION0206	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/28/79	0	2	
ZION0212	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/28/79	0	2	
ZION0215	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/14/91	12	10	
ZION0232	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/22/84-09/06/88	4	2	
ZION0235	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/07/88-03/07/88	0	1	
ZION0243	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	0	3	
ZION0253	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	0	2	
ZION0256	No	01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	9	56	
ZION0275	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	0	3	
ZION0276	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-09/18/91	11	60	
ZION0277	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-04/14/81	0	5	
ZION0279	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/21/83-06/21/83	0	1	
ZION0286	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	0	2	
ZION0290	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/07/84-07/06/87	3	2	
ZION0291	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/81-09/16/89	8	4	
ZION0295	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/12/86-03/12/86	0	1	
ZION0297	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/81-09/16/89	8	4	
ZION0299	No	01055	MANGANESE, TOTAL (UG/L AS MN)	10/28/80-02/27/91	10	43	
ZION0308	No	01055	MANGANESE, TOTAL (UG/L AS MN)	02/21/79-02/21/79	0	1	
ZION0322	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/08/91	4	10	
ZION0324	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/03/90	3	9	
ZION0326	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-05/22/91	4	12	
ZION0330	No	01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	9	55	
ZION0333	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/03/90	3	3	
ZION0337	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/05/83-07/05/83	0	1	
ZION0338	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/28/80-01/09/89	8	3	
ZION0346	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/19/78-09/19/78	0	1	
ZION0352	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/79-05/24/79	0	1	
ZION0354	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/20/82-04/27/83	0	6	
ZION0356	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-08/23/89	9	4	
ZION0358	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/13/83-07/13/83	0	1	
ZION0360	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/11/80-07/12/83	2	2	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0363	No	01055	MANGANESE, TOTAL (UG/L AS MN)	02/21/79-02/21/79	0	1	
ZION0364	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0365	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0372	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0373	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0374	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0375	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0002	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	0	1	
ZION0003	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/77-06/21/77	0	1	
ZION0004	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/20/81-10/20/81	0	1	
ZION0005	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-07/30/81	0	1	
ZION0007	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	0	1	
ZION0008	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/81-07/17/81	0	1	
ZION0009	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	0	1	
ZION0010	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/20/81-08/24/81	0	2	
ZION0011	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	0	1	
ZION0014	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-05/07/82	0	2	
ZION0017	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-05/07/82	0	2	
ZION0018	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/77-06/22/77	0	1	
ZION0019	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/77-06/22/77	0	1	
ZION0022	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	0	5	
ZION0024	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/17/81-10/17/81	0	1	
ZION0025	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	0	1	
ZION0027	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/29/81-08/29/81	0	1	
ZION0028	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/09/77-05/17/78	0	2	
ZION0030	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0032	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	0	2	
ZION0035	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	0	5	
ZION0036	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/05/80-07/05/80	0	1	
ZION0041	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	0	1	
ZION0044	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/16/81-09/13/86	4	2	
ZION0046	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-08/26/81	0	2	
ZION0048	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	0	1	
ZION0049	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/24/86-06/24/86	0	1	
ZION0050	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/19/86	4	2	
ZION0051	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/07/80-07/07/80	0	1	
ZION0052	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	0	1	
ZION0054	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/86-07/13/86	0	1	
ZION0057	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	0	1	
ZION0058	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/11/86-07/16/86	0	2	
ZION0060	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/10/86-09/10/86	0	1	
ZION0062	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/86-07/12/86	0	1	
ZION0064	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	0	1	
ZION0065	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/01/80-07/01/80	0	1	
ZION0067	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	0	1	
ZION0068	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/86-06/22/86	0	1	
ZION0070	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/86-07/13/86	0	1	
ZION0071	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/86-07/17/86	0	1	
ZION0073	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-03/04/82	0	2	
ZION0077	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/12/86-06/12/86	0	1	
ZION0079	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	0	1	
ZION0083	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/86-06/22/86	0	1	
ZION0086	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/22/86-08/22/86	0	1	
ZION0088	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	0	1	
ZION0089	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-07/14/86	4	3	
ZION0091	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/86-06/18/86	0	1	
ZION0093	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	0	1	
ZION0095	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	0	1	
ZION0096	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	0	2	
ZION0097	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	0	2	
ZION0098	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	0	2	
ZION0099	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	0	2	
ZION0100	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	0	1	
ZION0101	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/86-06/21/86	0	1	
ZION0103	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/14/86-09/14/86	0	1	
ZION0104	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-07/16/86	5	4	
ZION0105	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	0	1	
ZION0106	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/01/80-07/01/80	0	1	
ZION0107	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	0	1	
ZION0108	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/86-07/15/86	0	1	
ZION0109	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	0	1	
ZION0110	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/12/77-06/19/90	12	2	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0111	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/26/86-08/26/86	0	1	
ZION0112	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/12/77-11/12/77	0	1	
ZION0114	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/86-07/15/86	0	1	
ZION0116	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/28/87-07/28/87	0	1	
ZION0117	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/87-09/18/87	0	1	
ZION0118	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/11/86-09/11/86	0	1	
ZION0119	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/76-07/23/76	0	1	
ZION0120	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/80-07/17/80	0	1	
ZION0121	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/87-09/18/87	0	1	
ZION0122	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	0	1	
ZION0123	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/20/80-07/20/80	0	1	
ZION0128	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/19/80-07/19/80	0	1	
ZION0129	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/11/82-06/11/82	0	1	
ZION0130	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	0	1	
ZION0131	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/05/80-07/05/80	0	1	
ZION0132	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/23/86-08/23/86	0	1	
ZION0136	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/19/80-07/19/80	0	1	
ZION0137	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-11/10/93	16	5	
ZION0138	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0140	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/26/74	0	4	
ZION0142	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/02/80-07/02/80	0	1	
ZION0144	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/02/80-07/02/80	0	1	
ZION0149	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0162	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/86-09/18/86	0	1	
ZION0163	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	0	1	
ZION0164	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	0	1	
ZION0167	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/13/77-08/05/77	0	2	
ZION0168	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	1	3	
ZION0174	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/17/75-05/16/77	1	3	
ZION0177	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/10/93-03/12/96	2	12	
ZION0178	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/15/94-06/15/94	0	2	
ZION0180	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	0	5	
ZION0183	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	0	1	
ZION0184	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	0	1	
ZION0185	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/06/86-08/06/86	0	1	
ZION0186	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	4	25	
ZION0188	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	0	3	
ZION0192	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	4	24	
ZION0193	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	0	1	
ZION0194	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/80-07/15/80	0	1	
ZION0195	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	0	1	
ZION0196	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	0	1	
ZION0198	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	0	1	
ZION0200	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	0	1	
ZION0201	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/17/78-04/17/78	0	1	
ZION0202	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/28/75-12/28/75	0	1	
ZION0207	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/80-07/13/80	0	1	
ZION0208	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	0	1	
ZION0209	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	0	1	
ZION0211	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	0	1	
ZION0214	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	0	1	
ZION0216	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	0	1	
ZION0218	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	0	1	
ZION0220	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	0	1	
ZION0221	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	0	1	
ZION0222	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/10/80-07/10/80	0	1	
ZION0223	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/23/82-08/23/82	0	1	
ZION0224	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	0	1	
ZION0225	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/14/80-07/14/80	0	1	
ZION0226	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/80-07/15/80	0	1	
ZION0227	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	0	1	
ZION0229	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	0	1	
ZION0230	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	0	1	
ZION0231	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/18/77-11/18/77	0	1	
ZION0234	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	0	1	
ZION0236	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/74-01/18/74	0	1	
ZION0237	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/78-06/14/78	0	1	
ZION0240	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/17/77-11/17/77	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0241	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	0	3	
ZION0244	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/16/77-09/04/77	0	3	
ZION0248	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	0	3	
ZION0249	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	0	1	
ZION0251	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	0	1	
ZION0254	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/80-06/21/80	0	1	
ZION0255	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	0	1	
ZION0256	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	4	9	
ZION0259	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/08/64-06/08/64	0	1	
ZION0260	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/80-07/12/80	0	1	
ZION0261	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/26/80-06/26/80	0	1	
ZION0263	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	0	1	
ZION0265	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/16/77-11/16/77	0	1	
ZION0270	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/16/74	0	3	
ZION0272	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/16/74	0	3	
ZION0275	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	0	1	
ZION0276	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/92-10/30/96	4	8	
ZION0278	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	0	5	
ZION0283	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	0	5	
ZION0284	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/80-07/12/80	0	1	
ZION0285	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/23/80-06/23/80	0	1	
ZION0293	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	0	1	
ZION0295	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/78-04/12/78	0	1	
ZION0299	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/92-03/17/93	0	5	
ZION0301	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	0	1	
ZION0302	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	0	3	
ZION0303	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	0	5	
ZION0305	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	0	1	
ZION0306	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/11/80-07/11/80	0	1	
ZION0311	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/77-08/05/77	0	2	
ZION0312	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/25/93-06/25/93	0	1	
ZION0314	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/11/80-07/11/80	0	1	
ZION0316	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	0	3	
ZION0328	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-05/28/74	0	2	
ZION0330	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/19/92-10/30/96	4	23	
ZION0332	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	0	5	
ZION0334	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/09/96-10/30/96	0	3	
ZION0336	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/77-06/14/77	0	1	
ZION0338	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/06/77	0	1	
ZION0352	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/25/93-06/25/93	0	1	
ZION0358	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/13/77	0	2	
ZION0359	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/05/77-12/06/77	0	2	
ZION0360	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/06/77	0	1	
ZION0162	Yes	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	09/18/86-09/18/86	0	1	
ZION0183	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	0	1	
ZION0188	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	0	1	
ZION0193	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	0	1	
ZION0195	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	0	1	
ZION0196	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	0	1	
ZION0249	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	0	1	
ZION0255	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	0	1	
ZION0275	No	01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	0	1	
ZION0195	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	0	2	
ZION0196	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	0	3	
ZION0243	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	0	3	
ZION0253	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	0	2	
ZION0275	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	0	3	
ZION0286	No	01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	0	2	
ZION0022	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	0	5	
ZION0028	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/78-05/17/78	0	1	
ZION0035	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	0	5	
ZION0137	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/18/77-03/07/78	1	2	
ZION0140	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/26/74	0	4	
ZION0174	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	0	5	
ZION0180	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	0	5	
ZION0183	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	0	1	
ZION0188	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	0	3	
ZION0193	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0201	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/17/78-04/17/78	0	1	
ZION0202	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	12/28/75-12/28/75	0	1	
ZION0237	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/14/78-06/14/78	0	1	
ZION0244	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	0	3	
ZION0248	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	0	3	
ZION0249	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	0	1	
ZION0255	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	0	1	
ZION0270	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/16/74	0	3	
ZION0272	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/16/74	0	3	
ZION0276	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/01/86-10/01/86	0	1	
ZION0278	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	0	5	
ZION0283	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	0	5	
ZION0295	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/12/78-04/12/78	0	1	
ZION0303	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	0	5	
ZION0328	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-05/28/74	0	2	
ZION0332	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	0	5	
ZION0001	No	01067	NICKEL, TOTAL (UG/L AS NI)	12/01/81-12/01/81	0	1	
ZION0078	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/15/78-09/15/78	0	1	
ZION0080	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	0	1	
ZION0082	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	0	1	
ZION0126	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-10/26/82	3	22	
ZION0166	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01067	NICKEL, TOTAL (UG/L AS NI)	04/07/81-04/07/81	0	1	
ZION0186	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/26/82-06/21/83	0	5	
ZION0192	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/19/79-06/21/83	4	18	
ZION0201	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/10/80-11/10/80	0	2	
ZION0205	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/18/79-04/14/82	2	11	
ZION0206	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	0	2	
ZION0212	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	0	2	
ZION0215	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	0	6	
ZION0256	No	01067	NICKEL, TOTAL (UG/L AS NI)	02/24/82-06/21/83	1	10	
ZION0276	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/17/80-06/21/83	3	15	
ZION0277	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/17/80-04/14/81	0	5	
ZION0279	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/21/83-06/21/83	0	1	
ZION0291	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/06/81-12/22/81	0	3	
ZION0297	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/06/81-12/22/81	0	3	
ZION0299	No	01067	NICKEL, TOTAL (UG/L AS NI)	10/28/80-06/21/83	2	14	
ZION0308	No	01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-02/21/79	0	1	
ZION0330	No	01067	NICKEL, TOTAL (UG/L AS NI)	02/24/82-06/21/83	1	10	
ZION0338	No	01067	NICKEL, TOTAL (UG/L AS NI)	04/28/80-04/28/80	0	1	
ZION0346	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/19/78-09/19/78	0	1	
ZION0352	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/24/79-05/24/79	0	1	
ZION0354	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/20/82-04/27/83	0	6	
ZION0356	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-08/23/89	9	3	
ZION0360	No	01067	NICKEL, TOTAL (UG/L AS NI)	11/11/80-11/11/80	0	1	
ZION0363	No	01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-02/21/79	0	1	
ZION0364	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0365	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0372	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0373	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0374	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0375	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	0	1	
ZION0022	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	0	5	
ZION0028	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/17/78-05/17/78	0	1	
ZION0032	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	0	2	
ZION0035	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	0	5	
ZION0110	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/19/90-06/19/90	0	1	
ZION0119	No	01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/26/74	0	4	
ZION0167	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	09/17/75-05/16/77	1	3	
ZION0177	No	01075	SILVER, DISSOLVED (UG/L AS AG)	11/10/93-03/12/96	2	12	
ZION0178	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/15/94-06/15/94	0	2	
ZION0180	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	0	5	
ZION0183	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	0	1	
ZION0185	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/06/86-08/06/86	0	1	
ZION0186	No	01075	SILVER, DISSOLVED (UG/L AS AG)	12/03/85-10/30/96	10	26	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0188	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	0	3	
ZION0192	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/21/92-10/30/96	4	24	
ZION0193	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	0	1	
ZION0201	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/17/78-04/17/78	0	1	
ZION0202	No	01075	SILVER, DISSOLVED (UG/L AS AG)	12/28/75-12/28/75	0	1	
ZION0237	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/14/78-06/14/78	0	1	
ZION0241	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	0	3	
ZION0244	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01075	SILVER, DISSOLVED (UG/L AS AG)	05/16/77-09/04/77	0	3	
ZION0248	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	0	3	
ZION0249	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	0	1	
ZION0255	No	01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	0	1	
ZION0256	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/21/92-10/30/96	4	9	
ZION0270	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/16/74	0	3	
ZION0272	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/16/74	0	3	
ZION0276	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/92-10/30/96	4	8	
ZION0278	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	0	5	
ZION0283	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	0	4	
ZION0295	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/12/78-04/12/78	0	1	
ZION0299	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/92-03/17/93	0	5	
ZION0302	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	0	3	
ZION0303	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	0	5	
ZION0311	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/14/77-08/05/77	0	2	
ZION0312	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/25/93-06/25/93	0	1	
ZION0316	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	0	3	
ZION0328	No	01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-05/28/74	0	2	
ZION0330	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/19/92-10/30/96	4	23	
ZION0332	No	01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	0	5	
ZION0334	No	01075	SILVER, DISSOLVED (UG/L AS AG)	07/09/96-10/30/96	0	3	
ZION0352	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/25/93-06/25/93	0	1	
ZION0001	No	01077	SILVER, TOTAL (UG/L AS AG)	12/01/81-02/22/88	6	2	
ZION0012	No	01077	SILVER, TOTAL (UG/L AS AG)	07/21/89-07/21/89	0	1	
ZION0013	No	01077	SILVER, TOTAL (UG/L AS AG)	06/23/87-06/23/87	0	1	
ZION0028	No	01077	SILVER, TOTAL (UG/L AS AG)	10/19/82-05/27/86	3	2	
ZION0029	No	01077	SILVER, TOTAL (UG/L AS AG)	07/22/85-08/07/89	4	2	
ZION0040	No	01077	SILVER, TOTAL (UG/L AS AG)	09/02/91-09/02/91	0	1	
ZION0078	No	01077	SILVER, TOTAL (UG/L AS AG)	09/15/78-09/15/78	0	1	
ZION0080	No	01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	0	1	
ZION0082	No	01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	0	1	
ZION0126	No	01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-07/31/91	12	28	
ZION0141	Yes	01077	SILVER, TOTAL (UG/L AS AG)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01077	SILVER, TOTAL (UG/L AS AG)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01077	SILVER, TOTAL (UG/L AS AG)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01077	SILVER, TOTAL (UG/L AS AG)	04/07/81-04/07/81	0	1	
ZION0178	No	01077	SILVER, TOTAL (UG/L AS AG)	04/11/90-08/07/91	1	7	
ZION0185	No	01077	SILVER, TOTAL (UG/L AS AG)	04/03/83-01/17/90	6	4	
ZION0186	No	01077	SILVER, TOTAL (UG/L AS AG)	07/26/82-09/18/91	9	55	
ZION0192	No	01077	SILVER, TOTAL (UG/L AS AG)	04/19/79-09/18/91	12	64	
ZION0201	No	01077	SILVER, TOTAL (UG/L AS AG)	11/10/80-11/12/89	9	3	
ZION0205	No	01077	SILVER, TOTAL (UG/L AS AG)	04/18/79-04/14/82	2	11	
ZION0206	No	01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/28/79	0	2	
ZION0212	No	01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/28/79	0	2	
ZION0215	No	01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/14/91	12	10	
ZION0232	No	01077	SILVER, TOTAL (UG/L AS AG)	06/22/84-09/06/88	4	2	
ZION0235	No	01077	SILVER, TOTAL (UG/L AS AG)	03/07/88-03/07/88	0	1	
ZION0256	No	01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	9	56	
ZION0276	No	01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-09/18/91	11	60	
ZION0277	No	01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-04/14/81	0	5	
ZION0279	No	01077	SILVER, TOTAL (UG/L AS AG)	06/21/83-06/21/83	0	1	
ZION0290	No	01077	SILVER, TOTAL (UG/L AS AG)	05/07/84-07/06/87	3	2	
ZION0291	No	01077	SILVER, TOTAL (UG/L AS AG)	07/06/81-09/16/89	8	4	
ZION0295	No	01077	SILVER, TOTAL (UG/L AS AG)	03/12/86-03/12/86	0	1	
ZION0297	No	01077	SILVER, TOTAL (UG/L AS AG)	07/06/81-09/16/89	8	4	
ZION0299	No	01077	SILVER, TOTAL (UG/L AS AG)	10/28/80-02/27/91	10	43	
ZION0308	No	01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-02/21/79	0	1	
ZION0322	No	01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/08/91	4	10	
ZION0324	No	01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/03/90	3	9	
ZION0326	No	01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-05/22/91	4	12	
ZION0330	No	01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	9	55	
ZION0333	No	01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/03/90	3	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0337	No	01077	SILVER, TOTAL (UG/L AS AG)	07/05/83-07/05/83	0	1	
ZION0338	No	01077	SILVER, TOTAL (UG/L AS AG)	04/28/80-01/09/89	8	3	
ZION0346	No	01077	SILVER, TOTAL (UG/L AS AG)	09/19/78-09/19/78	0	1	
ZION0352	No	01077	SILVER, TOTAL (UG/L AS AG)	05/24/79-05/24/79	0	1	
ZION0354	No	01077	SILVER, TOTAL (UG/L AS AG)	07/20/82-04/27/83	0	6	
ZION0356	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-08/23/89	9	4	
ZION0358	No	01077	SILVER, TOTAL (UG/L AS AG)	07/13/83-07/13/83	0	1	
ZION0360	No	01077	SILVER, TOTAL (UG/L AS AG)	11/11/80-07/12/83	2	2	
ZION0363	No	01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-02/21/79	0	1	
ZION0364	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0365	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0372	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0373	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0374	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0375	No	01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	0	1	
ZION0116	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	07/28/87-07/28/87	0	1	
ZION0162	Yes	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	09/18/86-09/18/86	0	1	
ZION0183	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	0	1	
ZION0188	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	0	1	
ZION0193	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	0	1	
ZION0249	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	0	1	
ZION0255	No	01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	0	1	
ZION0036	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/05/80-07/05/80	0	1	
ZION0041	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	0	1	
ZION0051	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/07/80-07/07/80	0	1	
ZION0052	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	0	1	
ZION0057	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	0	1	
ZION0065	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/01/80-07/01/80	0	1	
ZION0079	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	0	1	
ZION0093	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	0	1	
ZION0105	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	0	1	
ZION0106	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/01/80-07/01/80	0	1	
ZION0107	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	0	1	
ZION0109	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	0	1	
ZION0120	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/17/80-07/17/80	0	1	
ZION0122	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	0	1	
ZION0123	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/20/80-07/20/80	0	1	
ZION0128	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/19/80-07/19/80	0	1	
ZION0130	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	0	1	
ZION0131	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/05/80-07/05/80	0	1	
ZION0136	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/19/80-07/19/80	0	1	
ZION0142	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/02/80-07/02/80	0	1	
ZION0144	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/02/80-07/02/80	0	1	
ZION0162	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	09/18/86-09/18/86	0	1	
ZION0163	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	0	1	
ZION0164	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	0	1	
ZION0183	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	0	1	
ZION0184	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	0	1	
ZION0188	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	0	1	
ZION0193	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	0	1	
ZION0194	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/15/80-07/15/80	0	1	
ZION0198	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	0	1	
ZION0200	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	0	1	
ZION0207	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/13/80-07/13/80	0	1	
ZION0208	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	0	1	
ZION0209	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	0	1	
ZION0211	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	0	1	
ZION0214	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0216	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0218	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0219	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/13/80-07/13/80	0	1	
ZION0220	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	0	1	
ZION0221	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	0	1	
ZION0222	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/10/80-07/10/80	0	1	
ZION0224	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0225	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/14/80-07/14/80	0	1	
ZION0226	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/15/80-07/15/80	0	1	
ZION0227	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0228	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	0	1	
ZION0230	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	0	1	
ZION0249	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	0	1	
ZION0254	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/21/80-06/21/80	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0255	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	0	1	
ZION0257	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/21/80-06/21/80	0	1	
ZION0260	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/12/80-07/12/80	0	1	
ZION0261	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/26/80-06/26/80	0	1	
ZION0284	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/12/80-07/12/80	0	1	
ZION0285	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	06/23/80-06/23/80	0	1	
ZION0306	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	0	1	
ZION0314	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	0	1	
ZION0320	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	0	1	
ZION0022	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	0	5	
ZION0028	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	11/09/77-05/17/78	0	2	
ZION0029	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	11/09/77-11/09/77	0	1	
ZION0032	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	0	2	
ZION0035	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	0	5	
ZION0110	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-06/19/90	0	1	
ZION0119	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/26/74	0	4	
ZION0162	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/18/86-09/18/86	0	1	
ZION0167	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/17/75-05/16/77	1	3	
ZION0177	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	11/10/93-03/12/96	2	12	
ZION0178	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/15/94-06/15/94	0	2	
ZION0180	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	0	5	
ZION0183	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	0	1	
ZION0185	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/06/86-08/06/86	0	1	
ZION0186	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	4	25	
ZION0188	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	0	1	
ZION0190	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	0	3	
ZION0192	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	4	24	
ZION0193	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	0	1	
ZION0201	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/17/78-04/17/78	0	1	
ZION0202	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/28/75-12/28/75	0	1	
ZION0223	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/23/82-08/23/82	0	1	
ZION0237	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/78-06/14/78	0	1	
ZION0241	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	0	3	
ZION0244	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/16/77-09/04/77	0	3	
ZION0248	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	0	3	
ZION0249	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	0	1	
ZION0255	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	0	1	
ZION0256	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	4	9	
ZION0263	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	0	1	
ZION0270	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/16/74	0	3	
ZION0272	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/16/74	0	3	
ZION0276	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/92-10/30/96	4	8	
ZION0278	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	0	5	
ZION0283	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	0	5	
ZION0293	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	0	1	
ZION0295	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/12/78-04/12/78	0	1	
ZION0299	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/92-03/17/93	0	5	
ZION0301	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	0	1	
ZION0302	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	0	3	
ZION0303	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	0	5	
ZION0305	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	0	1	
ZION0309	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/16/64-03/16/64	0	1	
ZION0311	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/77-08/05/77	0	2	
ZION0312	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/25/93-06/25/93	0	1	
ZION0316	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	0	3	
ZION0328	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-05/28/74	0	2	
ZION0330	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/19/92-10/30/96	4	23	
ZION0332	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	0	5	
ZION0334	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/09/96-10/30/96	0	3	
ZION0336	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/77-06/14/77	0	1	
ZION0338	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/06/77	0	1	
ZION0340	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	02/20/64-02/20/64	0	1	
ZION0352	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/25/93-06/25/93	0	1	
ZION0355	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	03/10/64-03/10/64	0	1	
ZION0356	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	11/28/77-11/28/77	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0358	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/13/77	0	2	
ZION0359	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/05/77-12/06/77	0	2	
ZION0360	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/06/77	0	1	
ZION0367	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/14/62-07/14/62	0	1	
ZION0370	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	02/18/67-02/18/67	0	1	
ZION0001	No	01092	ZINC, TOTAL (UG/L AS ZN)	12/01/81-02/22/88	6	2	
ZION0012	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/21/89-07/21/89	0	1	
ZION0013	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/23/87-06/23/87	0	1	
ZION0028	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/19/82-05/27/86	3	2	
ZION0029	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/22/85-08/07/89	4	2	
ZION0040	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/02/91-09/02/91	0	1	
ZION0078	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/15/78-09/15/78	0	1	
ZION0080	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	0	1	
ZION0082	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	0	1	
ZION0126	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	07/12/78-07/31/91	13	31	
ZION0141	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/81-04/07/81	0	1	
ZION0178	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/11/90-08/07/91	1	7	
ZION0185	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/03/83-01/17/90	6	4	
ZION0186	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/26/82-09/18/91	9	55	
ZION0192	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/19/79-09/18/91	12	64	
ZION0201	No	01092	ZINC, TOTAL (UG/L AS ZN)	11/10/80-11/12/89	9	3	
ZION0205	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/18/79-04/14/82	2	11	
ZION0206	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/28/79	0	2	
ZION0212	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/28/79	0	2	
ZION0215	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/14/91	12	10	
ZION0232	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/22/84-09/06/88	4	2	
ZION0235	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/07/88-03/07/88	0	1	
ZION0256	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/14/82-09/18/91	9	55	
ZION0276	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-09/18/91	11	60	
ZION0277	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-04/14/81	0	5	
ZION0279	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/21/83-06/21/83	0	1	
ZION0290	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/07/84-07/06/87	3	2	
ZION0291	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/06/81-09/16/89	8	4	
ZION0295	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/12/86-03/12/86	0	1	
ZION0297	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/06/81-09/16/89	8	4	
ZION0299	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/28/80-02/27/91	10	43	
ZION0308	No	01092	ZINC, TOTAL (UG/L AS ZN)	02/21/79-02/21/79	0	1	
ZION0322	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/08/91	4	10	
ZION0324	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/03/90	3	9	
ZION0326	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-05/22/91	4	12	
ZION0330	No	01092	ZINC, TOTAL (UG/L AS ZN)	02/24/82-09/18/91	9	55	
ZION0333	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/03/90	3	3	
ZION0337	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/05/83-07/05/83	0	1	
ZION0338	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/28/80-01/09/89	8	3	
ZION0346	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/19/78-09/19/78	0	1	
ZION0352	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/24/79-05/24/79	0	1	
ZION0354	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/20/82-04/27/83	0	6	
ZION0356	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-08/23/89	9	4	
ZION0358	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/13/83-07/13/83	0	1	
ZION0360	No	01092	ZINC, TOTAL (UG/L AS ZN)	11/11/80-07/12/83	2	2	
ZION0363	No	01092	ZINC, TOTAL (UG/L AS ZN)	02/21/79-02/21/79	0	1	
ZION0364	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0365	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0372	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0373	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0374	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0375	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	0	1	
ZION0183	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	0	1	
ZION0188	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	0	1	
ZION0193	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	0	1	
ZION0249	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	0	1	
ZION0255	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	0	1	
ZION0183	No	01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	0	1	
ZION0188	No	01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	0	1	
ZION0193	No	01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	0	1	
ZION0249	No	01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	0	1	
ZION0255	No	01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	0	1	
ZION0299	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/23/85-04/23/85	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0032	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	2	
ZION0036	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/05/80-07/05/80	0	1	
ZION0051	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/07/80-07/07/80	0	1	
ZION0052	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	0	1	
ZION0057	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	0	1	
ZION0065	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/01/80-07/01/80	0	1	
ZION0079	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	0	1	
ZION0093	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	0	1	
ZION0105	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	0	1	
ZION0106	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/01/80-07/01/80	0	1	
ZION0107	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	0	1	
ZION0109	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	0	1	
ZION0119	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/76-07/23/76	0	1	
ZION0130	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	0	1	
ZION0131	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/05/80-07/05/80	0	1	
ZION0142	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/02/80-07/02/80	0	1	
ZION0144	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/02/80-07/02/80	0	1	
ZION0167	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/13/77-08/05/77	0	2	
ZION0176	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	09/17/75-05/16/77	1	3	
ZION0177	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	09/07/94-03/12/96	1	9	
ZION0183	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	0	1	
ZION0186	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	2	9	
ZION0188	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	0	1	
ZION0192	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	2	9	
ZION0193	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	0	1	
ZION0198	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	0	1	
ZION0200	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	0	1	
ZION0208	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	0	1	
ZION0209	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	0	1	
ZION0211	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	0	1	
ZION0214	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0216	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0218	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0220	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	0	1	
ZION0221	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	0	1	
ZION0222	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/10/80-07/10/80	0	1	
ZION0224	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0227	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0228	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	0	1	
ZION0230	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	0	1	
ZION0241	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	3	
ZION0246	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/16/77-09/04/77	0	3	
ZION0249	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	0	1	
ZION0254	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/21/80-06/21/80	0	1	
ZION0255	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	0	1	
ZION0256	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	3	
ZION0257	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/21/80-06/21/80	0	1	
ZION0260	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/12/80-07/12/80	0	1	
ZION0261	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/26/80-06/26/80	0	1	
ZION0276	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	3	
ZION0285	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/23/80-06/23/80	0	1	
ZION0302	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	3	
ZION0316	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	0	3	
ZION0330	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	2	9	
ZION0334	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/09/96-10/30/96	0	3	
ZION0183	No	01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	0	1	
ZION0188	No	01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	0	1	
ZION0193	No	01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	0	1	
ZION0249	No	01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	0	1	
ZION0255	No	01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	0	1	
ZION0183	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	0	1	
ZION0188	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	0	1	
ZION0193	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	0	1	
ZION0249	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	0	1	
ZION0255	No	01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	0	1	
ZION0162	Yes	01130	LITHIUM, DISSOLVED (UG/L AS LI)	09/18/86-09/18/86	0	1	
ZION0183	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	0	1	
ZION0188	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	0	1	
ZION0193	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	0	1	
ZION0249	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	0	1	
ZION0255	No	01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	0	1	
ZION0022	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0028	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/17/78-05/17/78	0	1	
ZION0032	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	0	2	
ZION0035	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	0	5	
ZION0110	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/19/90-06/19/90	0	1	
ZION0119	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/76-07/23/76	0	1	
ZION0137	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	01/18/77-11/10/93	16	5	
ZION0140	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/01/77-05/03/77	0	2	
ZION0141	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/26/74	0	4	
ZION0167	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/13/77-08/05/77	0	2	
ZION0174	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	0	5	
ZION0176	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/17/75-05/16/77	1	3	
ZION0177	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	11/10/93-03/12/96	2	12	
ZION0178	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/15/94-07/31/96	2	3	
ZION0180	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	0	4	
ZION0181	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	0	5	
ZION0185	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/06/86-08/06/86	0	1	
ZION0186	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	4	25	
ZION0190	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	0	3	
ZION0192	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	4	24	
ZION0195	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	0	1	
ZION0196	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	0	1	
ZION0201	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/17/78-04/17/78	0	1	
ZION0202	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	12/28/75-12/28/75	0	1	
ZION0215	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/01/93-08/09/95	1	2	
ZION0223	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/23/82-08/23/82	0	1	
ZION0237	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/14/78-06/14/78	0	1	
ZION0241	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	0	3	
ZION0244	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	0	3	
ZION0246	Yes	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/16/77-09/04/77	0	3	
ZION0248	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	0	3	
ZION0256	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	4	9	
ZION0263	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	0	1	
ZION0270	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/16/74	0	3	
ZION0272	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/16/74	0	3	
ZION0275	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	0	1	
ZION0276	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/92-10/30/96	4	8	
ZION0278	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	0	5	
ZION0283	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	0	5	
ZION0293	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	0	1	
ZION0295	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/12/78-04/12/78	0	1	
ZION0299	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/92-03/17/93	0	5	
ZION0301	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	0	1	
ZION0302	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	0	3	
ZION0303	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	0	5	
ZION0305	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	0	1	
ZION0312	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/25/93-06/25/93	0	1	
ZION0316	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	0	3	
ZION0322	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/09/95	2	2	
ZION0324	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/04/93	0	1	
ZION0326	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/04/93	0	1	
ZION0328	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-05/28/74	0	2	
ZION0330	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/19/92-10/30/96	4	23	
ZION0332	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	0	5	
ZION0334	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/09/96-10/30/96	0	3	
ZION0352	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/25/93-06/25/93	0	1	
ZION0001	No	01147	SELENIUM, TOTAL (UG/L AS SE)	12/01/81-02/22/88	6	2	
ZION0012	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/21/89-07/21/89	0	1	
ZION0013	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/23/87-06/23/87	0	1	
ZION0028	No	01147	SELENIUM, TOTAL (UG/L AS SE)	10/19/82-05/27/86	3	2	
ZION0029	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/22/85-08/07/89	4	2	
ZION0040	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/02/91-09/02/91	0	1	
ZION0078	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/15/78-09/15/78	0	1	
ZION0080	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	0	1	
ZION0082	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	0	1	
ZION0126	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	0	1	
ZION0137	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-07/31/91	12	29	
ZION0141	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	10/31/84-10/31/84	0	1	
ZION0153	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	01/25/88-01/25/88	0	1	
ZION0166	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	04/07/81-04/07/81	0	1	
ZION0169	Yes	01147	SELENIUM, TOTAL (UG/L AS SE)	04/07/81-04/07/81	0	1	
ZION0178	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/11/90-08/07/91	1	7	
ZION0185	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/03/83-01/17/90	6	4	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0186	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/26/82-09/18/91	9	55	
ZION0192	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/19/79-09/18/91	12	64	
ZION0195	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	0	2	
ZION0196	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	0	3	
ZION0201	No	01147	SELENIUM, TOTAL (UG/L AS SE)	11/10/80-11/12/89	9	3	
ZION0205	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/18/79-04/14/82	2	11	
ZION0206	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/28/79	0	2	
ZION0212	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/28/79	0	2	
ZION0215	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/14/91	12	10	
ZION0232	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/22/84-09/06/88	4	2	
ZION0235	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/07/88-03/07/88	0	1	
ZION0243	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	0	3	
ZION0253	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	0	2	
ZION0256	No	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	9	56	
ZION0275	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	0	3	
ZION0276	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-09/18/91	11	60	
ZION0277	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-04/14/81	0	5	
ZION0279	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/21/83-06/21/83	0	1	
ZION0286	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	0	2	
ZION0290	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/07/84-07/06/87	3	2	
ZION0291	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/06/81-09/16/89	8	4	
ZION0295	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/12/86-03/12/86	0	1	
ZION0297	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/06/81-09/16/89	8	4	
ZION0299	No	01147	SELENIUM, TOTAL (UG/L AS SE)	10/28/80-02/27/91	10	43	
ZION0308	No	01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-02/21/79	0	1	
ZION0322	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/08/91	4	10	
ZION0324	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/03/90	3	9	
ZION0326	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-05/22/91	4	12	
ZION0330	No	01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	9	55	
ZION0333	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/03/90	3	3	
ZION0337	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/05/83-07/05/83	0	1	
ZION0338	No	01147	SELENIUM, TOTAL (UG/L AS SE)	04/28/80-01/09/89	8	3	
ZION0346	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/19/78-09/19/78	0	1	
ZION0352	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/24/79-05/24/79	0	1	
ZION0354	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/20/82-04/27/83	0	6	
ZION0356	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-08/23/89	9	4	
ZION0358	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/13/83-07/13/83	0	1	
ZION0360	No	01147	SELENIUM, TOTAL (UG/L AS SE)	11/11/80-07/12/83	2	2	
ZION0363	No	01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-02/21/79	0	1	
ZION0364	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0365	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0372	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0373	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0374	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0375	No	01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	0	1	
ZION0195	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	0	1	
ZION0196	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	0	1	
ZION0275	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	0	1	
ZION0183	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	0	1	
ZION0188	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	0	1	
ZION0193	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	0	1	
ZION0249	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	0	1	
ZION0255	No	01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	0	1	
ZION0183	No	01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	0	1	
ZION0188	No	01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	0	1	
ZION0193	No	01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	0	1	
ZION0249	No	01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	0	1	
ZION0255	No	01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	0	1	
ZION0056	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	0	4	
ZION0195	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0196	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	0	1	
ZION0275	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	0	1	
ZION0001	No	01501	ALPHA, TOTAL	05/13/81-01/01/88	6	3	
ZION0028	No	01501	ALPHA, TOTAL	06/30/81-08/27/86	5	3	
ZION0137	Yes	01501	ALPHA, TOTAL	03/07/78-03/07/78	0	1	
ZION0153	Yes	01501	ALPHA, TOTAL	01/25/88-01/25/88	0	1	
ZION0169	Yes	01501	ALPHA, TOTAL	10/21/86-10/21/86	0	1	
ZION0185	No	01501	ALPHA, TOTAL	01/17/90-01/17/90	0	1	
ZION0201	No	01501	ALPHA, TOTAL	06/18/81-06/09/87	5	5	
ZION0232	No	01501	ALPHA, TOTAL	09/06/88-09/06/88	0	1	
ZION0235	No	01501	ALPHA, TOTAL	11/18/81-03/07/88	6	2	
ZION0237	No	01501	ALPHA, TOTAL	06/16/81-11/19/81	0	2	
ZION0276	No	01501	ALPHA, TOTAL	10/28/80-02/18/81	0	2	
ZION0279	No	01501	ALPHA, TOTAL	06/21/83-06/21/83	0	1	
ZION0290	No	01501	ALPHA, TOTAL	09/10/85-09/10/85	0	1	
ZION0291	No	01501	ALPHA, TOTAL	10/01/81-09/16/89	7	3	
ZION0295	No	01501	ALPHA, TOTAL	09/10/85-09/10/85	0	1	
ZION0297	No	01501	ALPHA, TOTAL	07/06/81-09/16/89	8	3	
ZION0330	No	01501	ALPHA, TOTAL	09/03/85-10/13/92	7	9	
ZION0337	No	01501	ALPHA, TOTAL	05/18/89-05/18/89	0	1	
ZION0338	No	01501	ALPHA, TOTAL	06/18/81-08/05/85	4	3	
ZION0356	No	01501	ALPHA, TOTAL	06/15/81-08/23/89	8	4	
ZION0358	No	01501	ALPHA, TOTAL	10/09/84-10/09/84	0	1	
ZION0359	No	01501	ALPHA, TOTAL	08/06/81-08/06/81	0	1	
ZION0360	No	01501	ALPHA, TOTAL	10/09/84-10/09/84	0	1	
ZION0137	Yes	03501	BETA, TOTAL	03/07/78-03/07/78	0	1	
ZION0201	No	03501	BETA, TOTAL	09/13/83-09/13/83	0	1	
ZION0276	No	03501	BETA, TOTAL	10/28/80-02/18/81	0	2	
ZION0279	No	03501	BETA, TOTAL	06/21/83-06/21/83	0	1	
ZION0330	No	03501	BETA, TOTAL	09/03/85-10/13/92	7	9	
ZION0356	No	03501	BETA, TOTAL	04/02/85-08/23/89	4	2	
ZION0358	No	03501	BETA, TOTAL	10/09/84-10/09/84	0	1	
ZION0360	No	03501	BETA, TOTAL	10/09/84-10/09/84	0	1	
ZION0137	Yes	03509	BETA, SPECIFIC ACTIVITY (PC/GM OF SUSP. SOLIDS)	03/07/78-03/07/78	0	1	
ZION0110	No	03515	BETA, DISSOLVED GROSS, AS CS-137, PC/L	06/19/90-06/19/90	0	1	
ZION0137	Yes	07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	03/07/78-03/07/78	0	1	
ZION0276	No	07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	10/28/80-02/18/81	0	2	
ZION0279	No	07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	06/21/83-06/21/83	0	1	
ZION0330	No	07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	08/19/86-08/19/86	0	1	
ZION0143	Yes	07005	TRITIUM, DISSOLVED (PC/L)	08/28/88-11/03/88	0	3	
ZION0146	Yes	07005	TRITIUM, DISSOLVED (PC/L)	08/16/88-02/16/89	0	3	
ZION0150	Yes	07005	TRITIUM, DISSOLVED (PC/L)	08/16/88-02/16/89	0	3	
ZION0154	Yes	07005	TRITIUM, DISSOLVED (PC/L)	08/17/88-02/17/89	0	3	
ZION0161	Yes	07005	TRITIUM, DISSOLVED (PC/L)	08/26/88-02/15/89	0	3	
ZION0137	Yes	09501	RADIUM 226, TOTAL	03/07/78-03/07/78	0	1	
ZION0201	No	09501	RADIUM 226, TOTAL	06/18/81-06/09/87	5	8	
ZION0276	No	09501	RADIUM 226, TOTAL	10/28/80-02/18/81	0	2	
ZION0279	No	09501	RADIUM 226, TOTAL	06/21/83-06/21/83	0	1	
ZION0297	No	09501	RADIUM 226, TOTAL	12/22/82-09/16/89	6	2	
ZION0330	No	09501	RADIUM 226, TOTAL	09/03/85-06/04/91	5	7	
ZION0274	No	09511	RADIUM 226, DISSOLVED, RADON METHOD	07/23/75-07/23/75	0	1	
ZION0201	No	11501	RADIUM 228, TOTAL	09/16/81-09/01/87	5	2	
ZION0276	No	11501	RADIUM 228, TOTAL	10/28/80-02/18/81	0	2	
ZION0330	No	11501	RADIUM 228, TOTAL	08/19/86-08/19/86	0	1	
ZION0036	No	22703	URANIUM, NATURAL, DISSOLVED	07/05/80-07/05/80	0	1	
ZION0041	No	22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	0	1	
ZION0051	No	22703	URANIUM, NATURAL, DISSOLVED	07/07/80-07/07/80	0	1	
ZION0052	No	22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	0	1	
ZION0057	No	22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	0	1	
ZION0065	No	22703	URANIUM, NATURAL, DISSOLVED	07/01/80-07/01/80	0	1	
ZION0079	No	22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	0	1	
ZION0093	No	22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	0	1	
ZION0105	No	22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	0	1	
ZION0106	No	22703	URANIUM, NATURAL, DISSOLVED	07/01/80-07/01/80	0	1	
ZION0107	No	22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	0	1	
ZION0109	No	22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	0	1	
ZION0120	No	22703	URANIUM, NATURAL, DISSOLVED	07/17/80-07/17/80	0	1	
ZION0122	No	22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	0	1	
ZION0123	No	22703	URANIUM, NATURAL, DISSOLVED	07/20/80-07/20/80	0	1	
ZION0128	No	22703	URANIUM, NATURAL, DISSOLVED	07/19/80-07/19/80	0	1	
ZION0130	No	22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	0	1	
ZION0131	No	22703	URANIUM, NATURAL, DISSOLVED	07/05/80-07/05/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0136	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/19/80-07/19/80	0	1	
ZION0142	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/02/80-07/02/80	0	1	
ZION0144	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/02/80-07/02/80	0	1	
ZION0163	No	22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	0	1	
ZION0164	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	0	1	
ZION0184	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	0	1	
ZION0194	No	22703	URANIUM, NATURAL, DISSOLVED	07/15/80-07/15/80	0	1	
ZION0198	No	22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	0	1	
ZION0200	No	22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	0	1	
ZION0207	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/13/80-07/13/80	0	1	
ZION0208	No	22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	0	1	
ZION0209	No	22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	0	1	
ZION0211	No	22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	0	1	
ZION0214	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0216	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0218	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0219	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/13/80-07/13/80	0	1	
ZION0220	No	22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	0	1	
ZION0221	No	22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	0	1	
ZION0222	No	22703	URANIUM, NATURAL, DISSOLVED	07/10/80-07/10/80	0	1	
ZION0224	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0225	Yes	22703	URANIUM, NATURAL, DISSOLVED	07/14/80-07/14/80	0	1	
ZION0226	No	22703	URANIUM, NATURAL, DISSOLVED	07/15/80-07/15/80	0	1	
ZION0227	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0228	No	22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	0	1	
ZION0230	No	22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	0	1	
ZION0254	No	22703	URANIUM, NATURAL, DISSOLVED	06/21/80-06/21/80	0	1	
ZION0257	No	22703	URANIUM, NATURAL, DISSOLVED	06/21/80-06/21/80	0	1	
ZION0260	No	22703	URANIUM, NATURAL, DISSOLVED	07/12/80-07/12/80	0	1	
ZION0261	No	22703	URANIUM, NATURAL, DISSOLVED	06/26/80-06/26/80	0	1	
ZION0284	No	22703	URANIUM, NATURAL, DISSOLVED	07/12/80-07/12/80	0	1	
ZION0285	No	22703	URANIUM, NATURAL, DISSOLVED	06/23/80-06/23/80	0	1	
ZION0306	No	22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	0	1	
ZION0314	No	22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	0	1	
ZION0320	No	22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	0	1	
ZION0330	No	30191	DINOSEB, WATER, WHOLE, RECOVERABLE UG/L	06/04/91-09/18/91	0	2	
ZION0076	No	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/03/92-10/05/92	0	10	
ZION0094	No	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/03/92-10/05/92	0	9	
ZION0134	Yes	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/20/92-09/18/92	0	5	
ZION0148	Yes	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/21/92-10/06/92	0	11	
ZION0151	Yes	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/21/92-10/02/92	0	10	
ZION0157	Yes	30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/16/92-10/06/92	0	5	
ZION0330	No	30218	DICHLORVOS, WATER, WHOLE, RECOVERABLE UG/L	09/18/91-09/18/91	0	1	
ZION0056	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	0	2	
ZION0059	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/79-06/25/79	0	1	
ZION0084	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	0	2	
ZION0115	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	0	2	
ZION0137	Yes	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/01/84-10/03/84	0	10	
ZION0141	Yes	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/01/84-09/12/84	0	8	
ZION0178	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/23/91-08/07/91	0	2	
ZION0215	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/29/91-08/14/91	0	2	
ZION0217	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/29/91-08/14/91	0	2	
ZION0322	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/22/91-08/08/91	0	2	
ZION0324	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	08/08/91-08/08/91	0	1	
ZION0326	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/22/91-08/08/91	0	2	
ZION0329	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/16/96-09/03/96	0	8	
ZION0330	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/21/85-05/21/85	0	1	
ZION0347	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	09/23/77-09/23/77	0	1	
ZION0349	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/02/79-07/24/79	0	3	
ZION0354	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/20/82-04/27/83	0	5	
ZION0363	No	31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/20/82-04/27/83	0	5	
ZION0119	No	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/27/77-09/04/77	0	12	
ZION0133	No	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/27/77-09/04/77	0	12	
ZION0167	No	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/26/77-09/02/77	0	3	
ZION0176	Yes	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/28/77-09/04/77	0	9	
ZION0246	Yes	31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/26/77-09/03/77	0	3	
ZION0022	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	0	5	
ZION0035	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	0	5	
ZION0141	Yes	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	01/04/67-12/18/75	8	62	
ZION0174	Yes	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	0	4	
ZION0180	Yes	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	0	4	
ZION0181	Yes	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	0	5	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0190	Yes	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	0	3	
ZION0244	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	0	3	
ZION0248	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	0	3	
ZION0270	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/16/74	0	3	
ZION0272	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/16/74	0	2	
ZION0278	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	0	5	
ZION0283	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	0	5	
ZION0303	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	0	5	
ZION0328	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-05/28/74	0	2	
ZION0332	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	0	5	
ZION0137	Yes	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/24/77-09/11/79	2	11	
ZION0139	Yes	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	03/31/77-12/12/78	1	4	
ZION0140	Yes	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-11/29/77	0	11	
ZION0192	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-06/19/79	0	2	
ZION0205	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-04/19/79	0	1	
ZION0206	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	0	2	
ZION0212	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	0	2	
ZION0215	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	0	6	
ZION0217	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/23/79	0	2	
ZION0308	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/10/78-12/16/81	3	22	
ZION0352	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/23/79-05/23/79	0	1	
ZION0363	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-05/18/82	5	26	
ZION0047	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	1	5	
ZION0055	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	1	5	
ZION0056	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	0	2	
ZION0059	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-06/25/79	3	6	
ZION0072	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	1	5	
ZION0084	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	0	2	
ZION0115	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	0	2	
ZION0137	Yes	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/01/84-10/03/84	0	10	
ZION0141	Yes	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/01/84-09/12/84	0	8	
ZION0178	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/23/91-08/07/91	0	2	
ZION0179	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	08/07/91-08/07/91	0	1	
ZION0212	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-05/29/91	0	1	
ZION0215	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-08/14/91	0	2	
ZION0217	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-08/14/91	0	2	
ZION0311	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/14/77-08/05/77	0	2	
ZION0322	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	0	2	
ZION0324	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	0	2	
ZION0326	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	0	2	
ZION0329	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/23/96-09/03/96	0	7	
ZION0330	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/21/85-05/21/85	0	1	
ZION0333	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-05/22/91	0	1	
ZION0336	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/20/77-09/23/77	0	4	
ZION0347	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/12/76-09/23/77	1	9	
ZION0349	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/12/76-07/24/79	3	11	
ZION0354	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/20/82-04/27/83	0	5	
ZION0363	No	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/20/82-04/27/83	0	5	
ZION0137	Yes	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/24/77-09/11/79	2	11	
ZION0139	Yes	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/31/77-12/12/78	1	4	
ZION0140	Yes	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-11/29/77	0	10	
ZION0192	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-06/19/79	0	2	
ZION0205	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-04/19/79	0	1	
ZION0206	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	0	2	
ZION0212	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	0	2	
ZION0215	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	0	4	
ZION0217	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-05/22/79	0	1	
ZION0308	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/10/78-12/16/81	3	22	
ZION0352	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/23/79-05/23/79	0	1	
ZION0363	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-05/18/82	5	26	
ZION0022	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	0	5	
ZION0035	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	0	5	
ZION0047	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	0	4	
ZION0055	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	0	4	
ZION0059	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	0	4	
ZION0072	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	0	4	
ZION0174	Yes	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	0	4	
ZION0180	Yes	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	0	4	
ZION0181	Yes	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	0	5	
ZION0190	Yes	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	0	3	
ZION0244	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	0	3	
ZION0248	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0270	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	0	3	
ZION0272	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	0	2	
ZION0278	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	0	5	
ZION0283	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	0	5	
ZION0303	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	0	5	
ZION0328	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-05/28/74	0	2	
ZION0332	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	0	5	
ZION0347	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	0	5	
ZION0349	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	0	5	
ZION0119	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	0	12	
ZION0133	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	0	12	
ZION0141	Yes	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/16/71-12/18/75	4	34	
ZION0167	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/02/77	0	3	
ZION0176	Yes	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/77-09/04/77	0	9	
ZION0183	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	0	1	
ZION0188	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	0	1	
ZION0193	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	0	1	
ZION0246	Yes	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/03/77	0	3	
ZION0249	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	0	1	
ZION0255	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	0	1	
ZION0056	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	0	2	
ZION0084	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	0	2	
ZION0115	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	0	2	
ZION0137	Yes	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/01/84-10/03/84	0	10	
ZION0141	Yes	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/01/84-09/12/84	0	8	
ZION0178	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/23/91-08/07/91	0	2	
ZION0179	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	08/07/91-08/07/91	0	1	
ZION0212	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	0	2	
ZION0215	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	0	2	
ZION0217	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	0	2	
ZION0322	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	0	2	
ZION0324	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	0	2	
ZION0326	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	0	2	
ZION0330	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/21/85-05/21/85	0	1	
ZION0333	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-05/22/91	0	1	
ZION0354	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	07/20/82-11/09/82	0	3	
ZION0363	No	31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	07/20/82-11/09/82	0	3	
ZION0119	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/27/77-09/04/77	0	12	
ZION0133	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/27/77-09/04/77	0	12	
ZION0167	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/26/77-09/02/77	0	3	
ZION0176	Yes	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/28/77-09/04/77	0	9	
ZION0183	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	0	1	
ZION0188	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	0	1	
ZION0193	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	0	1	
ZION0246	Yes	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/26/77-09/03/77	0	3	
ZION0249	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	0	1	
ZION0255	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	0	1	
ZION0110	No	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/11/83-12/18/87	4	5	
ZION0110	No	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	32104	BROMOFORM,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32104	BROMOFORM,WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/11/83-05/11/83	0	3	
ZION0110	No	32106	CHLOROFORM,WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	32106	CHLOROFORM,WHOLE WATER,UG/L	05/11/83-12/18/87	4	5	
ZION0022	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	0	5	
ZION0035	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	0	5	
ZION0056	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/88-08/08/95	6	21	
ZION0084	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/08/95	6	21	
ZION0174	Yes	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	0	5	
ZION0178	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/02/90-07/31/96	5	8	
ZION0180	Yes	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	0	4	
ZION0181	Yes	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	0	5	
ZION0190	Yes	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	0	3	
ZION0215	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/02/89-08/09/95	6	7	
ZION0217	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/03/89-08/09/95	6	7	
ZION0244	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	0	3	
ZION0248	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0270	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/16/74	0	3	
ZION0272	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/16/74	0	3	
ZION0278	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	0	5	
ZION0283	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	0	5	
ZION0303	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	0	5	
ZION0322	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	6	8	
ZION0324	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	6	8	
ZION0326	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	6	10	
ZION0328	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-05/28/74	0	2	
ZION0332	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	0	5	
ZION0061	No	32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	08/13/75-09/25/75	0	2	
ZION0074	No	32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	08/13/75-09/25/75	0	2	
ZION0110	No	34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	06/19/90-06/19/90	0	1	
ZION0110	No	34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	06/19/90-06/19/90	0	1	
ZION0110	No	34301	CHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34301	CHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0356	No	34306	CHLORODIBROMOMETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34311	CHLOROETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34311	CHLOROETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0330	No	34351	ENDOSULFAN SULFATE TOTWUG/L	09/16/87-09/18/91	4	6	
ZION0330	No	34356	ENDOSULFAN, BETA TOTWUG/L	09/16/87-09/18/91	4	6	
ZION0330	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	09/16/87-09/18/91	4	6	
ZION0330	No	34366	ENDRIN ALDEHYDE TOTWUG/L	09/16/87-09/18/91	4	6	
ZION0110	No	34371	ETHYLBENZENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34391	HEXACHLOROBUTADIENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34413	METHYL BROMIDE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34413	METHYL BROMIDE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34418	METHYL CHLORIDE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34418	METHYL CHLORIDE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34423	METHYLENE CHLORIDE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34423	METHYLENE CHLORIDE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34475	TETRACHLOROETHYLENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34475	TETRACHLOROETHYLENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34488	TRICHLOROFLUOROMETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34488	TRICHLOROFLUOROMETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34496	1,1-DICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34496	1,1-DICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34501	1,1-DICHLOROETHYLENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34501	1,1-DICHLOROETHYLENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34506	1,1,1-TRICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34506	1,1,1-TRICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34511	1,1,2-TRICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34511	1,1,2-TRICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34536	1,2-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34536	1,2-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34541	1,2-DICHLOROPROPANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34541	1,2-DICHLOROPROPANE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34561	1,3-DICHLOROPROPENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34561	1,3-DICHLOROPROPENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34566	1,3-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34566	1,3-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34571	1,4-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0356	No	34571	1,4-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0110	No	34668	DICHLORODIFUOROMETHANE TOTWUG/L	06/19/90-06/19/90	0	1	
ZION0330	No	34671	PCB - 1016 TOTWUG/L	09/16/87-09/18/91	4	6	
ZION0356	No	34688	HEXACHLOROBENZENE WET WGTTISMG/KG	12/18/87-12/18/87	0	1	
ZION0356	No	34696	NAPHTHALENE TOTWUG/L	12/18/87-12/18/87	0	1	
ZION0110	No	34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	06/19/90-06/19/90	0	1	
ZION0110	No	34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	06/19/90-06/19/90	0	1	
ZION0001	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/22/88-02/22/88	0	1	
ZION0012	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/21/89-07/21/89	0	1	
ZION0013	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	06/23/87-06/23/87	0	1	
ZION0028	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/17/78-10/19/82	4	2	
ZION0029	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/07/89-08/07/89	0	1	
ZION0078	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/15/78-09/15/78	0	1	
ZION0080	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0082	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	0	1	
ZION0126	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	0	1	
ZION0137	Yes	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	01/18/77-04/19/79	2	4	
ZION0140	Yes	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	03/01/77-05/03/77	0	2	
ZION0141	Yes	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10/31/73-07/26/74	0	4	
ZION0185	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/06/86-10/07/87	1	2	
ZION0192	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/19/79-06/19/79	0	2	
ZION0201	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/17/78-04/17/78	0	1	
ZION0205	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/18/79-06/19/79	0	2	
ZION0206	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	0	1	
ZION0212	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	0	1	
ZION0215	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	0	3	
ZION0237	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	06/14/78-06/14/78	0	1	
ZION0290	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/06/87-07/06/87	0	1	
ZION0295	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/12/78-03/12/86	7	2	
ZION0308	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/21/79-02/21/79	0	1	
ZION0337	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/05/83-07/05/83	0	1	
ZION0338	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	01/09/89-01/09/89	0	1	
ZION0346	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/19/78-09/19/78	0	1	
ZION0352	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/24/79-05/24/79	0	1	
ZION0363	No	38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/21/79-02/21/79	0	1	
ZION0330	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	06/04/91-09/18/91	0	2	
ZION0356	No	38760	DBCP WATER, TOTUG/L	12/18/87-12/18/87	0	1	
ZION0330	No	39023	PHORATE, FLAME IONIZATION, WATER SAMPLE (UG/L)	09/18/91-09/18/91	0	1	
ZION0330	No	39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	06/04/91-06/04/91	0	1	
ZION0110	No	39034	PERTHANE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39053	ALDICARB IN WHOLE WATER (UG/L)	09/18/91-09/18/91	0	1	
ZION0330	No	39055	SIMAZINE IN WHOLE WATER (UG/L)	06/04/91-06/04/91	0	1	
ZION0110	No	39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/19/90-06/19/90	0	1	
ZION0110	No	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	39250	NAPTHALENES, POLYCHLORINATED (UG/L)	06/19/90-06/19/90	0	1	
ZION0037	No	39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0330	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	6	8	
ZION0110	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0037	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/16/87-09/18/91	4	6	
ZION0330	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/19/86-09/18/91	5	7	
ZION0110	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0330	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/02/90-09/18/91	1	3	
ZION0037	No	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/20/81-08/20/81	0	1	
ZION0223	No	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/18/81-08/18/81	0	1	
ZION0318	No	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/31/81-08/31/81	0	1	
ZION0110	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0330	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/19/86-09/18/91	5	7	
ZION0037	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/20/81-08/20/81	0	1	
ZION0223	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/18/81-08/18/81	0	1	
ZION0318	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/31/81-08/31/81	0	1	
ZION0110	No	39360	DDD IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0037	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39365	DDE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0037	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0037	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0037	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/20/81-08/20/81	0	1	

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Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0223	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/81-08/18/81	0	1	
ZION0318	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/81-08/31/81	0	1	
ZION0110	No	39388	ENDOSULFAN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39388	ENDOSULFAN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-08/19/86	0	1	
ZION0037	No	39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	6	8	
ZION0037	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0037	No	39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	6	8	
ZION0037	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/20/81-08/20/81	0	1	
ZION0223	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/81-08/18/81	0	1	
ZION0318	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/81-08/31/81	0	1	
ZION0110	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0037	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	7	
ZION0037	No	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/20/81-08/20/81	0	1	
ZION0223	No	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/18/81-08/18/81	0	1	
ZION0318	No	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/31/81-08/31/81	0	1	
ZION0110	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	6	7	
ZION0037	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/20/81-08/20/81	0	1	
ZION0223	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/18/81-08/18/81	0	1	
ZION0318	No	39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/31/81-08/31/81	0	1	
ZION0330	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	4	6	
ZION0330	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	4	6	
ZION0330	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	4	6	
ZION0330	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	4	6	
ZION0330	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	4	6	
ZION0330	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/03/85-09/18/91	6	7	
ZION0110	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0037	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0195	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	0	1	
ZION0196	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	0	1	
ZION0223	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0275	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	0	1	
ZION0318	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	09/18/91-09/18/91	0	1	
ZION0037	No	39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0037	No	39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	5	2	
ZION0037	No	39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	09/18/91-09/18/91	0	1	
ZION0037	No	39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/16/87-09/18/91	4	6	
ZION0110	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0110	No	39755	MIREX, TOTAL (UG/L)	06/19/90-06/19/90	0	1	
ZION0037	No	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0110	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	0	1	
ZION0330	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	6	8	

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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0330	No	39770	DACTHAL (DCPA) IN WHOLE WATER SAMPLE (UG/L)	08/03/88-09/06/88	0	2	
ZION0330	No	39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/06/88	3	4	
ZION0037	No	39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0037	No	39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	0	1	
ZION0223	No	39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	0	1	
ZION0318	No	39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	0	1	
ZION0330	No	46323	DELTA-BHC IN WHOLE WATER SMAPLE (UG/L)	09/16/87-09/18/91	4	6	
ZION0140	Yes	50051	FLOW, RATE, INSTANTANEOUS MGD	10/05/77-10/05/77	0	1	
ZION0308	No	50051	FLOW, RATE, INSTANTANEOUS MGD	04/02/80-01/13/81	0	2	
ZION0354	No	50051	FLOW, RATE, INSTANTANEOUS MGD	11/09/82-11/09/82	0	1	
ZION0363	No	50051	FLOW, RATE, INSTANTANEOUS MGD	02/21/79-09/15/82	3	6	
ZION0140	Yes	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/03/77-11/29/77	0	7	
ZION0308	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	02/07/78-07/12/78	0	3	
ZION0363	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	03/07/78-08/18/81	3	2	
ZION0036	No	50700	INVALID PARAMETER	07/05/80-07/05/80	0	1	
ZION0041	No	50700	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0052	No	50700	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0065	No	50700	INVALID PARAMETER	07/01/80-07/01/80	0	1	
ZION0079	No	50700	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0093	No	50700	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0105	No	50700	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0107	No	50700	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0122	No	50700	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0123	No	50700	INVALID PARAMETER	07/20/80-07/20/80	0	1	
ZION0128	No	50700	INVALID PARAMETER	07/19/80-07/19/80	0	1	
ZION0130	No	50700	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0136	Yes	50700	INVALID PARAMETER	07/19/80-07/19/80	0	1	
ZION0142	Yes	50700	INVALID PARAMETER	07/02/80-07/02/80	0	1	
ZION0144	Yes	50700	INVALID PARAMETER	07/02/80-07/02/80	0	1	
ZION0163	No	50700	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0164	Yes	50700	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0184	Yes	50700	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0194	No	50700	INVALID PARAMETER	07/15/80-07/15/80	0	1	
ZION0198	No	50700	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0200	No	50700	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0208	No	50700	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0209	No	50700	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0211	No	50700	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0216	No	50700	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0218	No	50700	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0219	Yes	50700	INVALID PARAMETER	07/13/80-07/13/80	0	1	
ZION0220	No	50700	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0221	No	50700	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0222	No	50700	INVALID PARAMETER	07/10/80-07/10/80	0	1	
ZION0224	No	50700	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0226	No	50700	INVALID PARAMETER	07/15/80-07/15/80	0	1	
ZION0227	No	50700	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0228	No	50700	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0230	No	50700	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0254	No	50700	INVALID PARAMETER	06/21/80-06/21/80	0	1	
ZION0257	No	50700	INVALID PARAMETER	06/21/80-06/21/80	0	1	
ZION0284	No	50700	INVALID PARAMETER	07/12/80-07/12/80	0	1	
ZION0285	No	50700	INVALID PARAMETER	06/23/80-06/23/80	0	1	
ZION0306	No	50700	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0320	No	50700	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0036	No	50760	INVALID PARAMETER	07/05/80-07/05/80	0	1	
ZION0041	No	50760	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0051	No	50760	INVALID PARAMETER	07/07/80-07/07/80	0	1	
ZION0052	No	50760	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0057	No	50760	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0065	No	50760	INVALID PARAMETER	07/01/80-07/01/80	0	1	
ZION0079	No	50760	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0093	No	50760	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0105	No	50760	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0106	No	50760	INVALID PARAMETER	07/01/80-07/01/80	0	1	
ZION0107	No	50760	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0109	No	50760	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0120	No	50760	INVALID PARAMETER	07/17/80-07/17/80	0	1	
ZION0122	No	50760	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0123	No	50760	INVALID PARAMETER	07/20/80-07/20/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0128	No	50760	INVALID PARAMETER	07/19/80-07/19/80	0	1	
ZION0130	No	50760	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0131	No	50760	INVALID PARAMETER	07/05/80-07/05/80	0	1	
ZION0136	Yes	50760	INVALID PARAMETER	07/19/80-07/19/80	0	1	
ZION0142	Yes	50760	INVALID PARAMETER	07/02/80-07/02/80	0	1	
ZION0144	Yes	50760	INVALID PARAMETER	07/02/80-07/02/80	0	1	
ZION0163	No	50760	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0164	Yes	50760	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0184	Yes	50760	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0194	No	50760	INVALID PARAMETER	07/15/80-07/15/80	0	1	
ZION0198	No	50760	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0200	No	50760	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0207	Yes	50760	INVALID PARAMETER	07/13/80-07/13/80	0	1	
ZION0208	No	50760	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0209	No	50760	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0211	No	50760	INVALID PARAMETER	06/28/80-06/28/80	0	1	
ZION0214	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0216	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0218	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0219	Yes	50760	INVALID PARAMETER	07/13/80-07/13/80	0	1	
ZION0220	No	50760	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0221	No	50760	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0222	No	50760	INVALID PARAMETER	07/10/80-07/10/80	0	1	
ZION0224	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0225	Yes	50760	INVALID PARAMETER	07/14/80-07/14/80	0	1	
ZION0226	No	50760	INVALID PARAMETER	07/15/80-07/15/80	0	1	
ZION0227	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0228	No	50760	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0230	No	50760	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0254	No	50760	INVALID PARAMETER	06/21/80-06/21/80	0	1	
ZION0257	No	50760	INVALID PARAMETER	06/21/80-06/21/80	0	1	
ZION0260	No	50760	INVALID PARAMETER	07/12/80-07/12/80	0	1	
ZION0261	No	50760	INVALID PARAMETER	06/26/80-06/26/80	0	1	
ZION0284	No	50760	INVALID PARAMETER	07/12/80-07/12/80	0	1	
ZION0285	No	50760	INVALID PARAMETER	06/23/80-06/23/80	0	1	
ZION0306	No	50760	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0314	No	50760	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0320	No	50760	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0036	No	50761	INVALID PARAMETER	07/05/80-07/05/80	0	1	
ZION0051	No	50761	INVALID PARAMETER	07/07/80-07/07/80	0	1	
ZION0052	No	50761	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0057	No	50761	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0105	No	50761	INVALID PARAMETER	06/30/80-06/30/80	0	1	
ZION0106	No	50761	INVALID PARAMETER	07/01/80-07/01/80	0	1	
ZION0109	No	50761	INVALID PARAMETER	07/26/80-07/26/80	0	1	
ZION0136	Yes	50761	INVALID PARAMETER	07/19/80-07/19/80	0	1	
ZION0164	Yes	50761	INVALID PARAMETER	07/22/80-07/22/80	0	1	
ZION0207	Yes	50761	INVALID PARAMETER	07/13/80-07/13/80	0	1	
ZION0208	No	50761	INVALID PARAMETER	06/29/80-06/29/80	0	1	
ZION0219	Yes	50761	INVALID PARAMETER	07/13/80-07/13/80	0	1	
ZION0225	Yes	50761	INVALID PARAMETER	07/14/80-07/14/80	0	1	
ZION0227	No	50761	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0228	No	50761	INVALID PARAMETER	06/19/80-06/19/80	0	1	
ZION0230	No	50761	INVALID PARAMETER	07/06/80-07/06/80	0	1	
ZION0261	No	50761	INVALID PARAMETER	06/26/80-06/26/80	0	1	
ZION0285	No	50761	INVALID PARAMETER	06/23/80-06/23/80	0	1	
ZION0306	No	50761	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0314	No	50761	INVALID PARAMETER	07/11/80-07/11/80	0	1	
ZION0076	No	50793	INVALID PARAMETER	06/03/92-10/05/92	0	10	
ZION0094	No	50793	INVALID PARAMETER	06/03/92-10/05/92	0	9	
ZION0134	Yes	50793	INVALID PARAMETER	05/20/92-09/18/92	0	6	
ZION0148	Yes	50793	INVALID PARAMETER	05/21/92-10/06/92	0	11	
ZION0151	Yes	50793	INVALID PARAMETER	05/21/92-10/02/92	0	11	
ZION0157	Yes	50793	INVALID PARAMETER	06/16/92-10/06/92	0	5	
ZION0076	No	50794	INVALID PARAMETER	06/03/92-10/05/92	0	10	
ZION0094	No	50794	INVALID PARAMETER	06/03/92-10/05/92	0	9	
ZION0134	Yes	50794	INVALID PARAMETER	05/20/92-09/18/92	0	6	
ZION0148	Yes	50794	INVALID PARAMETER	05/21/92-10/06/92	0	11	
ZION0151	Yes	50794	INVALID PARAMETER	05/21/92-10/02/92	0	11	
ZION0157	Yes	50794	INVALID PARAMETER	06/16/92-10/06/92	0	5	
ZION0076	No	50795	INVALID PARAMETER	06/03/92-10/05/92	0	10	
ZION0094	No	50795	INVALID PARAMETER	06/03/92-10/05/92	0	9	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0134	Yes	50795	INVALID PARAMETER	05/20/92-09/18/92	0	6	
ZION0148	Yes	50795	INVALID PARAMETER	05/21/92-10/06/92	0	11	
ZION0151	Yes	50795	INVALID PARAMETER	05/21/92-10/02/92	0	11	
ZION0157	Yes	50795	INVALID PARAMETER	06/16/92-10/06/92	0	5	
ZION0001	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/29/82-02/22/88	6	2	
ZION0010	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/20/81-08/24/81	0	2	
ZION0012	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/21/89-07/21/89	0	1	
ZION0013	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/23/87-06/23/87	0	1	
ZION0021	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/15/66-12/15/66	0	1	
ZION0022	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	0	5	
ZION0028	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/09/77-05/27/86	8	4	
ZION0029	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/09/77-08/07/89	11	3	
ZION0030	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-08/26/81	0	2	
ZION0032	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/19/92-12/10/96	4	39	
ZION0034	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/19/92-12/06/95	3	25	
ZION0035	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	0	5	
ZION0038	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/92-12/06/95	3	21	
ZION0040	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/02/91-12/06/95	4	17	
ZION0042	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/28/93-06/16/94	0	8	
ZION0044	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/13/86-09/13/86	0	1	
ZION0046	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-08/26/81	0	2	
ZION0050	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/19/86	0	1	
ZION0054	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/13/86-07/13/86	0	1	
ZION0056	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/03/88-08/08/95	7	26	
ZION0058	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/16/86-07/16/86	0	1	
ZION0060	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/10/86-09/10/86	0	1	
ZION0062	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/12/86-07/12/86	0	1	
ZION0070	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/13/86-07/13/86	0	1	
ZION0071	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/17/86-07/17/86	0	1	
ZION0073	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-03/04/82	0	2	
ZION0075	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/11/93-06/16/94	1	10	
ZION0078	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/15/78-09/15/78	0	1	
ZION0080	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	0	1	
ZION0082	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	0	1	
ZION0084	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-08/08/95	6	21	
ZION0086	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/22/86-08/22/86	0	1	
ZION0087	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/27/93-08/08/95	1	8	
ZION0089	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/86-07/14/86	0	1	
ZION0090	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/02/88-03/23/88	0	2	
ZION0103	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/86-09/14/86	0	1	
ZION0104	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-07/16/86	5	3	
ZION0108	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/15/86-07/15/86	0	1	
ZION0110	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/19/90-06/19/90	0	1	
ZION0111	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/26/86-08/26/86	0	1	
ZION0114	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/15/86-07/15/86	0	1	
ZION0115	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-06/28/93	4	5	
ZION0116	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/28/87-07/28/87	0	1	
ZION0117	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/87-09/18/87	0	1	
ZION0118	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/11/86-09/11/86	0	1	
ZION0119	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/23/76-07/23/76	0	1	
ZION0121	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/87-09/18/87	0	1	
ZION0126	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	0	1	
ZION0132	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/23/86-08/23/86	0	1	
ZION0137	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/18/77-11/10/93	16	43	
ZION0138	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	1	3	
ZION0139	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/31/77-12/12/78	1	4	
ZION0140	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/25/77-11/29/77	0	9	
ZION0141	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-10/31/84	11	5	
ZION0149	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	1	3	
ZION0153	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/25/88-01/25/88	0	1	
ZION0162	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/86-09/18/86	0	1	
ZION0166	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/07/81-04/07/81	0	1	
ZION0167	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/13/77-08/05/77	0	2	
ZION0168	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	1	3	
ZION0169	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/07/81-04/07/81	0	1	
ZION0174	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	0	5	
ZION0176	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/17/75-05/16/77	1	3	
ZION0177	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/18/92-03/12/96	3	14	
ZION0178	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/02/90-07/31/96	5	16	
ZION0179	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/07/91-08/07/91	0	1	
ZION0180	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	0	4	
ZION0181	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	0	5	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0185	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/83-01/17/90	6	6	
ZION0186	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/26/82-12/11/96	14	102	
ZION0190	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	0	3	
ZION0192	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/19/79-12/11/96	17	115	T,S
ZION0195	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	0	2	
ZION0196	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	0	3	
ZION0199	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/03/70-09/03/70	0	1	
ZION0201	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/17/78-11/12/89	11	4	
ZION0202	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/28/75-12/28/75	0	1	
ZION0205	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/18/79-04/14/82	2	16	
ZION0206	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/28/79	0	2	
ZION0212	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	16	8	
ZION0215	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	16	12	
ZION0217	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	16	5	
ZION0232	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/22/84-09/06/88	4	2	
ZION0235	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/07/88-03/07/88	0	1	
ZION0237	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/78-06/14/78	0	1	
ZION0241	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/96-12/11/96	0	11	
ZION0243	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	0	3	
ZION0244	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	0	3	
ZION0246	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/16/77-09/04/77	0	3	
ZION0248	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	0	3	
ZION0253	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	0	2	
ZION0256	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	14	83	
ZION0258	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/66-12/13/66	0	3	
ZION0259	Yes	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/08/64-06/08/64	0	1	
ZION0264	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/02/96-12/11/96	0	4	
ZION0270	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/16/74	0	3	
ZION0272	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/16/74	0	3	
ZION0275	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	0	3	
ZION0276	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-12/11/96	16	88	T
ZION0277	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-04/23/85	4	12	
ZION0278	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	0	5	
ZION0279	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/21/83-06/21/83	0	1	
ZION0281	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/25/66-03/25/66	0	1	
ZION0283	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	0	5	
ZION0286	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	0	2	
ZION0288	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/11/96-12/11/96	0	1	
ZION0290	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/07/84-07/06/87	3	2	
ZION0291	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/06/81-09/16/89	8	4	
ZION0292	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/25/68-10/25/68	0	1	
ZION0294	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/15/66-12/15/66	0	1	
ZION0295	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/12/78-03/12/86	7	2	
ZION0296	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/68-10/28/68	0	1	
ZION0297	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/06/81-09/16/89	8	4	
ZION0299	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/80-04/24/96	15	58	
ZION0302	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/02/96-12/11/96	0	11	
ZION0303	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	0	5	
ZION0308	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/10/78-04/19/79	1	10	
ZION0309	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/16/64-03/16/64	0	1	
ZION0311	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/77-08/05/77	0	2	
ZION0312	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/25/93-06/25/93	0	1	
ZION0316	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/96-12/11/96	0	11	
ZION0322	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	8	14	
ZION0323	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/07/65-10/07/65	0	1	
ZION0324	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	8	13	
ZION0325	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/20/68-08/20/68	0	1	
ZION0326	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	8	16	
ZION0328	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-05/28/74	0	2	
ZION0330	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	14	100	
ZION0331	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/07/67-03/07/67	0	1	
ZION0332	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	0	5	
ZION0333	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	8	8	
ZION0334	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/09/96-10/30/96	0	4	
ZION0336	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/77-06/14/77	0	1	
ZION0337	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/05/83-07/05/83	0	1	
ZION0338	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-01/09/89	11	4	
ZION0340	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/20/64-02/20/64	0	1	
ZION0341	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/24/81-08/24/81	0	1	
ZION0343	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/04/65-11/04/65	0	1	
ZION0346	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/19/78-09/19/78	0	1	
ZION0349	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/19/79-06/19/79	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0350	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/12/82-05/12/82	0	1	
ZION0352	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/24/79-06/25/93	14	3	
ZION0354	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/20/82-04/27/83	0	6	
ZION0355	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/10/64-03/10/64	0	1	
ZION0356	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/28/77-08/23/89	11	5	
ZION0358	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-06/28/84	6	4	
ZION0359	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/05/77-12/06/77	0	2	
ZION0360	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-06/28/84	6	4	
ZION0361	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/28/84-06/28/84	0	1	
ZION0363	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/11/78-04/19/79	1	4	
ZION0364	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0365	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0366	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/16/68-10/16/68	0	1	
ZION0367	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/62-07/14/62	0	1	
ZION0370	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/18/67-02/18/67	0	1	
ZION0371	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/30/66-03/30/66	0	1	
ZION0372	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0373	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0374	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0375	No	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	0	1	
ZION0002	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	0	1	
ZION0003	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/21/77-06/21/77	0	1	
ZION0004	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/20/81-10/20/81	0	1	
ZION0005	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-07/30/81	0	1	
ZION0006	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-08/31/82	1	4	
ZION0007	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	0	1	
ZION0008	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/17/81-07/17/81	0	1	
ZION0009	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	0	1	
ZION0010	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	0	1	
ZION0011	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	0	1	
ZION0014	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-05/07/82	0	2	
ZION0015	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	0	2	
ZION0016	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	0	2	
ZION0017	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-05/07/82	0	2	
ZION0018	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/22/77-06/22/77	0	1	
ZION0019	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/22/77-06/22/77	0	1	
ZION0020	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	0	1	
ZION0021	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/31/82	1	4	
ZION0023	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	0	1	
ZION0024	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/17/81-10/17/81	0	1	
ZION0025	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	0	1	
ZION0027	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/29/81-08/29/81	0	1	
ZION0030	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/26/81	0	1	
ZION0031	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	0	2	
ZION0033	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	0	1	
ZION0037	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/12/81-08/31/82	0	3	
ZION0039	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/01/77-05/01/77	0	1	
ZION0043	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	1	3	
ZION0044	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/16/81-11/16/81	0	1	
ZION0045	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-10/12/81	0	2	
ZION0046	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/26/81	0	1	
ZION0048	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	0	1	
ZION0050	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	0	1	
ZION0064	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	0	1	
ZION0067	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	0	1	
ZION0077	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	0	2	
ZION0089	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/17/82	0	2	
ZION0092	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-08/20/82	0	2	
ZION0095	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	0	1	
ZION0096	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	0	2	
ZION0097	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	0	2	
ZION0098	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	0	2	
ZION0099	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	0	2	
ZION0100	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	0	1	
ZION0101	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	0	2	
ZION0102	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	0	2	
ZION0104	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	1	5	
ZION0110	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/12/77-11/12/77	0	1	
ZION0112	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/12/77-11/12/77	0	1	
ZION0113	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	1	4	
ZION0125	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/20/81	0	1	
ZION0138	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/16/82	0	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0145	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	0	2	
ZION0147	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	0	2	
ZION0149	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/27/81-08/16/82	0	2	
ZION0156	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	0	4	
ZION0158	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	0	4	
ZION0168	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/16/82	0	2	
ZION0173	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/04/82-08/23/82	0	2	
ZION0175	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	0	1	
ZION0182	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/07/77-12/07/77	0	1	
ZION0183	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	4	
ZION0187	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	4	
ZION0188	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	5	
ZION0189	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	4	
ZION0193	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	5	
ZION0197	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	5	
ZION0199	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	09/03/70-09/03/70	0	1	
ZION0202	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/28/75-12/28/75	0	1	
ZION0203	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	4	
ZION0204	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	0	1	
ZION0210	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/09/77-12/09/77	0	1	
ZION0213	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	0	1	
ZION0223	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-08/23/82	1	4	
ZION0229	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	0	1	
ZION0231	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/18/77-11/18/77	0	1	
ZION0234	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	0	1	
ZION0236	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	01/18/74-01/18/74	0	1	
ZION0238	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/10/77-12/10/77	0	1	
ZION0239	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-05/11/82	0	2	
ZION0240	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/17/77-11/17/77	0	1	
ZION0242	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	5	
ZION0249	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	0	5	
ZION0250	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	4	
ZION0251	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	0	1	
ZION0252	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	5	
ZION0255	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	5	
ZION0258	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	1	4	
ZION0263	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-09/02/82	1	3	
ZION0265	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/16/77-11/16/77	0	1	
ZION0267	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/11/82-05/11/82	0	1	
ZION0268	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	4	
ZION0273	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-05/05/82	0	2	
ZION0280	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	4	
ZION0281	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/25/66-03/25/66	0	1	
ZION0292	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/25/68-10/25/68	0	1	
ZION0293	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	3	
ZION0296	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/28/68-10/28/68	0	1	
ZION0300	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/07/82-05/07/82	0	1	
ZION0301	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	3	
ZION0304	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	4	
ZION0305	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	1	5	
ZION0307	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	02/03/75-02/03/75	0	1	
ZION0310	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-05/07/82	0	2	
ZION0313	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	0	1	
ZION0315	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	02/03/75-02/03/75	0	1	
ZION0317	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	0	1	
ZION0318	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/31/81-08/23/82	0	5	
ZION0321	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-08/23/82	1	4	
ZION0325	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/68-08/20/68	0	1	
ZION0331	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/31/81-08/23/82	0	4	
ZION0341	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-05/06/82	0	2	
ZION0344	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-05/04/82	0	2	
ZION0348	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-05/04/82	0	2	
ZION0353	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-05/04/82	0	2	
ZION0362	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/06/82	0	2	
ZION0366	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/16/68-10/16/68	0	1	
ZION0006	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-08/31/82	1	4	
ZION0010	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/20/81-08/24/81	0	2	
ZION0015	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	0	2	
ZION0016	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	0	2	
ZION0020	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	0	1	
ZION0021	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	12/15/66-08/31/82	15	5	
ZION0023	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0030	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/26/81	0	2	
ZION0031	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	0	2	
ZION0033	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	0	1	
ZION0037	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	10/12/81-08/31/82	0	3	
ZION0043	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-08/23/82	1	3	
ZION0046	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/26/81	0	2	
ZION0073	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-03/04/82	0	2	
ZION0077	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/03/82	0	2	
ZION0101	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/03/82	0	2	
ZION0104	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/23/82	1	6	
ZION0125	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-08/20/81	0	1	
ZION0138	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	1	3	
ZION0145	Yes	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/04/82	0	2	
ZION0149	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	1	3	
ZION0156	Yes	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/04/82	0	4	
ZION0168	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	1	3	
ZION0173	Yes	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/04/82-08/23/82	0	2	
ZION0175	Yes	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/24/81	0	1	
ZION0187	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	0	4	
ZION0189	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	0	4	
ZION0203	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-09/01/82	1	4	
ZION0213	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-08/17/81	0	1	
ZION0223	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-08/23/82	1	4	
ZION0229	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	0	1	
ZION0234	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	0	1	
ZION0236	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	01/18/74-01/18/74	0	1	
ZION0239	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-05/11/82	0	2	
ZION0242	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	0	5	
ZION0250	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-09/01/82	1	4	
ZION0251	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	0	1	
ZION0258	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	12/06/66-09/01/82	15	7	
ZION0263	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-09/02/82	1	3	
ZION0267	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/11/82-05/11/82	0	1	
ZION0268	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	4	
ZION0273	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-05/05/82	0	2	
ZION0280	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	4	
ZION0293	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	3	
ZION0294	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	12/15/66-12/15/66	0	1	
ZION0300	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	05/07/82-05/07/82	0	1	
ZION0301	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	3	
ZION0304	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	4	
ZION0305	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	1	5	
ZION0310	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/28/81-05/07/82	0	2	
ZION0313	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-08/17/81	0	1	
ZION0317	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/24/81	0	1	
ZION0318	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/31/81-08/23/82	0	5	
ZION0321	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-08/23/82	1	4	
ZION0331	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/07/67-08/23/82	15	5	
ZION0341	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-05/06/82	0	2	
ZION0344	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-05/04/82	0	2	
ZION0348	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-05/04/82	0	2	
ZION0353	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-05/04/82	0	2	
ZION0362	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/06/82	0	2	
ZION0006	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-08/31/82	1	4	
ZION0010	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/20/81-08/24/81	0	2	
ZION0015	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	0	2	
ZION0016	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	0	2	
ZION0019	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	06/22/77-06/22/77	0	1	
ZION0020	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	0	1	
ZION0021	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/15/66-08/31/82	15	5	
ZION0023	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	0	1	
ZION0030	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/26/81	0	2	
ZION0031	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	0	2	
ZION0033	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	0	1	
ZION0037	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/12/81-08/31/82	0	3	
ZION0043	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-08/23/82	1	3	
ZION0045	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-10/12/81	0	2	
ZION0046	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/26/81	0	2	
ZION0073	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-03/04/82	0	2	
ZION0077	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/03/82	0	2	
ZION0101	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/03/82	0	2	
ZION0104	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/23/82	1	6	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0110	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/12/77-11/12/77	0	1	
ZION0112	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/12/77-11/12/77	0	1	
ZION0125	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-08/20/81	0	1	
ZION0138	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	1	3	
ZION0145	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/04/82	0	2	
ZION0149	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	1	3	
ZION0156	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/04/82	0	4	
ZION0168	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	1	3	
ZION0173	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/04/82-08/23/82	0	2	
ZION0175	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/24/81	0	1	
ZION0182	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/07/77-12/07/77	0	1	
ZION0187	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	0	4	
ZION0189	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	0	4	
ZION0203	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-09/01/82	1	4	
ZION0210	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/09/77-12/09/77	0	1	
ZION0213	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-08/17/81	0	1	
ZION0223	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-08/23/82	1	4	
ZION0229	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	0	1	
ZION0231	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/18/77-11/18/77	0	1	
ZION0234	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	0	1	
ZION0236	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	01/18/74-01/18/74	0	1	
ZION0238	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/10/77-12/10/77	0	1	
ZION0239	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-05/11/82	0	2	
ZION0240	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/17/77-11/17/77	0	1	
ZION0242	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	0	5	
ZION0250	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-09/01/82	1	4	
ZION0251	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	0	1	
ZION0258	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/06/66-09/01/82	15	7	
ZION0263	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-09/02/82	1	3	
ZION0265	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/16/77-11/16/77	0	1	
ZION0267	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/11/82-05/11/82	0	1	
ZION0268	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	4	
ZION0273	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-05/05/82	0	2	
ZION0280	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	4	
ZION0293	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	3	
ZION0294	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/15/66-12/15/66	0	1	
ZION0300	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/07/82-05/07/82	0	1	
ZION0301	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	3	
ZION0304	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	4	
ZION0305	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	1	5	
ZION0307	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	02/03/75-02/03/75	0	1	
ZION0310	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/28/81-05/07/82	0	2	
ZION0313	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-08/17/81	0	1	
ZION0315	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	02/03/75-02/03/75	0	1	
ZION0317	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/24/81	0	1	
ZION0318	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/31/81-08/23/82	0	5	
ZION0321	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-08/23/82	1	4	
ZION0331	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/07/67-08/23/82	15	5	
ZION0341	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-05/06/82	0	2	
ZION0344	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-05/04/82	0	2	
ZION0348	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-05/04/82	0	2	
ZION0353	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-05/04/82	0	2	
ZION0362	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/06/82	0	2	
ZION0042	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	07/19/93-06/16/94	0	7	
ZION0056	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-08/08/95	2	12	
ZION0075	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-06/16/94	1	10	
ZION0084	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-08/08/95	2	14	
ZION0087	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/27/93-08/08/95	1	8	
ZION0115	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/25/91-06/28/93	2	4	
ZION0178	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/23/91-07/31/96	5	4	
ZION0179	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/07/91-08/07/91	0	1	
ZION0212	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/29/91-08/09/95	4	6	
ZION0215	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/29/91-08/09/95	4	6	
ZION0217	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	2	4	
ZION0256	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	2	4	
ZION0322	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/08/91-08/09/95	4	5	
ZION0324	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	2	4	
ZION0326	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/22/91-08/09/95	4	5	
ZION0333	No	70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/22/91-08/09/95	4	5	
ZION0258	No	70326	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .002MM	07/31/63-07/31/63	0	1	
ZION0258	No	70327	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .004MM	07/31/63-07/31/63	0	1	
ZION0258	No	70329	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .016MM	07/31/63-07/31/63	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0103	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	09/14/86-09/14/86	0	1	
ZION0258	No	70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	07/31/63-07/31/66	3	6	
ZION0258	No	70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	07/31/63-08/13/64	1	5	
ZION0258	No	70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	07/31/63-08/13/64	1	5	
ZION0258	No	70334	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .500MM	08/19/63-08/03/64	0	2	
ZION0021	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	07/11/67-07/11/67	0	1	
ZION0077	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/26/74-10/02/76	1	8	
ZION0258	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	8	150	A
ZION0331	No	70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	7	113	A
ZION0021	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	07/11/67-07/11/67	0	1	
ZION0077	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/26/74-10/02/76	1	8	
ZION0258	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	8	150	A
ZION0331	No	70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	7	114	A
ZION0021	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	07/11/67-07/11/67	0	1	
ZION0077	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/26/74-10/02/76	1	6	
ZION0258	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	8	128	A
ZION0331	No	70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	7	95	A
ZION0021	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	07/11/67-07/11/67	0	1	
ZION0077	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/26/74-10/02/76	1	8	
ZION0258	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	8	155	A
ZION0331	No	70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	7	114	A
ZION0021	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	07/11/67-07/11/67	0	1	
ZION0077	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/20/75-10/02/76	1	7	
ZION0258	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	8	151	A
ZION0331	No	70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	7	112	A
ZION0021	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	07/11/67-07/11/67	0	1	
ZION0077	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/20/75-10/02/76	1	7	
ZION0258	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	8	138	A
ZION0331	No	70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	7	112	A
ZION0077	No	70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/20/75-10/02/76	1	7	
ZION0258	No	70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	8	92	A
ZION0331	No	70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	7	81	A
ZION0077	No	70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	05/19/75-05/19/75	0	1	
ZION0258	No	70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	11/08/66-06/12/70	3	7	
ZION0331	No	70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	02/26/69-01/14/74	4	5	
ZION0258	No	70347	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 2.00MM	06/12/70-06/12/70	0	1	
ZION0022	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0028	No	71830	HYDROXIDE ION (MG/L AS OH)	05/17/78-05/17/78	0	1	
ZION0032	No	71830	HYDROXIDE ION (MG/L AS OH)	04/24/96-12/10/96	0	7	
ZION0035	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0040	No	71830	HYDROXIDE ION (MG/L AS OH)	09/02/91-09/02/91	0	1	
ZION0042	No	71830	HYDROXIDE ION (MG/L AS OH)	06/28/93-06/28/93	0	1	
ZION0056	No	71830	HYDROXIDE ION (MG/L AS OH)	02/03/88-08/15/90	2	14	
ZION0084	No	71830	HYDROXIDE ION (MG/L AS OH)	10/05/88-08/15/90	1	7	
ZION0090	No	71830	HYDROXIDE ION (MG/L AS OH)	02/02/88-03/23/88	0	2	
ZION0115	No	71830	HYDROXIDE ION (MG/L AS OH)	10/05/88-10/05/88	0	1	
ZION0137	Yes	71830	HYDROXIDE ION (MG/L AS OH)	01/18/77-11/10/93	16	40	
ZION0140	Yes	71830	HYDROXIDE ION (MG/L AS OH)	03/01/77-05/03/77	0	2	
ZION0141	Yes	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-10/31/84	11	5	
ZION0174	Yes	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0177	No	71830	HYDROXIDE ION (MG/L AS OH)	11/10/93-03/12/96	2	12	
ZION0178	No	71830	HYDROXIDE ION (MG/L AS OH)	04/11/90-07/31/96	6	19	
ZION0180	Yes	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	3	
ZION0181	Yes	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0186	No	71830	HYDROXIDE ION (MG/L AS OH)	07/26/82-12/11/96	14	101	
ZION0190	Yes	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0192	No	71830	HYDROXIDE ION (MG/L AS OH)	04/19/79-12/11/96	17	109	T,S
ZION0201	No	71830	HYDROXIDE ION (MG/L AS OH)	04/17/78-04/17/78	0	1	
ZION0202	No	71830	HYDROXIDE ION (MG/L AS OH)	12/28/75-12/28/75	0	1	
ZION0205	No	71830	HYDROXIDE ION (MG/L AS OH)	04/18/79-04/14/82	2	11	
ZION0206	No	71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/28/79	0	2	
ZION0212	No	71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/28/79	0	2	
ZION0215	No	71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/14/91	12	10	
ZION0237	No	71830	HYDROXIDE ION (MG/L AS OH)	06/14/78-06/14/78	0	1	
ZION0241	No	71830	HYDROXIDE ION (MG/L AS OH)	04/03/96-12/11/96	0	11	
ZION0244	No	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0248	No	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0256	No	71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	14	78	
ZION0264	No	71830	HYDROXIDE ION (MG/L AS OH)	04/02/96-12/11/96	0	4	
ZION0270	No	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0272	No	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0276	No	71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-12/11/96	16	83	T

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0277	No	71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-04/23/85	4	8	
ZION0278	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0279	No	71830	HYDROXIDE ION (MG/L AS OH)	06/21/83-06/21/83	0	1	
ZION0283	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0288	No	71830	HYDROXIDE ION (MG/L AS OH)	12/11/96-12/11/96	0	1	
ZION0295	No	71830	HYDROXIDE ION (MG/L AS OH)	04/12/78-04/12/78	0	1	
ZION0299	No	71830	HYDROXIDE ION (MG/L AS OH)	10/28/80-04/24/96	15	53	
ZION0302	No	71830	HYDROXIDE ION (MG/L AS OH)	04/02/96-12/11/96	0	11	
ZION0303	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0308	No	71830	HYDROXIDE ION (MG/L AS OH)	02/21/79-02/21/79	0	1	
ZION0312	No	71830	HYDROXIDE ION (MG/L AS OH)	06/25/93-06/25/93	0	1	
ZION0316	No	71830	HYDROXIDE ION (MG/L AS OH)	04/03/96-12/11/96	0	11	
ZION0322	No	71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/08/91	4	11	
ZION0324	No	71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/03/90	3	9	
ZION0326	No	71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-05/22/91	4	13	
ZION0328	No	71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	0	2	
ZION0330	No	71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	14	100	
ZION0332	No	71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	0	4	
ZION0333	No	71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/03/90	3	3	
ZION0334	No	71830	HYDROXIDE ION (MG/L AS OH)	07/09/96-10/30/96	0	4	
ZION0352	No	71830	HYDROXIDE ION (MG/L AS OH)	05/24/79-06/25/93	14	3	
ZION0354	No	71830	HYDROXIDE ION (MG/L AS OH)	07/20/82-04/27/83	0	5	
ZION0356	No	71830	HYDROXIDE ION (MG/L AS OH)	08/23/89-08/23/89	0	1	
ZION0363	No	71830	HYDROXIDE ION (MG/L AS OH)	02/21/79-02/21/79	0	1	
ZION0141	Yes	71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	10/31/73-07/26/74	0	4	
ZION0189	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/23/82-08/23/82	0	1	
ZION0202	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	12/28/75-12/28/75	0	1	
ZION0353	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/17/81-08/17/81	0	1	
ZION0021	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/15/66-12/15/66	0	1	
ZION0119	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/23/76-07/23/76	0	1	
ZION0167	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/13/77-08/05/77	0	2	
ZION0176	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/17/75-05/16/77	1	3	
ZION0199	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/03/70-09/03/70	0	1	
ZION0202	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/28/75-12/28/75	0	1	
ZION0246	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/16/77-09/04/77	0	3	
ZION0258	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/66-12/13/66	0	1	
ZION0259	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	06/08/64-06/08/64	0	1	
ZION0281	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/25/66-03/25/66	0	1	
ZION0292	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/25/68-10/25/68	0	1	
ZION0294	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/15/66-12/15/66	0	1	
ZION0296	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/28/68-10/28/68	0	1	
ZION0309	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/64-03/16/64	0	1	
ZION0325	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/20/68-08/20/68	0	1	
ZION0331	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/07/67-03/07/67	0	1	
ZION0340	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	02/20/64-02/20/64	0	1	
ZION0343	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/04/65-11/04/65	0	1	
ZION0355	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/10/64-03/10/64	0	1	
ZION0366	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/68-10/16/68	0	1	
ZION0367	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/14/62-07/14/62	0	1	
ZION0370	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	02/18/67-02/18/67	0	1	
ZION0202	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	12/28/75-12/28/75	0	1	
ZION0281	No	71865	IODIDE (MG/L AS I)	03/25/66-03/25/66	0	1	
ZION0281	No	71870	BROMIDE (MG/L AS BR)	03/25/66-03/25/66	0	1	
ZION0309	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	03/16/64-03/16/64	0	1	
ZION0340	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	02/20/64-02/20/64	0	1	
ZION0355	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	03/10/64-03/10/64	0	1	
ZION0367	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	07/14/62-07/14/62	0	1	
ZION0370	No	71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	02/18/67-02/18/67	0	1	
ZION0199	Yes	71885	IRON (UG/L AS FE)	09/03/70-09/03/70	0	1	
ZION0309	No	71885	IRON (UG/L AS FE)	03/16/64-03/16/64	0	1	
ZION0340	No	71885	IRON (UG/L AS FE)	02/20/64-02/20/64	0	1	
ZION0355	No	71885	IRON (UG/L AS FE)	03/10/64-03/10/64	0	1	
ZION0367	No	71885	IRON (UG/L AS FE)	07/14/62-07/14/62	0	1	
ZION0370	No	71885	IRON (UG/L AS FE)	02/18/67-02/18/67	0	1	
ZION0040	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/02/91-09/02/91	0	1	
ZION0056	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/03/88-08/15/90	2	7	
ZION0084	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/09/89-08/15/90	1	3	
ZION0090	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/02/88-08/15/90	2	3	
ZION0115	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/09/89-08/15/90	1	2	
ZION0137	Yes	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-10/26/82	3	14	
ZION0141	Yes	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/31/84-10/31/84	0	1	
ZION0186	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/26/82-10/31/84	2	2	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0192	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	04/19/79-04/14/81	1	9	
ZION0205	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	04/18/79-04/14/81	1	9	
ZION0206	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	0	2	
ZION0212	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	0	2	
ZION0215	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	0	6	
ZION0235	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	03/07/88-03/07/88	0	1	
ZION0276	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	06/17/80-04/14/81	0	5	
ZION0277	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	06/17/80-04/14/81	0	5	
ZION0299	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/28/80-04/14/81	0	4	
ZION0308	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-02/21/79	0	1	
ZION0346	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/78-09/19/78	0	1	
ZION0352	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/79-09/04/90	11	2	
ZION0363	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-02/21/79	0	1	
ZION0032	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	0	2	
ZION0110	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-06/19/90	0	1	
ZION0119	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/76-07/23/76	0	1	
ZION0137	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	10/14/92-11/10/93	1	3	
ZION0167	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/13/77-08/05/77	0	2	
ZION0176	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/17/75-05/16/77	1	3	
ZION0177	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	11/10/93-03/12/96	2	12	
ZION0178	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/15/94-07/31/96	2	3	
ZION0186	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	4	25	
ZION0192	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	4	24	
ZION0195	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	0	1	
ZION0196	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	0	1	
ZION0215	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/01/93-08/09/95	1	2	
ZION0223	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	08/23/82-08/23/82	0	1	
ZION0241	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	0	3	
ZION0246	Yes	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/16/77-09/04/77	0	3	
ZION0256	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	4	9	
ZION0263	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	0	1	
ZION0275	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	0	1	
ZION0276	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/20/92-10/30/96	4	8	
ZION0293	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	0	1	
ZION0299	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/20/92-03/17/93	0	5	
ZION0301	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	0	1	
ZION0302	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	0	3	
ZION0305	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	0	1	
ZION0311	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/14/77-08/05/77	0	2	
ZION0312	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/25/93-06/25/93	0	1	
ZION0316	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	0	3	
ZION0322	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/09/95	2	2	
ZION0324	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/04/93	0	1	
ZION0326	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/04/93	0	1	
ZION0330	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/19/92-10/30/96	4	23	
ZION0334	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/09/96-10/30/96	0	3	
ZION0336	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/14/77-06/14/77	0	1	
ZION0352	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/25/93-06/25/93	0	1	
ZION0001	No	71900	MERCURY, TOTAL (UG/L AS HG)	12/01/81-02/22/88	6	2	
ZION0012	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/21/89-07/21/89	0	1	
ZION0013	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/23/87-06/23/87	0	1	
ZION0022	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0028	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/17/78-05/27/86	8	3	
ZION0029	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/22/85-08/07/89	4	2	
ZION0035	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0040	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/02/91-09/02/91	0	1	
ZION0078	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/15/78-09/15/78	0	1	
ZION0080	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	0	1	
ZION0082	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	0	1	
ZION0126	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	0	1	
ZION0137	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	01/18/77-07/31/91	14	30	
ZION0140	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	03/01/77-05/03/77	0	2	
ZION0141	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-10/31/84	11	5	
ZION0153	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	01/25/88-01/25/88	0	1	
ZION0166	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	04/07/81-04/07/81	0	1	
ZION0169	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	04/07/81-04/07/81	0	1	
ZION0174	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0178	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/11/90-08/07/91	1	7	
ZION0180	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	3	
ZION0181	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0185	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/03/83-01/17/90	6	5	
ZION0186	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/26/82-09/18/91	9	55	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0190	Yes	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0192	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/19/79-09/18/91	12	64	
ZION0195	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	0	2	
ZION0196	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	0	3	
ZION0201	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/17/78-11/12/89	11	4	
ZION0202	No	71900	MERCURY, TOTAL (UG/L AS HG)	12/28/75-12/28/75	0	1	
ZION0205	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/18/79-04/14/82	2	11	
ZION0206	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/28/79	0	2	
ZION0212	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/28/79	0	2	
ZION0215	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/14/91	12	10	
ZION0232	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/22/84-09/06/88	4	2	
ZION0235	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/07/88-03/07/88	0	1	
ZION0237	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/14/78-06/14/78	0	1	
ZION0243	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	0	3	
ZION0244	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0248	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0253	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	0	2	
ZION0256	No	71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	9	56	
ZION0270	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0272	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0275	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	0	3	
ZION0276	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-09/18/91	11	60	
ZION0277	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-04/14/81	0	5	
ZION0278	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0279	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/21/83-06/21/83	0	1	
ZION0283	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0286	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	0	2	
ZION0290	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/07/84-07/06/87	3	2	
ZION0291	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/06/81-09/16/89	8	5	
ZION0295	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/12/78-03/12/86	7	2	
ZION0297	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/06/81-09/16/89	8	4	
ZION0299	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/28/80-02/27/91	10	43	
ZION0303	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0308	No	71900	MERCURY, TOTAL (UG/L AS HG)	02/21/79-02/21/79	0	1	
ZION0322	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/08/91	4	10	
ZION0324	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/03/90	3	9	
ZION0326	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-05/22/91	4	12	
ZION0328	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	0	2	
ZION0330	No	71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	9	55	
ZION0332	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	0	4	
ZION0333	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/03/90	3	3	
ZION0337	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/05/83-07/05/83	0	1	
ZION0338	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/28/80-01/09/89	8	3	
ZION0346	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/19/78-09/19/78	0	1	
ZION0352	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/24/79-05/24/79	0	1	
ZION0354	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/20/82-04/27/83	0	6	
ZION0356	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-08/23/89	9	4	
ZION0358	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/13/83-07/13/83	0	1	
ZION0360	No	71900	MERCURY, TOTAL (UG/L AS HG)	11/11/80-07/12/83	2	2	
ZION0363	No	71900	MERCURY, TOTAL (UG/L AS HG)	02/21/79-02/21/79	0	1	
ZION0364	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0365	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0372	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0373	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0374	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0375	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	0	1	
ZION0137	Yes	71910	GOLD, TOTAL (UG/L AS AU)	10/01/85-10/01/85	0	1	
ZION0199	Yes	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	09/03/70-09/03/70	0	1	
ZION0292	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/25/68-02/27/70	1	2	
ZION0296	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/28/68-10/28/68	0	1	
ZION0309	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	03/16/64-03/16/64	0	1	
ZION0323	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/07/65-10/07/65	0	1	
ZION0335	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/10/68-10/10/68	0	1	
ZION0340	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	02/20/64-10/30/68	4	2	
ZION0343	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	11/04/65-11/04/65	0	1	
ZION0355	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	03/10/64-03/10/64	0	1	
ZION0366	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/16/68-10/16/68	0	1	
ZION0367	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	07/14/62-10/16/68	6	2	
ZION0368	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/23/68-10/23/68	0	1	
ZION0369	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	10/23/68-10/23/68	0	1	
ZION0371	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	03/30/66-10/16/68	2	2	
ZION0056	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	03/23/88-08/08/95	7	31	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0084	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	10/05/88-08/08/95	6	29	
ZION0178	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	04/11/90-07/31/96	6	33	
ZION0215	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	16	37	
ZION0217	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	16	18	
ZION0322	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	8	33	
ZION0324	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	8	23	
ZION0326	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	8	28	
ZION0333	No	72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	06/28/95-06/28/95	0	1	
ZION0061	No	72025	DEPTH OF POND OR RESERVOIR IN FEET	08/13/75-09/25/75	0	2	
ZION0074	No	72025	DEPTH OF POND OR RESERVOIR IN FEET	08/13/75-09/25/75	0	2	
ZION0001	No	74010	IRON, TOTAL (MG/L AS FE)	12/01/81-02/22/88	6	2	
ZION0012	No	74010	IRON, TOTAL (MG/L AS FE)	07/21/89-07/21/89	0	1	
ZION0013	No	74010	IRON, TOTAL (MG/L AS FE)	06/23/87-06/23/87	0	1	
ZION0028	No	74010	IRON, TOTAL (MG/L AS FE)	11/09/77-05/27/86	8	4	
ZION0029	No	74010	IRON, TOTAL (MG/L AS FE)	11/09/77-08/07/89	11	3	
ZION0040	No	74010	IRON, TOTAL (MG/L AS FE)	09/02/91-09/02/91	0	1	
ZION0078	No	74010	IRON, TOTAL (MG/L AS FE)	09/15/78-09/15/78	0	1	
ZION0080	No	74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	0	1	
ZION0082	No	74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	0	1	
ZION0119	No	74010	IRON, TOTAL (MG/L AS FE)	07/23/76-07/23/76	0	1	
ZION0126	No	74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	0	1	
ZION0137	Yes	74010	IRON, TOTAL (MG/L AS FE)	01/18/77-07/31/91	14	34	
ZION0140	Yes	74010	IRON, TOTAL (MG/L AS FE)	03/01/77-05/03/77	0	2	
ZION0141	Yes	74010	IRON, TOTAL (MG/L AS FE)	10/31/84-10/31/84	0	1	
ZION0153	Yes	74010	IRON, TOTAL (MG/L AS FE)	01/25/88-01/25/88	0	1	
ZION0166	Yes	74010	IRON, TOTAL (MG/L AS FE)	04/07/81-04/07/81	0	1	
ZION0167	No	74010	IRON, TOTAL (MG/L AS FE)	05/13/77-08/05/77	0	2	
ZION0169	Yes	74010	IRON, TOTAL (MG/L AS FE)	04/07/81-04/07/81	0	1	
ZION0176	Yes	74010	IRON, TOTAL (MG/L AS FE)	09/17/75-05/16/77	1	3	
ZION0178	No	74010	IRON, TOTAL (MG/L AS FE)	04/11/90-08/07/91	1	7	
ZION0185	No	74010	IRON, TOTAL (MG/L AS FE)	04/03/83-01/17/90	6	4	
ZION0186	No	74010	IRON, TOTAL (MG/L AS FE)	07/26/82-09/18/91	9	55	
ZION0192	No	74010	IRON, TOTAL (MG/L AS FE)	04/19/79-09/18/91	12	64	
ZION0201	No	74010	IRON, TOTAL (MG/L AS FE)	04/17/78-11/12/89	11	4	
ZION0205	No	74010	IRON, TOTAL (MG/L AS FE)	04/18/79-04/14/82	2	11	
ZION0206	No	74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/28/79	0	2	
ZION0212	No	74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/28/79	0	2	
ZION0215	No	74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/14/91	12	10	
ZION0232	No	74010	IRON, TOTAL (MG/L AS FE)	06/22/84-09/06/88	4	2	
ZION0235	No	74010	IRON, TOTAL (MG/L AS FE)	03/07/88-03/07/88	0	1	
ZION0237	No	74010	IRON, TOTAL (MG/L AS FE)	06/14/78-06/14/78	0	1	
ZION0246	Yes	74010	IRON, TOTAL (MG/L AS FE)	05/16/77-09/04/77	0	3	
ZION0256	No	74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	9	56	
ZION0276	No	74010	IRON, TOTAL (MG/L AS FE)	06/17/80-09/18/91	11	60	
ZION0277	No	74010	IRON, TOTAL (MG/L AS FE)	06/17/80-04/14/81	0	5	
ZION0279	No	74010	IRON, TOTAL (MG/L AS FE)	06/21/83-06/21/83	0	1	
ZION0290	No	74010	IRON, TOTAL (MG/L AS FE)	05/07/84-07/06/87	3	2	
ZION0291	No	74010	IRON, TOTAL (MG/L AS FE)	07/06/81-09/16/89	8	4	
ZION0295	No	74010	IRON, TOTAL (MG/L AS FE)	04/12/78-03/12/86	7	2	
ZION0297	No	74010	IRON, TOTAL (MG/L AS FE)	07/06/81-09/16/89	8	4	
ZION0299	No	74010	IRON, TOTAL (MG/L AS FE)	10/28/80-02/27/91	10	43	
ZION0308	No	74010	IRON, TOTAL (MG/L AS FE)	02/21/79-02/21/79	0	1	
ZION0322	No	74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/08/91	4	10	
ZION0324	No	74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/03/90	3	9	
ZION0326	No	74010	IRON, TOTAL (MG/L AS FE)	08/19/86-05/22/91	4	12	
ZION0330	No	74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	9	55	
ZION0333	No	74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/03/90	3	3	
ZION0337	No	74010	IRON, TOTAL (MG/L AS FE)	07/05/83-07/05/83	0	1	
ZION0338	No	74010	IRON, TOTAL (MG/L AS FE)	12/06/77-01/09/89	11	4	
ZION0346	No	74010	IRON, TOTAL (MG/L AS FE)	09/19/78-09/19/78	0	1	
ZION0352	No	74010	IRON, TOTAL (MG/L AS FE)	05/24/79-05/24/79	0	1	
ZION0354	No	74010	IRON, TOTAL (MG/L AS FE)	07/20/82-04/27/83	0	6	
ZION0356	No	74010	IRON, TOTAL (MG/L AS FE)	11/28/77-08/23/89	11	5	
ZION0358	No	74010	IRON, TOTAL (MG/L AS FE)	12/06/77-07/13/83	5	3	
ZION0359	No	74010	IRON, TOTAL (MG/L AS FE)	12/05/77-12/06/77	0	2	
ZION0360	No	74010	IRON, TOTAL (MG/L AS FE)	12/06/77-07/12/83	5	3	
ZION0363	No	74010	IRON, TOTAL (MG/L AS FE)	02/21/79-02/21/79	0	1	
ZION0364	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	
ZION0365	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	
ZION0372	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	
ZION0373	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	
ZION0374	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0375	No	74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	0	1	
ZION0022	No	75009	CADDIS	07/15/74-07/15/74	0	1	
ZION0174	Yes	75009	CADDIS	07/15/74-07/15/74	0	1	
ZION0181	Yes	75009	CADDIS	07/15/74-07/15/74	0	1	
ZION0270	No	75009	CADDIS	07/16/74-07/16/74	0	1	
ZION0278	No	75009	CADDIS	07/16/74-07/16/74	0	1	
ZION0332	No	75009	CADDIS	07/16/74-07/16/74	0	1	
ZION0022	No	75012	SNAILS	07/15/74-07/15/74	0	1	
ZION0174	Yes	75012	SNAILS	07/15/74-07/15/74	0	1	
ZION0181	Yes	75012	SNAILS	07/15/74-07/15/74	0	1	
ZION0270	No	75012	SNAILS	07/16/74-07/16/74	0	1	
ZION0278	No	75012	SNAILS	07/16/74-07/16/74	0	1	
ZION0332	No	75012	SNAILS	07/16/74-07/16/74	0	1	
ZION0022	No	75021	CHIRONOMIDAE	07/15/74-07/15/74	0	1	
ZION0174	Yes	75021	CHIRONOMIDAE	07/15/74-07/15/74	0	1	
ZION0181	Yes	75021	CHIRONOMIDAE	07/15/74-07/15/74	0	1	
ZION0270	No	75021	CHIRONOMIDAE	07/16/74-07/16/74	0	1	
ZION0278	No	75021	CHIRONOMIDAE	07/16/74-07/16/74	0	1	
ZION0332	No	75021	CHIRONOMIDAE	07/16/74-07/16/74	0	1	
ZION0195	No	75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	0	1	
ZION0196	No	75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	0	1	
ZION0275	No	75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	0	1	
ZION0110	No	75986	ALPHA GROSS,1 SIGMA PRC EST AS NAT U,DISS,WTR UG/L	06/19/90-06/19/90	0	1	
ZION0110	No	75987	ALPHA GROSS,DISS,1 SIGMA PRC EST AS TH230,WTR PC/L	06/19/90-06/19/90	0	1	
ZION0110	No	75988	BETA GROSS,DISS,1 SIGMA PRC EST AS SR90/Y90 PC/L	06/19/90-06/19/90	0	1	
ZION0110	No	75989	BETA GROSS,1 SIGMA PRC EST AS CS-137,DISS,WTR PC/L	06/19/90-06/19/90	0	1	
ZION0356	No	77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	77128	STYRENE WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	77128	STYRENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77135	O-XYLENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77222	1,2,4-TRIMETHYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77223	ISOPROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77224	N-PROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77226	1,3,5-TRIMETHYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77275	1-METHYL-2-CHLOROBENZENE (O-CHLOR*WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77277	1-METHYL-4-CHLOROBENZENE (P-CHLOR*WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77342	N-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77350	SEC-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77353	TERT-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77356	1-METHYL-4-ISOPROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	77613	1,2,3-TRICHLOROBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	77651	1,2-DIBROMOETHANE WHOLE WATER,UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	77651	1,2-DIBROMOETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	0	1	
ZION0330	No	77700	CARBARYL WHOLE WATER,UG/L	09/18/91-09/18/91	0	1	
ZION0330	No	77825	ALACHLOR WHOLE WATER,UG/L	06/04/91-06/04/91	0	1	
ZION0330	No	78008	ENDRIN KETONE IN WATER UG/L	09/16/87-09/06/88	0	3	
ZION0356	No	78113	ETHYL BENZENE WHOLE WATER SAMPLE UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	78124	BENZENE IN WATER (VOLATILE ANALYSIS) UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	78132	P-XYLENE IN WHOLE WATER UG/L	12/18/87-12/18/87	0	1	
ZION0137	Yes	80000	ALPHA ACTIVITY (PC/MG)	03/07/78-03/07/78	0	1	
ZION0274	No	80020	URANIUM,DISS.,BY EXTRACTION FLUOROMETRIC METHOD	07/23/75-07/23/75	0	1	
ZION0110	No	80030	ALPHA,DISSOLVED GROSS,AS URANIUM-NATURAL,UG/L	06/19/90-06/19/90	0	1	
ZION0110	No	80050	BETA,DISSOLVED GROSS,AS SR-Y-90, PC/L	06/19/90-06/19/90	0	1	
ZION0215	No	80110	SPECIFIC GRAVITY WATER-UNITY AT 4C	08/28/79-08/28/79	0	1	
ZION0010	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/20/81-08/24/81	0	2	
ZION0021	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	07/11/67-07/11/67	0	1	
ZION0030	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-08/26/81	0	2	
ZION0046	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-08/26/81	0	2	
ZION0058	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/11/86-07/16/86	0	2	
ZION0068	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/22/86-06/22/86	0	1	
ZION0073	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-03/04/82	0	2	
ZION0077	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/26/74-06/12/86	11	9	
ZION0091	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/18/86-06/18/86	0	1	
ZION0101	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/21/86-06/21/86	0	1	
ZION0103	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	09/14/86-09/14/86	0	1	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0104	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-07/16/86	5	4	
ZION0138	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/23/81-08/26/81	0	2	
ZION0149	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	08/27/81-08/27/81	0	1	
ZION0168	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/23/81-08/26/81	0	2	
ZION0175	Yes	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	12/12/66-12/12/66	0	1	
ZION0258	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	8	167	A
ZION0331	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	7	115	A
ZION0010	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/20/81-08/24/81	0	2	
ZION0021	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	07/11/67-07/11/67	0	1	
ZION0030	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	0	2	
ZION0046	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	0	2	
ZION0073	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-03/04/82	0	2	
ZION0077	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/26/74-10/02/76	1	8	
ZION0104	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	0	2	
ZION0138	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/23/81-08/26/81	0	2	
ZION0149	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	08/27/81-08/27/81	0	1	
ZION0168	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/23/81-08/26/81	0	2	
ZION0175	Yes	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	12/12/66-12/12/66	0	1	
ZION0258	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	8	167	A
ZION0331	No	80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	7	115	A
ZION0258	No	80158	BED MATERIAL FALL DIAMETER, % FINER THAN .062MM	11/30/67-05/04/71	3	10	
ZION0331	No	80158	BED MATERIAL FALL DIAMETER, % FINER THAN .062MM	11/20/67-09/05/73	5	20	
ZION0258	No	80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	11/30/67-05/04/71	3	15	
ZION0331	No	80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	03/07/67-03/19/74	7	31	
ZION0258	No	80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	11/30/67-05/04/71	3	15	
ZION0331	No	80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	03/07/67-03/19/74	7	31	
ZION0258	No	80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	11/30/67-05/04/71	3	15	
ZION0331	No	80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	03/07/67-03/19/74	7	31	
ZION0258	No	80162	BED MATERIAL FALL DIAMETER, % FINER THAN 1.00MM	11/30/67-09/01/70	2	12	
ZION0331	No	80162	BED MATERIAL FALL DIAMETER, % FINER THAN 1.00MM	03/07/67-09/02/70	3	14	
ZION0258	No	80163	BED MATERIAL FALL DIAMETER, % FINER THAN 2.00MM	11/30/67-07/13/70	2	10	
ZION0331	No	80163	BED MATERIAL FALL DIAMETER, % FINER THAN 2.00MM	03/07/67-09/02/70	3	13	
ZION0258	No	80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	08/16/67-08/16/67	0	1	
ZION0331	No	80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	05/09/67-03/19/74	6	4	
ZION0258	No	80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	08/16/67-08/16/67	0	1	
ZION0331	No	80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	05/09/67-09/07/67	0	2	
ZION0258	No	80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	08/16/67-08/16/67	0	1	
ZION0331	No	80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	05/09/67-09/07/67	0	2	
ZION0258	No	80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	08/16/67-08/16/67	0	1	
ZION0331	No	80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	05/09/67-09/07/67	0	2	
ZION0258	No	80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	08/16/67-05/04/71	3	3	
ZION0331	No	80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	05/09/67-03/19/74	6	19	
ZION0258	No	80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	08/16/67-05/04/71	3	3	
ZION0331	No	80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	05/09/67-03/19/74	6	19	
ZION0258	No	80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	08/16/67-05/04/71	3	13	
ZION0331	No	80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	03/07/67-12/04/73	6	31	
ZION0258	No	80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	08/16/67-05/04/71	3	10	
ZION0331	No	80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	03/07/67-12/04/73	6	29	
ZION0258	No	80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	11/30/67-05/04/71	3	9	
ZION0331	No	80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	03/07/67-12/04/73	6	25	
ZION0258	No	80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	11/30/67-05/04/71	3	8	
ZION0331	No	80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	03/07/67-12/04/73	6	21	
ZION0331	No	80174	BED MATERIAL SIEVE DIAMETER,% FINER THAN 64.0MM	02/28/73-02/28/73	0	1	
ZION0330	No	81284	TRIFLURALIN(C13H16F3N3O4) WHOLE WATER SAMPLE UG/L	06/04/91-06/04/91	0	1	
ZION0330	No	81405	CARBOFURAN (EURADAN) WHOLE WATER SAMPLE UG/L	09/18/91-09/18/91	0	1	
ZION0356	No	81522	DIBROMOETHANE WHL WATER SMPL UG/L	12/18/87-12/18/87	0	1	
ZION0110	No	81551	XYLENE WHL WATER SMPL UG/L	06/19/90-06/19/90	0	1	
ZION0356	No	81555	BROMOBENZENE WHL WATER SMPL UG/L	12/18/87-12/18/87	0	1	
ZION0356	No	81710	M-XYLENE IN THE WHOLE WATER SAMPLE MG/L	12/18/87-12/18/87	0	1	
ZION0037	No	81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/20/81-08/20/81	0	1	
ZION0223	No	81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/18/81-08/18/81	0	1	
ZION0318	No	81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/31/81-08/31/81	0	1	
ZION0330	No	81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	09/18/91-09/18/91	0	1	
ZION0041	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	0	1	
ZION0120	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/17/80-07/17/80	0	1	
ZION0122	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	0	1	
ZION0123	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/20/80-07/20/80	0	1	
ZION0128	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/19/80-07/19/80	0	1	
ZION0136	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/19/80-07/19/80	0	1	
ZION0163	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/26/80-07/26/80	0	1	
ZION0164	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	0	1	
ZION0184	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	0	1	

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Station/Parameter Period of Record Tabulation
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Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0194	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/15/80-07/15/80	0	1	
ZION0207	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/13/80-07/13/80	0	1	
ZION0219	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/13/80-07/13/80	0	1	
ZION0225	Yes	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/14/80-07/14/80	0	1	
ZION0226	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/15/80-07/15/80	0	1	
ZION0284	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/12/80-07/12/80	0	1	
ZION0306	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	0	1	
ZION0314	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	0	1	
ZION0320	No	82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	0	1	
ZION0002	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	0	1	
ZION0007	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	0	1	
ZION0008	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/17/81-07/17/81	0	1	
ZION0009	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	0	1	
ZION0010	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/20/81-04/20/81	0	1	
ZION0030	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	0	1	
ZION0046	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	0	1	
ZION0048	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	0	1	
ZION0067	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	0	1	
ZION0073	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	0	1	
ZION0088	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	0	1	
ZION0095	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	0	1	
ZION0104	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	0	1	
ZION0138	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	0	1	
ZION0149	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	0	1	
ZION0168	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	0	1	
ZION0356	No	82080	TRIHALOMETHANE TOTAL IN WATER, BY SUMMATION UG/L	05/11/83-05/11/83	0	4	
ZION0143	Yes	82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/28/88-05/04/89	0	4	
ZION0146	Yes	82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/16/88-05/04/89	0	4	
ZION0150	Yes	82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/16/88-05/03/89	0	4	
ZION0154	Yes	82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/17/88-05/04/89	0	4	
ZION0161	Yes	82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/26/88-05/03/89	0	4	
ZION0143	Yes	82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/28/88-05/04/89	0	4	
ZION0146	Yes	82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/16/88-05/04/89	0	4	
ZION0150	Yes	82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/16/88-05/03/89	0	4	
ZION0154	Yes	82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/17/88-05/04/89	0	4	
ZION0161	Yes	82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/26/88-05/03/89	0	4	
ZION0110	No	82183	2,4-DP (DICHLORPROP) TOTAL UG/L	06/19/90-06/19/90	0	1	
ZION0036	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/05/80-07/05/80	0	1	
ZION0051	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/07/80-07/07/80	0	1	
ZION0052	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	0	1	
ZION0057	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	0	1	
ZION0065	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/01/80-07/01/80	0	1	
ZION0079	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	0	1	
ZION0093	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	0	1	
ZION0105	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	0	1	
ZION0106	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/01/80-07/01/80	0	1	
ZION0107	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	0	1	
ZION0109	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	0	1	
ZION0130	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	0	1	
ZION0131	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/05/80-07/05/80	0	1	
ZION0142	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/02/80-07/02/80	0	1	
ZION0144	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/02/80-07/02/80	0	1	
ZION0198	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	0	1	
ZION0200	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	0	1	
ZION0208	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	0	1	
ZION0209	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	0	1	
ZION0211	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	0	1	
ZION0214	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0216	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0218	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0220	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	0	1	
ZION0221	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	0	1	
ZION0222	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/10/80-07/10/80	0	1	
ZION0224	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0227	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0228	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	0	1	
ZION0230	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	0	1	
ZION0254	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/21/80-06/21/80	0	1	
ZION0257	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/21/80-06/21/80	0	1	
ZION0260	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/12/80-07/12/80	0	1	
ZION0261	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/26/80-06/26/80	0	1	
ZION0285	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/23/80-06/23/80	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0056	No	82702	AS DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82702	AS DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82702	AS DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82702	AS DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82702	AS DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82702	AS DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82702	AS DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82702	AS DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82702	AS DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82703	BA DECNT FLD ACID WTR MG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82703	BA DECNT FLD ACID WTR MG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82703	BA DECNT FLD ACID WTR MG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82703	BA DECNT FLD ACID WTR MG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82703	BA DECNT FLD ACID WTR MG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82703	BA DECNT FLD ACID WTR MG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82703	BA DECNT FLD ACID WTR MG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82703	BA DECNT FLD ACID WTR MG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82703	BA DECNT FLD ACID WTR MG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82705	CD DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82705	CD DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82705	CD DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82705	CD DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82705	CD DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82705	CD DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82705	CD DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82705	CD DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82705	CD DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82706	CR DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82706	CR DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82706	CR DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82706	CR DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82706	CR DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82706	CR DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82706	CR DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82706	CR DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82706	CR DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82708	CU DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82708	CU DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82708	CU DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82708	CU DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82708	CU DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82708	CU DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82708	CU DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82708	CU DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82708	CU DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82710	FE DECNT FLD ACID WTR MG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82710	FE DECNT FLD ACID WTR MG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82710	FE DECNT FLD ACID WTR MG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82710	FE DECNT FLD ACID WTR MG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82710	FE DECNT FLD ACID WTR MG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82710	FE DECNT FLD ACID WTR MG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82710	FE DECNT FLD ACID WTR MG/L	01/08/92-09/23/93	1	6	

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Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0186	No	82710	FE DECNT FLD ACID WTR MG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82710	FE DECNT FLD ACID WTR MG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82711	PB DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82711	PB DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82711	PB DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82711	PB DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82711	PB DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82711	PB DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82711	PB DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82711	PB DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82711	PB DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82712	MN DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82712	MN DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82712	MN DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82712	MN DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82712	MN DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82712	MN DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82712	MN DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82712	MN DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82712	MN DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82713	HG DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82713	HG DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82713	HG DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82713	HG DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82713	HG DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82713	HG DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82713	HG DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82713	HG DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82713	HG DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82716	AG DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82716	AG DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82716	AG DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82716	AG DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82716	AG DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82716	AG DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82716	AG DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82716	AG DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82716	AG DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0056	No	82719	ZN DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	2	9	
ZION0084	No	82719	ZN DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	1	5	
ZION0090	No	82719	ZN DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	0	1	
ZION0115	No	82719	ZN DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	0	2	
ZION0137	Yes	82719	ZN DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	0	2	
ZION0177	No	82719	ZN DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	0	2	
ZION0178	No	82719	ZN DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	1	6	
ZION0186	No	82719	ZN DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	0	4	
ZION0192	No	82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0256	No	82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0276	No	82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0299	No	82719	ZN DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	0	3	
ZION0330	No	82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	0	4	
ZION0002	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0003	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/21/77-06/21/77	0	1	
ZION0004	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/20/81-10/20/81	0	1	
ZION0005	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/30/81-07/30/81	0	1	
ZION0006	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/31/82-08/31/82	0	1	
ZION0007	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	
ZION0008	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/17/81-07/17/81	0	1	
ZION0009	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	
ZION0010	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/24/81-08/24/81	0	1	
ZION0011	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0014	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/30/81-05/07/82	0	2	
ZION0015	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0017	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/30/81-05/07/82	0	2	
ZION0018	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/22/77-06/22/77	0	1	
ZION0019	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/22/77-06/22/77	0	1	
ZION0020	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0023	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0024	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/17/81-10/17/81	0	1	
ZION0025	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0027	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/29/81-08/29/81	0	1	
ZION0030	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/26/81-08/26/81	0	1	
ZION0031	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0043	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0044	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/16/81-09/13/86	4	2	
ZION0045	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0046	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/26/81-08/26/81	0	1	
ZION0048	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0049	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/24/86-06/24/86	0	1	
ZION0050	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/19/86	4	2	
ZION0054	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/13/86-07/13/86	0	1	
ZION0058	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/16/86-07/16/86	0	1	
ZION0064	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0067	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0068	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/22/86-06/22/86	0	1	
ZION0070	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/13/86-07/13/86	0	1	
ZION0073	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	03/04/82-03/04/82	0	1	
ZION0083	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/22/86-06/22/86	0	1	
ZION0086	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/22/86-08/22/86	0	1	
ZION0088	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0089	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/20/86	4	4	
ZION0091	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/18/86-06/18/86	0	1	
ZION0095	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0096	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-06/07/82	0	2	
ZION0097	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0098	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-08/21/86	4	3	
ZION0099	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/28/81-07/06/82	0	3	
ZION0110	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/12/77-06/19/90	12	2	
ZION0112	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/12/77-11/12/77	0	1	
ZION0114	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/15/86-07/15/86	0	1	
ZION0116	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/28/87-07/28/87	0	1	
ZION0118	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/11/86-09/11/86	0	1	
ZION0125	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/20/81-08/20/81	0	1	
ZION0129	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	06/11/82-06/11/82	0	1	
ZION0132	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/86-08/23/86	0	1	
ZION0138	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/16/82-08/16/82	0	1	
ZION0145	Yes	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/04/82-05/04/82	0	1	
ZION0149	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/16/82-08/16/82	0	1	
ZION0156	Yes	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/19/86-09/19/86	0	1	
ZION0172	Yes	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/22/80-08/22/80	0	1	
ZION0182	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	12/07/77-12/07/77	0	1	
ZION0189	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0199	Yes	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/03/70-09/03/70	0	1	
ZION0202	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	12/28/75-12/28/75	0	1	
ZION0203	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/01/82-09/01/82	0	1	
ZION0210	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	12/09/77-12/09/77	0	1	
ZION0213	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/17/81-08/17/81	0	1	
ZION0223	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0229	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0231	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/18/77-11/18/77	0	1	
ZION0234	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0238	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	12/10/77-12/10/77	0	1	
ZION0240	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/17/77-11/17/77	0	1	
ZION0250	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/01/82-09/01/82	0	1	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0251	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0262	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0263	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0265	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0266	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0273	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/05/82-05/05/82	0	1	
ZION0274	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/23/75-07/23/75	0	1	
ZION0281	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	03/25/66-03/25/66	0	1	
ZION0292	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/25/68-10/25/68	0	1	
ZION0296	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/28/68-10/28/68	0	1	
ZION0301	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0304	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0305	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0310	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/07/82-05/07/82	0	1	
ZION0318	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0323	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/07/65-10/07/65	0	1	
ZION0325	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	08/20/68-08/20/68	0	1	
ZION0335	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/10/68-10/10/68	0	1	
ZION0340	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	02/20/64-02/20/64	0	1	
ZION0341	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/06/82-05/06/82	0	1	
ZION0348	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/04/82-05/04/82	0	1	
ZION0362	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	05/06/82-05/06/82	0	1	
ZION0366	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/16/68-10/16/68	0	1	
ZION0367	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	07/14/62-07/14/62	0	1	
ZION0368	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/23/68-10/23/68	0	1	
ZION0371	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	10/16/68-10/16/68	0	1	
ZION0002	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	
ZION0003	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/21/77-06/21/77	0	1	
ZION0004	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/20/81-10/20/81	0	1	
ZION0005	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/30/81-07/30/81	0	1	
ZION0006	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/31/82-08/31/82	0	1	
ZION0007	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	
ZION0008	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/17/81-07/17/81	0	1	
ZION0009	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/16/81-07/16/81	0	1	
ZION0010	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/24/81-08/24/81	0	1	
ZION0011	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0014	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/30/81-05/07/82	0	2	
ZION0015	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0017	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/30/81-05/07/82	0	2	
ZION0018	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/22/77-06/22/77	0	1	
ZION0019	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/22/77-06/22/77	0	1	
ZION0020	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0023	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0024	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/17/81-10/17/81	0	1	
ZION0025	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0027	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/29/81-08/29/81	0	1	
ZION0030	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/26/81-08/26/81	0	1	
ZION0031	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/03/82-05/03/82	0	1	
ZION0043	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0044	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/16/81-09/13/86	4	2	
ZION0045	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0046	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/26/81-08/26/81	0	1	
ZION0048	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0049	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/24/86-06/24/86	0	1	
ZION0050	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/19/86	4	2	
ZION0054	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/13/86-07/13/86	0	1	
ZION0058	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/16/86-07/16/86	0	1	
ZION0064	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0067	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0068	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/22/86-06/22/86	0	1	
ZION0070	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/13/86-07/13/86	0	1	
ZION0073	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	03/04/82-03/04/82	0	1	
ZION0083	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/22/86-06/22/86	0	1	
ZION0086	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/22/86-08/22/86	0	1	
ZION0088	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0089	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/20/86	4	4	
ZION0091	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/18/86-06/18/86	0	1	
ZION0095	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/15/81-07/15/81	0	1	
ZION0096	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-06/07/82	0	2	
ZION0097	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/28/81	0	1	
ZION0098	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-08/21/86	4	3	
ZION0099	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/28/81-07/06/82	0	3	

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

Station/Parameter Period of Record Tabulation
From 07/14/62 To 12/11/96

Station	In Park	Code	Name	Start - End	Years	Obs	Plots[1]
ZION0110	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/12/77-06/19/90	12	2	
ZION0112	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/12/77-11/12/77	0	1	
ZION0114	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/15/86-07/15/86	0	1	
ZION0116	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/28/87-07/28/87	0	1	
ZION0118	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/11/86-09/11/86	0	1	
ZION0125	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/20/81-08/20/81	0	1	
ZION0129	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	06/11/82-06/11/82	0	1	
ZION0132	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/86-08/23/86	0	1	
ZION0138	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/16/82-08/16/82	0	1	
ZION0145	Yes	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/04/82-05/04/82	0	1	
ZION0149	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/16/82-08/16/82	0	1	
ZION0156	Yes	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/19/86-09/19/86	0	1	
ZION0172	Yes	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/22/80-08/22/80	0	1	
ZION0182	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	12/07/77-12/07/77	0	1	
ZION0189	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0199	Yes	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/03/70-09/03/70	0	1	
ZION0202	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	12/28/75-12/28/75	0	1	
ZION0203	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/01/82-09/01/82	0	1	
ZION0210	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	12/09/77-12/09/77	0	1	
ZION0213	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/17/81-08/17/81	0	1	
ZION0223	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0229	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0231	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/18/77-11/18/77	0	1	
ZION0234	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0238	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	12/10/77-12/10/77	0	1	
ZION0240	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/17/77-11/17/77	0	1	
ZION0250	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/01/82-09/01/82	0	1	
ZION0251	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/24/72-05/24/72	0	1	
ZION0262	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0263	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0265	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0266	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	11/16/77-11/16/77	0	1	
ZION0273	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/05/82-05/05/82	0	1	
ZION0274	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/23/75-07/23/75	0	1	
ZION0281	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	03/25/66-03/25/66	0	1	
ZION0292	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/25/68-10/25/68	0	1	
ZION0296	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/28/68-10/28/68	0	1	
ZION0301	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0304	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0305	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	09/02/82-09/02/82	0	1	
ZION0310	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/07/82-05/07/82	0	1	
ZION0318	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/23/82-08/23/82	0	1	
ZION0323	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/07/65-10/07/65	0	1	
ZION0325	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	08/20/68-08/20/68	0	1	
ZION0335	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/10/68-10/10/68	0	1	
ZION0340	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	02/20/64-02/20/64	0	1	
ZION0341	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/06/82-05/06/82	0	1	
ZION0348	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/04/82-05/04/82	0	1	
ZION0362	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	05/06/82-05/06/82	0	1	
ZION0366	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/16/68-10/16/68	0	1	
ZION0367	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	07/14/62-07/14/62	0	1	
ZION0368	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/23/68-10/23/68	0	1	
ZION0371	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	10/16/68-10/16/68	0	1	

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

Station-By-Station Results

Station Inventory for Station: ZION0001

NPS Station ID: ZION0001 LAT/LON: 37.470977/-112.485559 Agency: 21UTDHDW Date Created: 05/26/90
Location: ALTON - ALTON (BIRCH) FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1300101 /UT4900077001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 0.40 On/Off RF1:
RF3 Index: 15010008003400.49 RF3 Mile Point: 0.98 Distance from RF3: 0.02 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1110

Parameter Inventory for Station: ZION0001

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/29/82-02/22/88	2	0.6	0.6	1.	0.2	0.32	0.566	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/22/88-02/22/88	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/22/88-02/22/88	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/22/88-02/22/88	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/29/82-01/29/82	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/29/82-02/22/88	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/22/88-02/22/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/22/88-02/22/88	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/29/82-02/22/88	2	10.	10.	16.	4.	72.	8.485	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/29/82-02/22/88	2	0.145	0.145	0.16	0.13	0.	0.021	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	12/01/81-02/22/88	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	12/01/81-02/22/88	2 ##	0.038	0.038	0.05	0.025	0.	0.018	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	12/01/81-02/22/88	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	12/01/81-02/22/88	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	12/01/81-02/22/88	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	12/01/81-02/22/88	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	12/01/81-02/22/88	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	12/01/81-12/01/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	12/01/81-02/22/88	2 ##	4.	4.	7.	1.	18.	4.243	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	12/01/81-02/22/88	2 ##	112.5	112.5	200.	25.	15312.5	123.744	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	12/01/81-02/22/88	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01501	ALPHA, TOTAL	05/13/81-01/01/88	3	2.	1.833	3.	0.5	1.583	1.258	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/22/88-02/22/88	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/29/82-02/22/88	2	462.	462.	532.	392.	9800.	98.995	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	12/01/81-02/22/88	2 ##	0.275	0.275	0.5	0.05	0.101	0.318	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/01/81-02/22/88	2 ##	0.02	0.02	0.025	0.015	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

EPA Water Quality Criteria Analysis for Station: ZION0001

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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									
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	2	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.	2	0	0.00	2	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	2	0	0.00	2	0	0.00									
		Drinking Water	1300.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	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	2	1	0.50	2	1	0.50									
		Drinking Water	100.	2	0	0.00	2	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	2	1	0.50	2	1	0.50									
		Drinking Water	5000.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									

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

Station Inventory for Station: ZION0002

NPS Station ID: ZION0002
Location: (C-38- 6)25CCC-S3
Station Type: /TYPA/AMBNT/SPRING
RMI-Indexes:
RMI-Miles:
HUC: 15010008
Major Basin:
Minor Basin:
RF1 Index: 15010008
RF3 Index: 15010008059800.00
Description:

LAT/LON: 37.470837/-112.485838
Depth of Water: 0
Elevation: 0
RF1 Mile Point: 0.000
RF3 Mile Point: 0.15

Agency: 112WRD
FIPS State/County: 49025 UTAH/KANE
STORET Station ID(s): 372815112290901
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 19.60
Distance from RF3: 0.07

Date Created: 06/20/87
On/Off RF1:
On/Off RF3:

Parameter Inventory for Station: ZION0002

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	1	550.	550.	550.	550.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/81-07/16/81	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/81-07/16/81	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/16/81-07/16/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	1	71.	71.	71.	71.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/16/81-07/16/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	1	329.	329.	329.	329.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0002

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0002

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0003

NPS Station ID: ZION0003
LAT/LON: 37.471115/-112.486948
Agency: 112WRD
Date Created: 04/14/78
Location: (C-38- 6)26DDD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372816112291301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 25.00
On/Off RF1:
RF3 Index: 15010008053803.28
RF3 Mile Point: 5.89
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0003

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/77-06/21/77	1		540.	540.	540.	540.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/21/77-06/21/77	1		6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/21/77-06/21/77	1		6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/77-06/21/77	1		0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/21/77-06/21/77	1		177.	177.	177.	177.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/77-06/21/77	1		290.	290.	290.	290.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/21/77-06/21/77	1		350.	350.	350.	350.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/21/77-06/21/77	1		0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/21/77-06/21/77	1		0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/21/77-06/21/77	1		0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/21/77-06/21/77	1	##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/21/77-06/21/77	1		300.	300.	300.	300.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/21/77-06/21/77	1		14.	14.	14.	14.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/21/77-06/21/77	1		71.	71.	71.	71.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/77-06/21/77	1		30.	30.	30.	30.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/77-06/21/77	1		5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/21/77-06/21/77	1		0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/21/77-06/21/77	1		4.	4.	4.	4.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/21/77-06/21/77	1		0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/21/77-06/21/77	1		5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/21/77-06/21/77	1		4.	4.	4.	4.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/21/77-06/21/77	1		0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/21/77-06/21/77	1		19.	19.	19.	19.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/21/77-06/21/77	1	##	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/21/77-06/21/77	1		120.	120.	120.	120.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/77-06/21/77	1	##	5.	5.	5.	5.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/21/77-06/21/77	1		308.	308.	308.	308.	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: ZION0003

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	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: ZION0003

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0004

NPS Station ID: ZION0004
Location: (C-38- 6)34CAB-S1
Station Type: /TYPA/AMBNT/SPRING
RMI-Indexes:
RMI-Miles:
HUC: 15010008
Major Basin:
Minor Basin:
RF1 Index: 15010008
RF3 Index: 15010008037400.00
Description:

LAT/LON: 37.462504/-112.516116
Depth of Water: 0
Elevation: 0
RF1 Mile Point: 0.000
RF3 Mile Point: 0.00

Agency: 112WRD
FIPS State/County: 49025 UTAH/KANE
STORET Station ID(s): 372745112305801
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 27.30
Distance from RF3: 0.01

Date Created: 06/20/87
On/Off RF1:
On/Off RF3:

Parameter Inventory for Station: ZION0004

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/20/81-10/20/81	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/20/81-10/20/81	1	785.	785.	785.	785.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/20/81-10/20/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/20/81-10/20/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/20/81-10/20/81	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/20/81-10/20/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/20/81-10/20/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/20/81-10/20/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/20/81-10/20/81	1 ##	0.045	0.045	0.045	0.045	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/20/81-10/20/81	1	420.	420.	420.	420.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/20/81-10/20/81	1	87.	87.	87.	87.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/20/81-10/20/81	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/20/81-10/20/81	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/20/81-10/20/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	10/20/81-10/20/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/20/81-10/20/81	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/20/81-10/20/81	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/20/81-10/20/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/20/81-10/20/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/20/81-10/20/81	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/20/81-10/20/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/20/81-10/20/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/20/81-10/20/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/20/81-10/20/81	1	426.	426.	426.	426.	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: ZION0004

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0004

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0005

NPS Station ID: ZION0005
LAT/LON: 37.374726/-112.534171
Agency: 112WRD
Date Created: 06/20/87
Location: (C-39- 4)33DAC-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372229112320301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010003
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010003
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0005

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-07/30/81	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-07/30/81	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-07/30/81	1	635.	635.	635.	635.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/30/81-07/30/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/30/81-07/30/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-07/30/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/30/81-07/30/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/30/81-07/30/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-07/30/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-07/30/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-07/30/81	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-07/30/81	1	68.	68.	68.	68.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-07/30/81	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-07/30/81	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/30/81-07/30/81	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/30/81-07/30/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-07/30/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-07/30/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-07/30/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-07/30/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-07/30/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-07/30/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-07/30/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-07/30/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0005

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0006

NPS Station ID: ZION0006
LAT/LON: 37.427226/-112.535281
Agency: 112WRD
Date Created: 12/19/81
Location: E. FK. VIRGIN R. AT HIWAY 136 BRIDGE, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372538112320701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 28.030
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008053803.28
RF3 Mile Point: 5.37
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0006

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-08/31/82	4	10.	10.125	12.	8.5	2.063	1.436	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-08/31/82	4	15.25	13.375	19.	4.	44.229	6.651	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	4	585.	586.25	595.	580.	56.25	7.5	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-08/31/82	4	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-08/31/82	4	467.5	467.5	475.	460.	41.667	6.455	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-08/31/82	4	8.6	8.65	8.9	8.5	0.03	0.173	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-08/31/82	4	7.85	7.85	8.2	7.5	0.097	0.311	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-08/31/82	4	7.825	7.77	8.2	7.5	0.105	0.324	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-08/31/82	4	0.015	0.017	0.032	0.006	0.	0.011	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-08/31/82	4	8.1	8.	8.2	7.6	0.073	0.271	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-08/31/82	4	8.1	7.927	8.2	7.6	0.08	0.284	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-08/31/82	4	0.008	0.012	0.025	0.006	0.	0.009	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-08/31/82	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-10/12/81	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-08/31/82	4 ##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-08/31/82	4	280.	280.	280.	280.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-08/31/82	4	56.	56.5	58.	56.	1.	1.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-08/31/82	4	33.	33.	33.	33.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-08/31/82	4	2.85	3.05	3.9	2.6	0.337	0.58	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-08/31/82	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-08/31/82	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-08/31/82	4	1.25	1.25	1.3	1.2	0.003	0.058	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-08/31/82	4	6.	7.	10.	6.	4.	2.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-08/31/82	4 ##	4.25	4.75	10.	0.5	17.417	4.173	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-08/31/82	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-08/31/82	4	8.9	8.725	9.	8.1	0.176	0.419	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-08/31/82	4	20.	22.5	30.	20.	25.	5.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-08/31/82	4	260.	262.75	284.	247.	244.25	15.628	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-08/31/82	4	1.335	1.305	1.51	1.04	0.056	0.237	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-08/31/82	4	0.355	0.36	0.39	0.34	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0006

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0007

NPS Station ID: ZION0007
LAT/LON: 37.424726/-112.536393
Agency: 112WRD
Date Created: 06/20/87
Location: (C-39- 6)16BBD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372529112321101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 10.50
On/Off RF1:
RF3 Index: 15010008053500.00
RF3 Mile Point: 0.70
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0007

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	1		10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	1		510.	510.	510.	510.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1		0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1		0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	1		0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	1		290.	290.	290.	290.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	1		60.	60.	60.	60.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	1		33.	33.	33.	33.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	1		4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	1		0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/16/81-07/16/81	1		3.	3.	3.	3.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	1		2.	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	1		5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	1	##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	1		0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	1		8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	1		10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	1		3.	3.	3.	3.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	1		284.	284.	284.	284.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	1		1.5	1.5	1.5	1.5	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: ZION0007

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0007

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0008

NPS Station ID: ZION0008
LAT/LON: 37.429726/-112.536948
Agency: 112WRD
Date Created: 06/20/87
Location: (C-39- 6) 9CCA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372547112321301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.30
On/Off RF1:
RF3 Index: 15010008001026.56
RF3 Mile Point: 31.16
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0008

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/81-07/17/81	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/17/81-07/17/81	1	332.	332.	332.	332.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/81-07/17/81	1	440.	440.	440.	440.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/17/81-07/17/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/17/81-07/17/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/17/81-07/17/81	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/17/81-07/17/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/17/81-07/17/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/17/81-07/17/81	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/17/81-07/17/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/17/81-07/17/81	1	260.	260.	260.	260.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/17/81-07/17/81	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/81-07/17/81	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/81-07/17/81	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/17/81-07/17/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/17/81-07/17/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/17/81-07/17/81	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/17/81-07/17/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/17/81-07/17/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/17/81-07/17/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/17/81-07/17/81	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/17/81-07/17/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/81-07/17/81	1	7.	7.	7.	7.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/17/81-07/17/81	1	252.	252.	252.	252.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/17/81-07/17/81	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0008

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0008

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0009

NPS Station ID: ZION0009
LAT/LON: 37.409726/-112.546949
Agency: 112WRD
Date Created: 06/05/82
Location: (C-39- 6)20ABC-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372435112324901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 26.00
On/Off RF1:
RF3 Index: 15010008015500.00
RF3 Mile Point: 0.00
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0009

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/81-07/16/81	1		9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/16/81-07/16/81	1		460.	460.	460.	460.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/81-07/16/81	1		7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/81-07/16/81	1		7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1		0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/16/81-07/16/81	1		7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/81-07/16/81	1		0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/16/81-07/16/81	1		0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/16/81-07/16/81	1		270.	270.	270.	270.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/16/81-07/16/81	1		54.	54.	54.	54.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/16/81-07/16/81	1		32.	32.	32.	32.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/16/81-07/16/81	1		3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/16/81-07/16/81	1		0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/16/81-07/16/81	1		3.	3.	3.	3.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/16/81-07/16/81	1		1.	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/16/81-07/16/81	1		4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/16/81-07/16/81	1	##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/16/81-07/16/81	1		0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/16/81-07/16/81	1		8.	8.	8.	8.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/16/81-07/16/81	1		10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/16/81-07/16/81	1		2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/81-07/16/81	1		254.	254.	254.	254.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/16/81-07/16/81	1		0.7	0.7	0.7	0.7	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: ZION0009

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0009

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0010

NPS Station ID: ZION0010
LAT/LON: 37.394170/-112.555559
Agency: 112WRD
Date Created: 12/02/81
Location: (C-39- 6)29BCB-
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372339112332001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 18.00
On/Off RF1:
RF3 Index: 15010008058601.45
RF3 Mile Point: 5.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0010

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/20/81-08/24/81	2	15.	15.	16.	14.	2.	1.414	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/20/81-08/24/81	2	5.5	5.5	7.	4.	4.5	2.121	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/20/81-08/24/81	2	457.5	457.5	480.	435.	1012.5	31.82	**	**	**	**
00400	PH (STANDARD UNITS)	04/20/81-08/24/81	2	8.25	8.25	8.4	8.1	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/20/81-08/24/81	2	8.225	8.225	8.4	8.1	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/20/81-08/24/81	2	0.006	0.006	0.008	0.004	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/20/81-08/24/81	2	8.1	8.1	8.2	8.	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/20/81-08/24/81	2	8.089	8.089	8.2	8.	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/20/81-08/24/81	2	0.008	0.008	0.01	0.006	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/20/81-08/24/81	2	270.	270.	290.	250.	800.	28.284	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/20/81-08/24/81	2	54.	54.	60.	48.	72.	8.485	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/20/81-08/24/81	2	33.5	33.5	35.	32.	4.5	2.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/20/81-08/24/81	2	3.65	3.65	4.6	2.7	1.805	1.344	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/20/81-08/24/81	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	04/20/81-08/24/81	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/20/81-08/24/81	2	1.3	1.3	1.4	1.2	0.02	0.141	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/20/81-08/24/81	2	5.5	5.5	6.	5.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/20/81-08/24/81	2 ##	1.7	1.7	2.5	0.9	1.28	1.131	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/20/81-08/24/81	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/20/81-08/24/81	2	7.75	7.75	8.	7.5	0.125	0.354	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/20/81-08/24/81	2	25.	25.	30.	20.	50.	7.071	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/20/81-04/20/81	1	1600.	1600.	1600.	1600.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/20/81-08/24/81	2	895.	895.	1600.	190.	994050.	997.021	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/20/81-08/24/81	2 ##	17.5	17.5	30.	5.	312.5	17.678	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/20/81-08/24/81	2	23.5	23.5	40.	7.	544.5	23.335	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/20/81-08/24/81	2	35.	35.	60.	10.	1250.	35.355	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/20/81-08/24/81	2	11.5	11.5	20.	3.	144.5	12.021	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/20/81-08/24/81	2	252.5	252.5	289.	216.	2664.5	51.619	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	1	207.	207.	207.	207.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/20/81-08/24/81	2	3.85	3.85	5.54	2.16	5.712	2.39	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/20/81-08/24/81	2	0.34	0.34	0.39	0.29	0.005	0.071	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/20/81-08/24/81	2	85.	85.	164.	6.	12482.	111.723	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/20/81-08/24/81	2	1.58	1.58	3.1	0.06	4.621	2.15	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/20/81-04/20/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0010

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0011

NPS Station ID: ZION0011
LAT/LON: 37.398337/-112.564170
Agency: 112WRD
Date Created: 03/27/82
Location: (C-39- 6)30ABA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372354112335101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001023.24
RF3 Mile Point: 23.23
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0011

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	1	500.	500.	500.	500.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-08/28/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	1	280.	280.	280.	280.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/28/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	1	219.	219.	219.	219.	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: ZION0011

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0011

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0012

NPS Station ID: ZION0012 LAT/LON: 37.377227/-112.575838 Agency: 21UTDHDW Date Created: 05/26/90
Location: GLENDALE - HOPS SPRING FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1300402 /UT4900190002
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.80 On/Off RF1:
RF3 Index: 15010008001019.78 RF3 Mile Point: 21.11 Distance from RF3: 0.02 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1605

Parameter Inventory for Station: ZION0012

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/21/89-07/21/89	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/21/89-07/21/89	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/21/89-07/21/89	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/21/89-07/21/89	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/21/89-07/21/89	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/21/89-07/21/89	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/21/89-07/21/89	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/21/89-07/21/89	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/21/89-07/21/89	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/21/89-07/21/89	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/21/89-07/21/89	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/21/89-07/21/89	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/21/89-07/21/89	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/21/89-07/21/89	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/21/89-07/21/89	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/21/89-07/21/89	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/21/89-07/21/89	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/21/89-07/21/89	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/21/89-07/21/89	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/21/89-07/21/89	1	0.59	0.59	0.59	0.59	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/21/89-07/21/89	1	176.	176.	176.	176.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/21/89-07/21/89	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/21/89-07/21/89	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: ZION0012

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
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	1	1.00	1	1	1.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	1	1.00	1	1	1.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0013

NPS Station ID: ZION0013 LAT/LON: 37.379170/-112.578616 Agency: 21UTDHDW Date Created: 05/26/90
Location: GLENDALE - SPENCER SPRING FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1300403 /UT4900190003
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 2.40 On/Off RF1:
RF3 Index: 15010008052500.00 RF3 Mile Point: 0.54 Distance from RF3: 0.06 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1605

Parameter Inventory for Station: ZION0013

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/23/87-06/23/87	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/23/87-06/23/87	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/23/87-06/23/87	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/87-06/23/87	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/23/87-06/23/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/23/87-06/23/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/23/87-06/23/87	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/23/87-06/23/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/23/87-06/23/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/23/87-06/23/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/23/87-06/23/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/23/87-06/23/87	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/23/87-06/23/87	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/23/87-06/23/87	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/23/87-06/23/87	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/23/87-06/23/87	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/23/87-06/23/87	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/23/87-06/23/87	1	10.	10.	10.	10.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	06/23/87-06/23/87	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/23/87-06/23/87	1	316.	316.	316.	316.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/23/87-06/23/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/23/87-06/23/87	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: ZION0013

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	1	1.00							1	1	1.00			
		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			
01077	SILVER, TOTAL	Fresh Acute	4.1	1	1	1.00							1	1	1.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
		Drinking Water	5000.	1	0	0.00							1	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
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: ZION0014

NPS Station ID: ZION0014
LAT/LON: 37.426115/-112.583059
Agency: 112WRD
Date Created: 07/17/82
Location: (C-39- 7)13ABA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372534112345901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 5.50
On/Off RF1:
RF3 Index: 15010008053000.54
RF3 Mile Point: 1.11
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0014

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-05/07/82	2	7.	7.	8.	6.	2.	1.414	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-05/07/82	2	4.5	4.5	6.3	2.7	6.48	2.546	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-05/07/82	2	505.	505.	530.	480.	1250.	35.355	**	**	**	**
00400	PH (STANDARD UNITS)	07/30/81-05/07/82	2	7.5	7.5	7.8	7.2	0.18	0.424	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/30/81-05/07/82	2	7.404	7.404	7.8	7.2	0.199	0.446	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-05/07/82	2	0.039	0.039	0.063	0.016	0.001	0.033	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/30/81-05/07/82	2	8.05	8.05	8.1	8.	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/30/81-05/07/82	2	8.047	8.047	8.1	8.	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-05/07/82	2	0.009	0.009	0.01	0.008	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-05/07/82	2 ##	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-05/07/82	2	295.	295.	310.	280.	450.	21.213	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/07/82-05/07/82	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-05/07/82	2	57.	57.	60.	54.	18.	4.243	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-05/07/82	2	37.	37.	38.	36.	2.	1.414	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-05/07/82	2	4.05	4.05	6.3	1.8	10.125	3.182	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/30/81-05/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	07/30/81-05/07/82	2	2.5	2.5	4.	1.	4.5	2.121	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-05/07/82	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-05/07/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-05/07/82	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-05/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-05/07/82	2	7.9	7.9	8.1	7.7	0.08	0.283	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-05/07/82	2 ##	4.75	4.75	5.	4.5	0.125	0.354	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-05/07/82	2 ##	1.	1.	1.5	0.5	0.5	0.707	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-05/07/82	2	141.5	141.5	277.	6.	36720.5	191.626	**	**	**	**

** - Less than 9 observations ## - 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: ZION0014

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						

& - 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: ZION0014

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0015

NPS Station ID: ZION0015
LAT/LON: 37.376948/-112.590281
Agency: 112WRD
Date Created: 12/19/81
Location: E. FK. VIRGIN R. ABOVE STOUT CANYON, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372237112352501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 22.680
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008001515.64
RF3 Mile Point: 21.29
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0015

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	11.25	11.25	12.5	10.	3.125	1.768	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	18.75	18.75	22.	15.5	21.125	4.596	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	2	607.	607.	609.	605.	8.	2.828	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	2	6.	6.	7.	5.	2.	1.414	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	2	495.	495.	550.	440.	6050.	77.782	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	2	9.1	9.1	9.3	8.9	0.08	0.283	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-05/03/82	2	8.3	8.3	8.4	8.2	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-05/03/82	2	8.289	8.289	8.4	8.2	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.005	0.005	0.006	0.004	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/03/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/03/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	2	275.	275.	290.	260.	450.	21.213	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	2	54.	54.	58.	50.	32.	5.657	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	2	34.5	34.5	36.	33.	4.5	2.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	2	4.25	4.25	4.9	3.6	0.845	0.919	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-05/03/82	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	2	1.5	1.5	1.6	1.4	0.02	0.141	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	2	7.	7.	9.	5.	8.	2.828	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	2 ##	4.25	4.25	6.	2.5	6.125	2.475	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	2	8.75	8.75	8.9	8.6	0.045	0.212	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	2	265.	265.	286.	244.	882.	29.698	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	2	4.455	4.455	5.64	3.27	2.808	1.676	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	2	0.36	0.36	0.39	0.33	0.002	0.042	**	**	**	**

** - 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

EPA Water Quality Criteria Analysis for Station: ZION0015

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0016

NPS Station ID: ZION0016
LAT/LON: 37.376392/-112.590838
Agency: 112WRD
Date Created: 01/23/82
Location: STOUT CANYON AT MOUTH, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372235112352701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 22.540
Distance from RF1: 0.70
On/Off RF1: OFF
RF3 Index: 15010008001706.57
RF3 Mile Point: 10.98
Distance from RF3: 0.08
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0016

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	11.25	11.25	12.	10.5	1.125	1.061	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	18.25	18.25	21.	15.5	15.125	3.889	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	2	607.	607.	609.	605.	8.	2.828	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	2	9.	9.	13.	5.	32.	5.657	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	2	505.	505.	560.	450.	6050.	77.782	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	2	8.7	8.7	8.9	8.5	0.08	0.283	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-05/03/82	2	9.025	9.025	9.75	8.3	1.051	1.025	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-05/03/82	2	8.586	8.586	9.75	8.3	1.437	1.199	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.003	0.003	0.005	0.	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/03/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-08/19/81	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	2 ##	0.013	0.013	0.02	0.005	0.	0.011	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	2	280.	280.	290.	270.	200.	14.142	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	2	56.5	56.5	59.	54.	12.5	3.536	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	2	33.5	33.5	35.	32.	4.5	2.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	2	2.	2.	2.1	1.9	0.02	0.141	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-05/03/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	2	1.15	1.15	1.4	0.9	0.125	0.354	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	2	12.	12.	13.	11.	2.	1.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	2	8.35	8.35	8.9	7.8	0.605	0.778	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	2	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	2	260.5	260.5	275.	246.	420.5	20.506	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	2	6.445	6.445	9.28	3.61	16.074	4.009	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	2	0.35	0.35	0.37	0.33	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - 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: ZION0016

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	1	0.50	1	1	1.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0017

NPS Station ID: ZION0017
LAT/LON: 37.386392/-112.593616
Agency: 112WRD
Date Created: 07/17/82
Location: (C-39- 7)26DDA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372311112353701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001020.57
RF3 Mile Point: 20.74
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0017

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/81-05/07/82	2	11.75	11.75	13.5	10.	6.125	2.475	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/30/81-05/07/82	2	5.55	5.55	5.6	5.5	0.005	0.071	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/30/81-05/07/82	2	282.5	282.5	305.	260.	1012.5	31.82	**	**	**	**
00400	PH (STANDARD UNITS)	07/30/81-05/07/82	2	7.8	7.8	8.1	7.5	0.18	0.424	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/30/81-05/07/82	2	7.704	7.704	8.1	7.5	0.199	0.446	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-05/07/82	2	0.02	0.02	0.032	0.008	0.	0.017	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/30/81-05/07/82	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/30/81-05/07/82	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/81-05/07/82	2	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/30/81-05/07/82	2 ##	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/81-05/07/82	2	150.	150.	150.	150.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/07/82-05/07/82	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/81-05/07/82	2	36.5	36.5	37.	36.	0.5	0.707	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/81-05/07/82	2	14.5	14.5	15.	14.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/81-05/07/82	2	1.5	1.5	1.6	1.4	0.02	0.141	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/30/81-05/07/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/30/81-05/07/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/30/81-05/07/82	2	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/81-05/07/82	2	0.8	0.8	1.	0.6	0.08	0.283	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/81-05/07/82	2	17.	17.	19.	15.	8.	2.828	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/81-05/07/82	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/81-05/07/82	2	9.15	9.15	9.5	8.8	0.245	0.495	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/30/81-07/30/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/30/81-05/07/82	2	13.5	13.5	17.	10.	24.5	4.95	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/30/81-05/07/82	2	11.5	11.5	13.	10.	4.5	2.121	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/30/81-05/07/82	2	154.	154.	169.	139.	450.	21.213	**	**	**	**

** - Less than 9 observations ## - 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: ZION0017

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						

& - 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: ZION0017

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0018

NPS Station ID: ZION0018
LAT/LON: 37.338059/-112.603059
Agency: 112WRD
Date Created: 07/18/78
Location: (C-40- 7)14BAD- 1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372017112361101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.20
On/Off RF1:
RF3 Index: 15010008070500.00
RF3 Mile Point: 0.03
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0018

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/77-06/22/77	1	15.5	15.5	15.5	15.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/77-06/22/77	1	540.	540.	540.	540.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/22/77-06/22/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/22/77-06/22/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/77-06/22/77	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/22/77-06/22/77	1	182.	182.	182.	182.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/22/77-06/22/77	1	360.	360.	360.	360.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/22/77-06/22/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/77-06/22/77	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/22/77-06/22/77	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/22/77-06/22/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/77-06/22/77	1	65.	65.	65.	65.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/77-06/22/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/77-06/22/77	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/22/77-06/22/77	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/22/77-06/22/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/77-06/22/77	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/77-06/22/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/77-06/22/77	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/77-06/22/77	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/77-06/22/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/22/77-06/22/77	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/22/77-06/22/77	1	80.	80.	80.	80.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/77-06/22/77	1	50.	50.	50.	50.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/22/77-06/22/77	1	319.	319.	319.	319.	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: ZION0018

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	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: ZION0018

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0019

NPS Station ID: ZION0019
LAT/LON: 37.337781/-112.603338
Agency: 112WRD
Date Created: 08/17/77
Location: (C-40- 7)14BAD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372016112361201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001510.92
RF3 Mile Point: 11.89
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0019

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/77-06/22/77	1		13.	13.	13.	13.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/77-06/22/77	1		200.	200.	200.	200.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/22/77-06/22/77	1		6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/22/77-06/22/77	1		6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/77-06/22/77	1		0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/22/77-06/22/77	1		81.	81.	81.	81.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	1		130.	130.	130.	130.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/22/77-06/22/77	1		160.	160.	160.	160.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/22/77-06/22/77	1		0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/77-06/22/77	1		0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	06/22/77-06/22/77	1		0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/22/77-06/22/77	1	##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/22/77-06/22/77	1		110.	110.	110.	110.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/22/77-06/22/77	1		0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/77-06/22/77	1		28.	28.	28.	28.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/77-06/22/77	1		10.	10.	10.	10.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/77-06/22/77	1		10.	10.	10.	10.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/22/77-06/22/77	1		0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/22/77-06/22/77	1		16.	16.	16.	16.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/77-06/22/77	1		3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/77-06/22/77	1		2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/77-06/22/77	1		6.	6.	6.	6.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/77-06/22/77	1		0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/77-06/22/77	1		9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/22/77-06/22/77	1		30.	30.	30.	30.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/22/77-06/22/77	1		40.	40.	40.	40.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/77-06/22/77	1		8.	8.	8.	8.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	06/22/77-06/22/77	1		149.	149.	149.	149.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	06/22/77-06/22/77	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

EPA Water Quality Criteria Analysis for Station: ZION0019

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0020

NPS Station ID: ZION0020
LAT/LON: 37.341115/-112.603338
Agency: 112WRD
Date Created: 07/17/82
Location: E. FK VIRGIN RIVER ABV LYDIA'S CANYON, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372028112361201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 19.370
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008001019.78
RF3 Mile Point: 21.46
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0020

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-05/03/82	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	1	615.	615.	615.	615.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	1	560.	560.	560.	560.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/03/82-05/03/82	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/03/82-05/03/82	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/03/82-05/03/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	1	290.	290.	290.	290.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	1	58.	58.	58.	58.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/03/82-05/03/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	1	281.	281.	281.	281.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	1	19.	19.	19.	19.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	1	0.38	0.38	0.38	0.38	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: ZION0020

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400	PH	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						

& - 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: ZION0021

NPS Station ID: ZION0021 LAT/LON: 37.338615/-112.603615 Agency: 112WRD Date Created: / /
Location: EAST FORK VIRGIN RIVER NR GLENDALE, UTAH FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 09404450
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 12.00 On/Off RF1:
RF3 Index: 15010008015600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.41 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	153	10.	9.901	28.	0.	32.185	5.673	3.	5.	14.	18.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/15/91	31	17.5	17.	30.5	0.	63.3	7.956	6.8	11.	23.	28.
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	4	610.	610.25	615.	606.	13.583	3.686	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-08/20/74	24	14.	19.458	100.	8.	407.216	20.18	8.	10.25	17.75	43.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	135	15.	22.83	218.	4.	929.605	30.489	8.	11.	21.	34.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	158	520.	519.158	670.	135.	3719.599	60.989	459.5	490.	560.	580.
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/31/82	4	8.35	8.425	8.9	8.1	0.156	0.395	**	**	**	**
00400	PH (STANDARD UNITS)	12/15/66-08/31/82	5	8.2	8.22	8.5	8.	0.032	0.179	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/15/66-08/31/82	5	8.2	8.193	8.5	8.	0.033	0.181	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/15/66-08/31/82	5	0.006	0.006	0.01	0.003	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/31/82	4	8.15	8.1	8.3	7.8	0.047	0.216	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-08/31/82	4	8.147	8.057	8.3	7.8	0.049	0.222	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/31/82	4	0.007	0.009	0.016	0.005	0.	0.005	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/15/66-12/15/66	1	346.	346.	346.	346.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/15/66-12/15/66	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/31/82	4 ##	0.075	0.075	0.1	0.05	0.001	0.029	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/31/82	4 ##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/15/66-08/31/82	5	310.	296.8	314.	270.	411.2	20.278	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/15/66-12/15/66	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/15/66-08/31/82	5	61.	58.2	62.	53.	18.7	4.324	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/15/66-08/31/82	5	38.	36.8	39.	34.	4.7	2.168	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/15/66-08/31/82	5	4.8	4.56	4.9	3.9	0.198	0.445	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/15/66-08/31/82	5	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-08/31/82	4	3.5	3.5	4.	3.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/15/66-08/31/82	5	2.3	2.2	2.6	1.9	0.09	0.3	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/15/66-08/31/82	5	4.	6.2	14.	4.	19.2	4.382	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/15/66-08/31/82	5	30.	28.	38.	20.	52.	7.211	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/15/66-08/31/82	5	0.5	0.48	0.5	0.4	0.002	0.045	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/15/66-08/31/82	5	9.4	9.14	9.7	8.6	0.258	0.508	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/15/66-08/31/82	5	30.	30.	50.	20.	150.	12.247	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/15/66-12/15/66	1	329.	329.	329.	329.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/31/82	4	289.	285.	331.	231.	2040.667	45.174	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	12/15/66-08/31/82	5	17.5	22.618	55.1	7.48	371.462	19.273	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/15/66-08/31/82	5	0.42	0.398	0.45	0.31	0.004	0.061	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	07/11/67-07/11/67	1	42.	42.	42.	42.	0.	0.	**	**	**	**
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	07/11/67-07/11/67	1	51.	51.	51.	51.	0.	0.	**	**	**	**
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	07/11/67-07/11/67	1	72.	72.	72.	72.	0.	0.	**	**	**	**
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	07/11/67-07/11/67	1	97.	97.	97.	97.	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: ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	07/11/67-07/11/67	1	99.	99.	99.	99.	0.	0.	**	**	**	**
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	07/11/67-07/11/67	1	100.	100.	100.	100.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/15/66-12/15/66	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	07/11/67-07/11/67	1	118000.	118000.	118000.	118000.	0.	0.	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	07/11/67-07/11/67	1	5740.	5740.	5740.	5740.	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

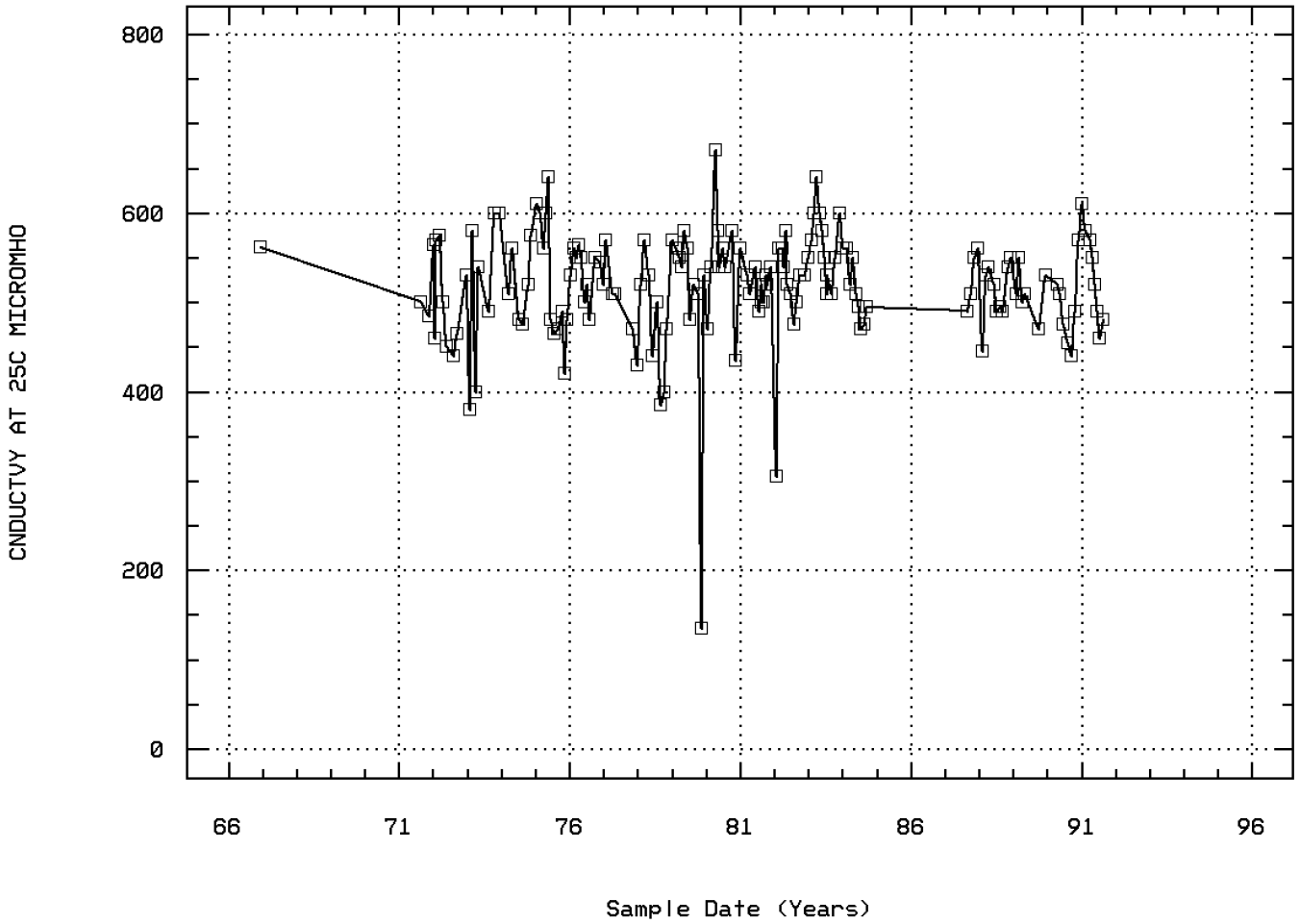
EPA Water Quality Criteria Analysis for Station: ZION0021

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station: ZION0021 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



EAST FORK VIRGIN RIVER NR GLENDALE, UTA

Annual Analysis for 1966 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	1	562.	562.	562.	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 box-and-whisker plot

Annual Analysis for 1967 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	1	19.4	19.4	19.4	19.4	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 1971 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	2	9.25	9.25	14.	4.5	45.125	6.718	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	2	492.5	492.5	500.	485.	112.5	10.607	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	9	5.	8.778	28.	0.	74.257	8.617	0.	3.25	13.	28.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	9	500.	506.111	575.	440.	3029.861	55.044	440.	455.	567.5	575.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	7	7.	7.286	19.	2.	33.488	5.787	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	7	540.	512.857	600.	380.	8557.143	92.505	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	6	13.	12.583	18.	8.	15.542	3.942	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	2	14.	14.	16.	12.	8.	2.828	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	6	515.	520.	575.	475.	1670.	40.866	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	11	8.	9.273	21.	0.	38.018	6.166	0.9	5.	13.5	20.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	11	14.	15.	25.	9.	24.6	4.96	9.2	11.	20.	24.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	11	490.	528.636	640.	420.	5570.455	74.635	429.	470.	600.	634.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	11	6.	8.727	20.	1.	37.768	6.146	1.4	4.	14.	19.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	11	12.	11.909	16.	8.	6.491	2.548	8.2	10.	14.	15.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	11	545.	533.636	565.	480.	700.455	26.466	484.	520.	550.	564.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	4	6.5	6.625	10.	3.5	8.563	2.926	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	5	11.	11.4	12.	11.	0.3	0.548	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	5	510.	498.	570.	430.	2720.	52.154	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	8	10.25	10.563	18.5	4.	28.174	5.308	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	8	14.5	20.375	56.	11.	224.554	14.985	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	8	485.	476.875	570.	385.	4235.268	65.079	**	**	**	**

** - 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 1979 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	10	11.	10.55	19.	1.	31.025	5.57	1.2	6.	15.125	18.65
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	11	18.	39.182	172.	15.	2324.964	48.218	15.2	16.	30.	154.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	11	540.	503.182	580.	135.	15751.364	125.504	204.	510.	560.	578.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	9	8.	9.278	20.	3.	27.819	5.274	3.	5.25	12.	20.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	9	62.	69.222	218.	21.	3886.944	62.345	21.	22.5	86.5	218.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	9	540.	546.111	670.	435.	4511.111	67.165	435.	505.	580.	670.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	10	12.75	11.25	17.5	4.	18.181	4.264	4.1	8.375	13.875	17.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	11	16.	16.818	23.	12.	15.564	3.945	12.2	14.	21.	22.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	11	520.	521.818	560.	490.	436.364	20.889	492.	500.	540.	556.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	12	11.	9.917	17.	0.5	27.265	5.222	1.25	5.625	14.	16.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	13	20.	19.308	29.	13.	28.397	5.329	13.	14.	22.5	28.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	13	530.	512.308	580.	305.	4723.397	68.727	373.	500.	555.	572.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	11	8.5	9.273	19.	2.	31.768	5.636	2.2	4.	14.	18.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	11	24.	50.091	191.	18.	2720.291	52.156	18.4	20.	62.	171.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	11	570.	567.273	640.	510.	1721.818	41.495	510.	530.	600.	632.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	9	10.5	11.	23.	1.	58.813	7.669	1.	4.5	18.75	23.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	9	15.	17.333	24.	11.	31.	5.568	11.	12.	23.5	24.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	9	510.	515.	560.	470.	1218.75	34.911	470.	485.	555.	560.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	4	7.	6.5	7.	5.	1.	1.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	4	13.5	12.5	17.	6.	21.667	4.655	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	4	530.	527.5	560.	490.	1091.667	33.04	**	**	**	**

** - 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 box-and-whisker plot

Annual Analysis for 1988 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	8	12.5	11.688	19.	2.	42.496	6.519	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	9	9.	11.	18.	6.	17.5	4.183	6.	8.	15.	18.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	9	520.	511.111	550.	445.	1142.361	33.799	445.	490.	540.	550.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	6	7.	7.5	13.	3.	18.7	4.324	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	6	8.5	11.167	23.	6.	42.167	6.494	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	6	510.	511.667	550.	470.	736.667	27.142	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	7	14.	12.214	19.	3.5	26.655	5.163	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	7	5.	7.286	14.	4.	14.238	3.773	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	7	490.	494.286	570.	440.	1920.238	43.821	**	**	**	**

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

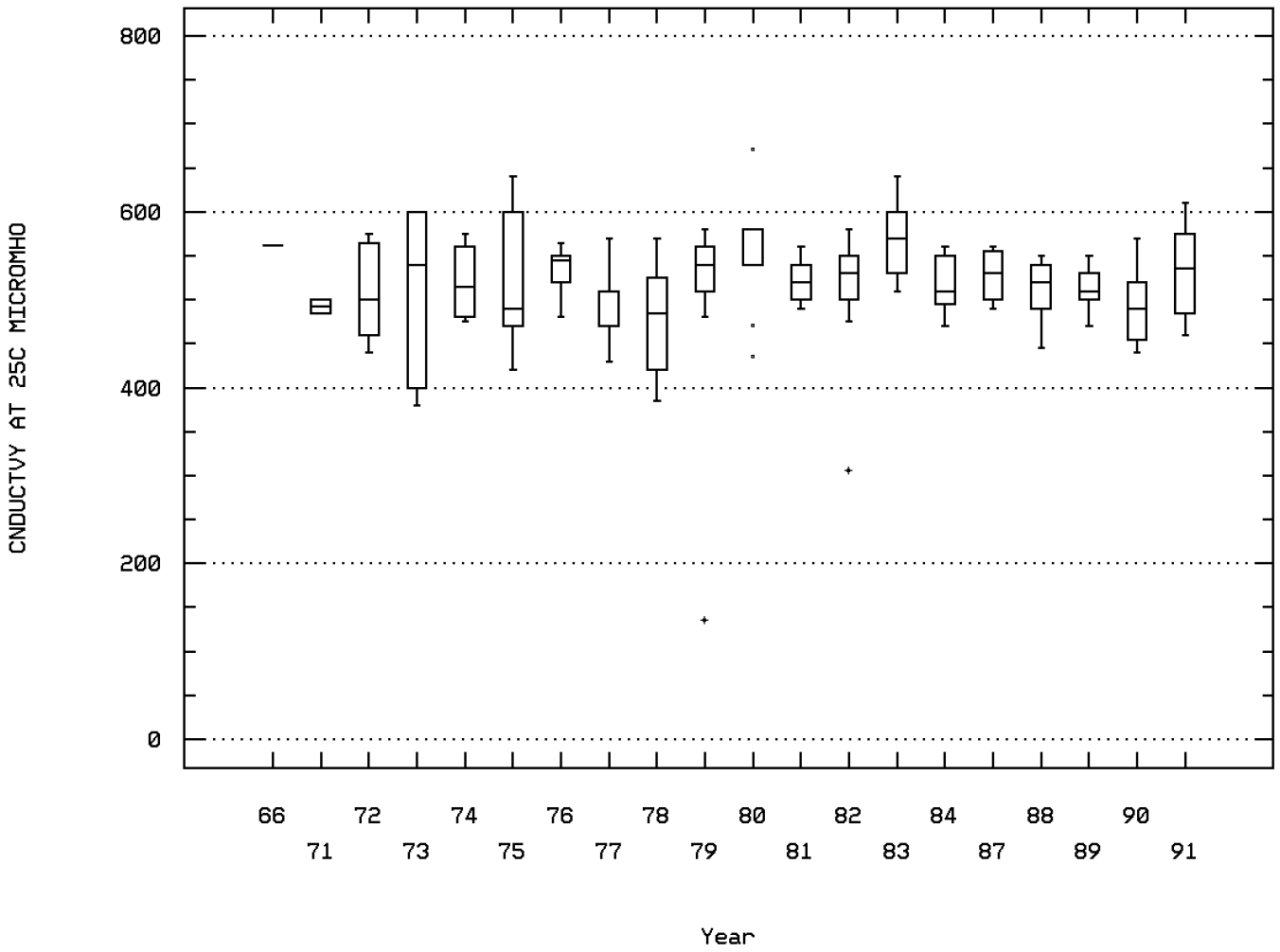
Annual Analysis for 1991 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	8	12.25	11.375	20.	1.5	32.054	5.662	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	8	9.	9.25	15.	6.	7.357	2.712	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	8	535.	532.5	610.	460.	2850.	53.385	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0021 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



EAST FORK VIRGIN RIVER NR GLENDALE, UTA

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	103	7.	9.567	28.	0.	42.726	6.537	2.2	4.	15.	19.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/15/91	22	14.75	15.614	30.5	0.	75.808	8.707	2.65	9.25	23.25	28.7
00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-08/20/74	18	14.	16.222	62.	8.	144.418	12.017	8.	10.5	17.25	24.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	91	14.	16.033	78.	5.	100.788	10.039	7.2	11.	20.	23.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	108	520.	511.407	610.	135.	4168.599	64.565	444.5	480.	557.5	575.5

** - 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 #2: 3/20 to 5/09 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	29	9.5	9.155	14.5	4.	7.627	2.762	5.	7.	11.25	12.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/15/91	6	17.75	18.75	22.	16.5	4.875	2.208	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-08/20/74	5	17.	33.	100.	10.	1429.	37.802	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	24	20.	44.75	218.	7.	3636.37	60.302	10.	11.5	49.25	181.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	29	540.	545.69	670.	400.	2403.079	49.021	500.	510.	567.5	600.

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

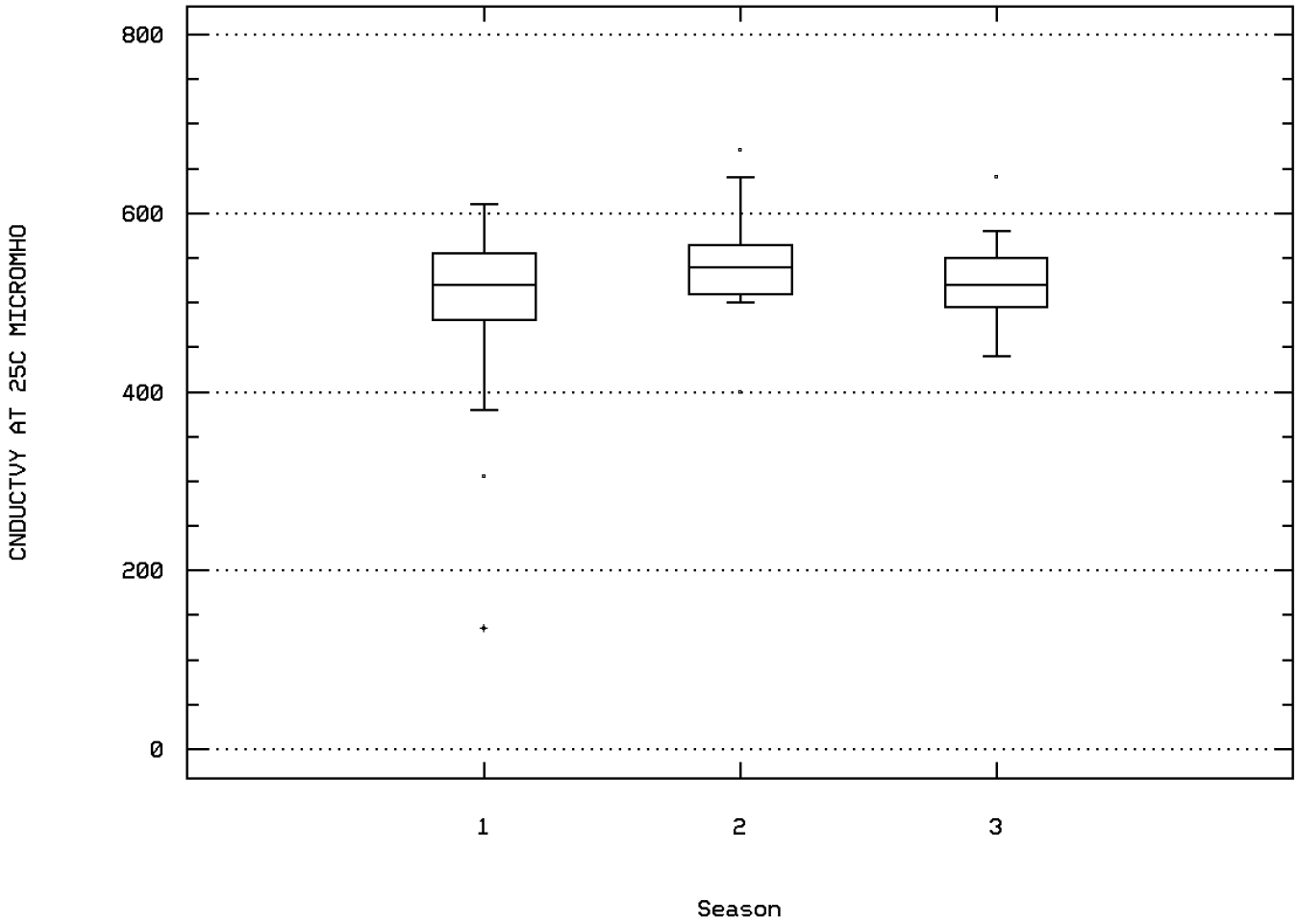
Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0021

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/67-08/15/91	21	12.	12.571	18.	8.5	7.157	2.675	9.2	10.75	14.25	17.4
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/15/91	3	27.	23.667	28.	16.	44.333	6.658	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-08/20/74	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/18/74-08/15/91	20	15.5	27.45	95.	4.	826.155	28.743	5.3	9.	30.75	92.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-08/15/91	21	520.	522.381	640.	440.	2176.548	46.653	455.	492.5	555.	580.

** - Less than 9 observations ## - Computed 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: ZION0021 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



EAST FORK VIRGIN RIVER NR GLENDALE, UTA

Station Inventory for Station: ZION0022

NPS Station ID: ZION0022
LAT/LON: 37.338615/-112.603615
Agency: 21USU
Date Created: / /
Location: E F VIRGIN RIVER N OF GLENDALE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000201 /09404450
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0018.26
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 19.260
Distance from RF1: 0.30
On/Off RF1: ON
RF3 Index: 15010008001019.78
RF3 Mile Point: 21.34
Distance from RF3: 0.03
On/Off RF3:
Description:
E FORK VIRGIN RIVER 1.5 MI N OF GLENDALE AT USGS STATION 09404450

Parameter Inventory for Station: ZION0022

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	5	6.	7.4	14.	1.	23.8	4.879	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/15/74	5	13.	14.2	17.	12.	4.7	2.168	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	8.4	8.875	17.	1.7	43.823	6.62	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	5	510.	523.	560.	490.	920.	30.332	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	5	8.5	9.1	11.7	7.4	2.725	1.651	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	5	0.8	1.06	1.8	0.6	0.268	0.518	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.2	8.08	8.2	7.8	0.032	0.179	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.2	8.048	8.2	7.8	0.033	0.182	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/15/74	5	0.006	0.009	0.016	0.006	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	21.	22.225	41.9	5.	309.603	17.596	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	262.	261.6	273.	250.	121.3	11.014	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	160.5	160.25	169.	151.	62.25	7.89	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	326.	322.75	333.	306.	159.583	12.633	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	5	13.	13.2	26.	5.	78.2	8.843	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.089	0.074	0.109	0.005	0.002	0.042	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.04	32.826	164.	0.02	5377.068	73.328	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	5	0.001	0.002	0.004	0.001	0.	0.002	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	5	0.018	0.019	0.038	0.006	0.	0.012	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	4	3.5	3.25	4.	2.	0.917	0.957	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	5	65.	62.4	70.	50.	65.3	8.081	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	4	65.	63.75	72.	53.	64.917	8.057	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	268.	270.4	300.	254.	306.8	17.516	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	5	54.	55.	62.	45.	44.	6.633	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	5	36.	34.8	38.	32.	7.2	2.683	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	5	4.	10.2	38.	2.	242.2	15.563	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	5	1.	2.2	6.	0.	5.7	2.387	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	5	3.	4.	8.	2.	5.5	2.345	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	5	26.	26.6	44.	6.	193.8	13.921	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.44	0.358	0.48	0.07	0.037	0.193	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	9.5	9.5	10.	9.	0.333	0.577	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	5	10.	6.	10.	0.	30.	5.477	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	5	40.	142.	490.	20.	40320.	200.798	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	5	0.	0.2	1.	0.	0.2	0.447	**	**	**	**

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Parameter Inventory for Station: ZION0022

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	540.	560.	910.	250.	90200.	300.333	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	5	0.	10.	40.	0.	300.	17.321	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	5	0.	6.	30.	0.	180.	13.416	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	5	0.	1.8	5.	0.	6.2	2.49	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	5	0.	2.	10.	0.	20.	4.472	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	5	1500.	5528.	24000.	210.	106983770.	10343.296	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/15/74	5	3.176	3.138	4.38	2.322	0.617	0.785	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1372.829								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	43.	80.	230.	11.	8012.	89.51	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	1.633	1.673	2.362	1.041	0.265	0.515	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			47.137								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	5 ##	3.65	9.361	36.	0.	224.197	14.973	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	5	276.	326.	566.	220.	18844.	137.273	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/15/74-07/15/74	1	100.	100.	100.	100.	0.	0.	**	**	**	**
75012	SNAILS	07/15/74-07/15/74	1	1909.	1909.	1909.	1909.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/15/74-07/15/74	1	4736.	4736.	4736.	4736.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0022

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	3	0.60	3	1	0.33	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: ZION0022

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0023

NPS Station ID: ZION0023
LAT/LON: 37.339448/-112.603892
Agency: 112WRD
Date Created: 07/17/82
Location: LYDIA'S CANYON AT MOUTH, UTAH
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372022112361401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 19.260
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001010.33
RF3 Mile Point: 10.40
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0023

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	1	615.	615.	615.	615.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	1	540.	540.	540.	540.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/03/82-05/03/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/03/82-05/03/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/03/82-05/03/82	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	1	64.	64.	64.	64.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/03/82-05/03/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	1	30.	30.	30.	30.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	1	346.	346.	346.	346.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0023

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400	PH	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						

& - 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: ZION0024

NPS Station ID: ZION0024
Location: (C-40- 7)14BAA-S1
Station Type: /TYPA/AMBNT/SPRING
RMI-Indexes:
RMI-Miles:
HUC: 15010008
Major Basin:
Minor Basin:
RF1 Index: 15010008
RF3 Index: 15010008056300.00
Description:

LAT/LON: 37.339170/-112.604727
Depth of Water: 0
Elevation: 0
RF1 Mile Point: 0.000
RF3 Mile Point: 3.54

Agency: 112WRD
FIPS State/County: 49025 UTAH/KANE
STORET Station ID(s): 372021112361701
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 13.50
Distance from RF3: 0.06

Date Created: 06/20/87
On/Off RF1:
On/Off RF3:

Parameter Inventory for Station: ZION0024

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/17/81-10/17/81	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/17/81-10/17/81	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/17/81-10/17/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/17/81-10/17/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/17/81-10/17/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/17/81-10/17/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/17/81-10/17/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/17/81-10/17/81	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/17/81-10/17/81	1 ##	0.045	0.045	0.045	0.045	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/17/81-10/17/81	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/17/81-10/17/81	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/17/81-10/17/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/17/81-10/17/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/17/81-10/17/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	10/17/81-10/17/81	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/17/81-10/17/81	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/17/81-10/17/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/17/81-10/17/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/17/81-10/17/81	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/17/81-10/17/81	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/17/81-10/17/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/17/81-10/17/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/17/81-10/17/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/17/81-10/17/81	1	186.	186.	186.	186.	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: ZION0024

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0024

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0025

NPS Station ID: ZION0025
LAT/LON: 37.386949/-112.606949
Agency: 112WRD
Date Created: 06/20/87
Location: (C-39- 7)26CDB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372313112362501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 16.50
On/Off RF1:
RF3 Index: 15010008041100.00
RF3 Mile Point: 0.00
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0025

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	1	690.	690.	690.	690.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-08/28/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	1	420.	420.	420.	420.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	1	87.	87.	87.	87.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/28/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	1	720.	720.	720.	720.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	1	140.	140.	140.	140.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	1	327.	327.	327.	327.	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: ZION0025

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0025

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0026

NPS Station ID: ZION0026
LAT/LON: 37.279727/-112.628616
Agency: 112WRD
Date Created: 04/14/78
Location: (C-41- 7) 4AAA- 1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371648112374501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 8.30
On/Off RF1:
RF3 Index: 15010008057400.00
RF3 Mile Point: 1.94
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0026

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: ZION0027

NPS Station ID: ZION0027
LAT/LON: 37.356115/-112.629170
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40-7)3CCC-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372122112374501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 0.30
On/Off RF1:
RF3 Index: 15010008001019.78
RF3 Mile Point: 21.42
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0027

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/29/81-08/29/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/29/81-08/29/81	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/29/81-08/29/81	1	1340.	1340.	1340.	1340.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/29/81-08/29/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/29/81-08/29/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/29/81-08/29/81	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/29/81-08/29/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/29/81-08/29/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/29/81-08/29/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/29/81-08/29/81	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/29/81-08/29/81	1	810.	810.	810.	810.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/29/81-08/29/81	1	126.	126.	126.	126.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/29/81-08/29/81	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/29/81-08/29/81	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/29/81-08/29/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/29/81-08/29/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/29/81-08/29/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/29/81-08/29/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/29/81-08/29/81	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/29/81-08/29/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/29/81-08/29/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/29/81-08/29/81	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/29/81-08/29/81	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/29/81-08/29/81	1	140.	140.	140.	140.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/29/81-08/29/81	1	739.	739.	739.	739.	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: ZION0027

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0027

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0028

NPS Station ID: ZION0028 LAT/LON: 37.294170/-112.630559 Agency: 21UTDHDW Date Created: 05/26/90
Location: ORDERVILLE - NORTH SPRING FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1300801 /UT4900331001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 1.20 On/Off RF1:
RF3 Index: 15010008054400.00 RF3 Mile Point: 0.64 Distance from RF3: 0.03 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1098

Parameter Inventory for Station: ZION0028

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/09/77-05/27/86	4	1.	4.35	15.	0.4	50.49	7.106	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/09/77-05/27/86	3	660.	652.667	670.	628.	481.333	21.939	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/09/77-10/19/82	3	7.3	7.433	7.9	7.1	0.173	0.416	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/77-10/19/82	3	7.3	7.324	7.9	7.1	0.191	0.437	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/77-10/19/82	3	0.05	0.047	0.079	0.013	0.001	0.034	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/27/86-05/27/86	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/09/77-05/27/86	3	270.	271.333	278.	266.	37.333	6.11	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/09/77-05/27/86	3	330.	331.333	339.	325.	50.333	7.095	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/86-05/27/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/78-05/27/86	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/09/77-05/17/78	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/09/77-05/27/86	3	378.	376.667	380.	372.	17.333	4.163	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/09/77-05/27/86	3	86.	86.667	88.	86.	1.333	1.155	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/09/77-05/27/86	3	38.	38.667	40.	38.	1.333	1.155	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/09/77-05/27/86	4	4.5	4.5	8.	1.	8.333	2.887	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/09/77-05/27/86	3	4.	4.	4.	4.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/09/77-05/27/86	4	4.5	5.25	10.	2.	12.917	3.594	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/09/77-05/27/86	4	112.	89.	120.	12.	2652.	51.498	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/09/77-05/27/86	4	0.615	0.502	0.72	0.06	0.09	0.3	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/09/77-05/27/86	3	9.	8.667	12.	5.	12.333	3.512	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/19/82-05/27/86	2 ##	2.75	2.75	3.	2.5	0.125	0.354	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	11/09/77-05/17/78	2	78.	78.	130.	26.	5408.	73.539	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	10/19/82-05/27/86	2 ##	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/09/77-05/17/78	2	80.	80.	80.	80.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/19/82-05/27/86	2 ##	1.	1.	1.5	0.5	0.5	0.707	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/19/82-05/27/86	2 ##	3.75	3.75	5.	2.5	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: ZION0028

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01040	COPPER, DISSOLVED (UG/L AS CU)	11/09/77-05/17/78	2 ##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/19/82-05/27/86	2 ##	6.25	6.25	10.	2.5	28.125	5.303	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/09/77-05/17/78	2 ##	38.5	38.5	52.	25.	364.5	19.092	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/19/82-05/27/86	2 ##	18.75	18.75	35.	2.5	528.125	22.981	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/19/82-05/27/86	2	31.	31.	45.	17.	392.	19.799	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/09/77-05/17/78	2	34.	34.	55.	13.	882.	29.698	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	10/19/82-05/27/86	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	11/09/77-05/17/78	2	19.	19.	35.	3.	512.	22.627	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/19/82-05/27/86	2	27.5	27.5	45.	10.	612.5	24.749	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/17/78-05/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	10/19/82-05/27/86	2 ##	1.125	1.125	2.	0.25	1.531	1.237	**	**	**	**
01501	ALPHA, TOTAL	06/30/81-08/27/86	3	1.	1.167	2.	0.5	0.583	0.764	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/17/78-10/19/82	2 ##	0.015	0.015	0.025	0.005	0.	0.014	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/09/77-05/27/86	4	417.	417.75	433.	404.	157.583	12.553	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	05/17/78-05/17/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/17/78-05/27/86	3 ##	0.1	0.217	0.5	0.05	0.061	0.247	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	11/09/77-05/27/86	4	0.51	0.555	1.18	0.02	0.231	0.481	**	**	**	**

** - Less than 9 observations ## - 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: ZION0028

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00				2	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00							2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00				2	0	0.00			
		Drinking Water	250.	4	0	0.00	2	0	0.00				2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00				2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00				2	0	0.00			
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.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	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.	2	0	0.00	1	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	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			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	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.	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	15.	2	1	0.50	1	1	1.00				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			

& - 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: ZION0028

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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	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			
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.	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			
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.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00				2	0	0.00			

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

Station Inventory for Station: ZION0029

NPS Station ID: ZION0029 LAT/LON: 37.355559/-112.633060 Agency: 21UTDHDW Date Created: 05/26/90
Location: GLENDALE - LYDIAS CANYON FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1300404 /UT4900190004
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.90 On/Off RF1:
RF3 Index: 15010008052500.00 RF3 Mile Point: 0.00 Distance from RF3: 0.05 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/09/77-08/07/89	3	0.4	0.633	1.2	0.3	0.243	0.493	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/09/77-07/22/85	2	704.	704.	795.	613.	16562.	128.693	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/09/77-08/07/89	3	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/77-08/07/89	3	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/77-08/07/89	3	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/22/85-07/22/85	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/09/77-07/22/85	2	378.5	378.5	387.	370.	144.5	12.021	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/85-07/22/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/85-07/22/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/09/77-08/07/89	2	0.35	0.35	0.6	0.1	0.125	0.354	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/09/77-07/22/85	2	463.5	463.5	513.	414.	4900.5	70.004	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/09/77-07/22/85	2	88.5	88.5	97.	80.	144.5	12.021	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/09/77-07/22/85	2	59.	59.	66.	52.	98.	9.899	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/09/77-08/07/89	3	3.	3.	4.	2.	1.	1.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/09/77-07/22/85	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/09/77-08/07/89	3	3.	3.333	5.	2.	2.333	1.528	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/09/77-08/07/89	3	59.	59.667	78.	42.	324.333	18.009	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/09/77-08/07/89	3	0.3	0.29	0.31	0.26	0.001	0.026	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/09/77-07/22/85	2	12.5	12.5	13.	12.	0.5	0.707	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/22/85-08/07/89	2 ##	4.125	4.125	8.	0.25	30.031	5.48	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	11/09/77-11/09/77	1	57.	57.	57.	57.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/22/85-08/07/89	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/09/77-11/09/77	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/22/85-08/07/89	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/22/85-07/22/85	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/22/85-08/07/89	2 ##	6.	6.	7.	5.	2.	1.414	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	11/09/77-11/09/77	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/22/85-08/07/89	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/09/77-11/09/77	1	23.	23.	23.	23.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/22/85-08/07/89	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/22/85-08/07/89	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/22/85-08/07/89	2 ##	1.75	1.75	2.5	1.	1.125	1.061	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	11/09/77-11/09/77	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 time series plot

Parameter Inventory for Station: ZION0029

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01092	ZINC, TOTAL (UG/L AS ZN)	07/22/85-08/07/89	2 ##	27.5	27.5	30.	25.	12.5	3.536	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/22/85-08/07/89	2 ##	1.375	1.375	2.5	0.25	2.531	1.591	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/07/89-08/07/89	1	0.41	0.41	0.41	0.41	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/09/77-08/07/89	3	404.	440.667	518.	400.	4489.333	67.002	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/22/85-08/07/89	2 ##	0.275	0.275	0.5	0.05	0.101	0.318	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	11/09/77-08/07/89	3	0.05	0.075	0.15	0.025	0.004	0.066	**	**	**	**

** - Less than 9 observations ## - 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: ZION0029

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
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									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	2	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									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	2	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	2	0	0.00	2	0	0.00									
		Drinking Water	1300.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	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.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	2	0	0.00	2	0	0.00									
		Drinking Water	5000.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									

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

Station Inventory for Station: ZION0030

NPS Station ID: ZION0030
LAT/LON: 37.258892/-112.653615
Agency: 112WRD
Date Created: 12/02/81
Location: (C-41- 7) 8DBA-
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371532112391301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001008.53
RF3 Mile Point: 8.64
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0030

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-08/26/81	2	14.5	14.5	20.	9.	60.5	7.778	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-08/26/81	2	13.	13.	19.	7.	72.	8.485	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-08/26/81	2	622.5	622.5	640.	605.	612.5	24.749	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/81-08/26/81	2	8.4	8.4	8.5	8.3	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/81-08/26/81	2	8.389	8.389	8.5	8.3	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-08/26/81	2	0.004	0.004	0.005	0.003	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/22/81-08/26/81	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/22/81-08/26/81	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-08/26/81	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/26/81	2	325.	325.	340.	310.	450.	21.213	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-08/26/81	2	63.	63.	67.	59.	32.	5.657	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-08/26/81	2	41.	41.	42.	40.	2.	1.414	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-08/26/81	2	8.2	8.2	9.7	6.7	4.5	2.121	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/22/81-08/26/81	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	04/22/81-08/26/81	2	5.	5.	6.	4.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-08/26/81	2	3.2	3.2	3.9	2.5	0.98	0.99	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-08/26/81	2	8.	8.	10.	6.	8.	2.828	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-08/26/81	2	79.5	79.5	100.	59.	840.5	28.991	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-08/26/81	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-08/26/81	2	9.45	9.45	10.	8.9	0.605	0.778	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/26/81	2	35.	35.	50.	20.	450.	21.213	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-08/26/81	2	1750.	1750.	2400.	1100.	845000.	919.239	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	2	1750.	1750.	2400.	1100.	845000.	919.239	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-08/26/81	2	25.	25.	30.	20.	50.	7.071	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	2	55.	55.	70.	40.	450.	21.213	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	2	60.	60.	70.	50.	200.	14.142	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-08/26/81	2	4.	4.	6.	2.	8.	2.828	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-08/26/81	2	380.	380.	407.	353.	1458.	38.184	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/26/81	1	339.	339.	339.	339.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/26/81	2	12.94	12.94	18.3	7.58	57.459	7.58	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/26/81	2	0.515	0.515	0.55	0.48	0.002	0.049	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-08/26/81	2	727.	727.	1300.	154.	656658.	810.344	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	2	16.	16.	24.	8.	128.	11.314	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0030

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0031

NPS Station ID: ZION0031
LAT/LON: 37.392503/-112.662504
Agency: 112WRD
Date Created: 12/19/81
Location: RIGHT FORK LYDIA'S CANYON AT ROAD'S END, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372333112394501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008053000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0031

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	12.75	12.75	16.	9.5	21.125	4.596	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/03/82	2	22.	22.	29.5	14.5	112.5	10.607	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/03/82	2	592.5	592.5	595.	590.	12.5	3.536	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/03/82	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/03/82	2	480.	480.	500.	460.	800.	28.284	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/03/82	2	8.45	8.45	8.7	8.2	0.125	0.354	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-05/03/82	2	8.35	8.35	8.4	8.3	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-05/03/82	2	8.347	8.347	8.4	8.3	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.004	0.004	0.005	0.004	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/03/82	2	8.25	8.25	8.3	8.2	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/03/82	2	8.247	8.247	8.3	8.2	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/03/82	2	0.006	0.006	0.006	0.005	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/03/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/03/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/03/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/03/82	2	265.	265.	270.	260.	50.	7.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/03/82	2	49.5	49.5	53.	46.	24.5	4.95	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/03/82	2	35.	35.	36.	34.	2.	1.414	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/03/82	2	1.85	1.85	1.9	1.8	0.005	0.071	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/03/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-05/03/82	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/03/82	2	0.9	0.9	1.2	0.6	0.18	0.424	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/03/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/03/82	2	4.	4.	6.	2.	8.	2.828	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/03/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/03/82	2	8.15	8.15	8.8	7.5	0.845	0.919	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/03/82	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/03/82	2	256.	256.	262.	250.	72.	8.485	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/03/82	2	1.19	1.19	1.7	0.68	0.52	0.721	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/03/82	2	0.35	0.35	0.36	0.34	0.	0.014	**	**	**	**

** - Less than 9 observations ## - 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: ZION0031

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0032

NPS Station ID: ZION0032
LAT/LON: 37.240837/-112.671116
Agency: 21UTAH
Date Created: 12/01/90
Location: MUDDY CK AT US-89 XING
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495156
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 12.00
On/Off RF1:
RF3 Index: 15010008015600.00
RF3 Mile Point: 0.00
Distance from RF3: 0.41
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/19/92-12/10/96	39	13.	14.128	27.7	1.1	63.833	7.99	2.6	8.2	21.4	24.7
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/19/92-12/10/96	39	2.	3.313	18.	0.1	17.811	4.22	0.2	0.5	4.	9.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/24/96-12/10/96	7	1.8	806.114	5630.	0.9	4524699.048	2127.134	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/19/92-12/10/96	39	1737.	1895.333	2890.	274.	357797.912	598.162	1008.	1511.	2420.	2590.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/24/96-12/10/96	7	2515.	2424.143	2744.	1630.	131487.81	362.612	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	02/19/92-12/10/96	39	7.9	8.182	11.	5.8	2.008	1.417	6.5	7.1	9.4	10.5
00400	PH (STANDARD UNITS)	02/19/92-12/10/96	39	8.	7.996	8.51	6.1	0.171	0.414	7.6	7.85	8.3	8.4
00400	CONVERTED PH (STANDARD UNITS)	02/19/92-12/10/96	39	8.	7.509	8.51	6.1	0.414	0.644	7.6	7.85	8.3	8.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/19/92-12/10/96	39	0.01	0.031	0.794	0.003	0.016	0.126	0.004	0.005	0.014	0.025
00403	PH, LAB, STANDARD UNITS SU	04/24/96-12/10/96	7	8.1	8.057	8.4	7.8	0.036	0.19	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/24/96-12/10/96	7	8.1	8.024	8.4	7.8	0.037	0.194	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/96-12/10/96	7	0.008	0.009	0.016	0.004	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/24/96-12/10/96	7	6.	6.286	11.	2.	9.571	3.094	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/24/96-12/10/96	7	385.	345.286	433.	184.	8575.571	92.604	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/24/96-12/10/96	7	470.	421.143	528.	224.	12791.81	113.101	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/24/96-12/10/96	7	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/19/92-12/10/96	39	82.	1007.487	14640.	1.5	7892124.401	2809.293	4.	11.	327.	2362.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/96-12/10/96	7 ##	0.025	0.042	0.091	0.025	0.001	0.029	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/24/96-12/10/96	7	0.6	0.616	1.1	0.01	0.146	0.382	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/96-12/10/96	7	0.03	0.112	0.646	0.005	0.056	0.236	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/24/96-12/10/96	7 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/24/96-12/10/96	7	1279.	1165.	1343.	675.	53904.	232.172	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/96-12/10/96	7	261.	239.429	283.	143.	2436.952	49.365	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/96-12/10/96	7	146.	138.057	155.	77.4	752.223	27.427	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/96-12/10/96	7	158.	154.857	173.	119.	337.476	18.371	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/96-12/10/96	7	8.6	9.034	10.4	7.8	0.954	0.977	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/96-12/10/96	7	21.	21.143	30.	15.	20.476	4.525	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/96-12/10/96	7	1289.	1228.357	1542.	736.5	66658.226	258.183	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	2	36.	36.	36.	36.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	2 ##	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	2	89.5	89.5	121.	58.	1984.5	44.548	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	2	163.	163.	240.	86.	11858.	108.894	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	2 ##	15.	15.	15.	15.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0032

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	2 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/19/92-12/10/96	39	1876.	1741.846	2870.	680.	337923.87	581.312	1064.	1214.	2238.	2460.
71830	HYDROXIDE ION (MG/L AS OH)	04/24/96-12/10/96	7	0.	0.	0.	0.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0032

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	7	1	0.14	4	1	0.25	1	0	0.00	2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	39	0	0.00	27	0	0.00	5	0	0.00	7	0	0.00			
00400	PH	Other-Hi Lim.	9.	39	0	0.00	27	0	0.00	5	0	0.00	7	0	0.00			
		Other-Lo Lim.	6.5	39	1	0.03	27	1	0.04	5	0	0.00	7	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	250.	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	7	7	1.00	4	4	1.00	1	1	1.00	2	2	1.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	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			
01025	CADMIUM, DISSOLVED	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			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	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			
01049	LEAD, DISSOLVED	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			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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			
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			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	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

Station Inventory for Station: ZION0033

NPS Station ID: ZION0033
LAT/LON: 37.233616/-112.675281
Agency: 112WRD
Date Created: 07/17/82
Location: MUDDY CREEK AT MOUTH, UTAH
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371401112403101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 9.520
Distance from RF1: 4.80
On/Off RF1: OFF
RF3 Index: 15010008060100.00
RF3 Mile Point: 0.23
Distance from RF3: 0.11
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0033

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-05/03/82	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/03/82-05/03/82	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	05/03/82-05/03/82	1	628.	628.	628.	628.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/03/82-05/03/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-05/03/82	1	1500.	1500.	1500.	1500.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/03/82-05/03/82	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/03/82-05/03/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/03/82-05/03/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/03/82-05/03/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-05/03/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-05/03/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-05/03/82	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-05/03/82	1	700.	700.	700.	700.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-05/03/82	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-05/03/82	1	96.	96.	96.	96.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-05/03/82	1	65.	65.	65.	65.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/03/82-05/03/82	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/03/82-05/03/82	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-05/03/82	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/03/82-05/03/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/03/82-05/03/82	1	590.	590.	590.	590.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-05/03/82	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-05/03/82	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-05/03/82	1	70.	70.	70.	70.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-05/03/82	1	1040.	1040.	1040.	1040.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/03/82-05/03/82	1	7.92	7.92	7.92	7.92	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/03/82-05/03/82	1	1.41	1.41	1.41	1.41	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: ZION0033

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400	PH	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00				1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0034

NPS Station ID: ZION0034
LAT/LON: 37.255003/-112.678615
Agency: 21UTAH
Date Created: 12/01/90
Location: MUDDY CREEK 1 MI ABOVE US-89 XING
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495157
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.50
On/Off RF1:
RF3 Index: 15010008054400.00
RF3 Mile Point: 0.64
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0034

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/19/92-12/06/95	25	13.2	15.652	27.2	1.1	64.254	8.016	4.16	9.9	24.3	26.08
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/19/92-12/06/95	24	1.5	2.333	15.	0.1	10.69	3.27	0.1	0.2	3.	6.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/19/92-12/06/95	25	1627.	2155.32	3749.	989.	928537.227	963.606	1178.6	1334.5	3302.5	3540.
00300	OXYGEN, DISSOLVED MG/L	02/19/92-12/06/95	25	7.9	7.96	11.2	5.6	2.562	1.601	6.08	6.65	9.2	10.52
00400	PH (STANDARD UNITS)	02/19/92-12/06/95	25	8.3	8.228	8.6	7.69	0.051	0.226	7.9	8.05	8.4	8.5
00400	CONVERTED PH (STANDARD UNITS)	02/19/92-12/06/95	25	8.3	8.166	8.6	7.69	0.055	0.234	7.9	8.05	8.4	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/19/92-12/06/95	25	0.005	0.007	0.02	0.003	0.	0.004	0.003	0.004	0.009	0.013
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/19/92-12/06/95	25	73.	719.5	11120.	1.5	5338684.75	2310.559	4.8	9.5	241.	1895.6
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/19/92-12/06/95	25	1352.	1856.56	3540.	774.	995789.507	997.893	872.	988.	3034.	3262.

** - Less than 9 observations ## - 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: ZION0034

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------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.	25	0	0.00	17	0	0.00	3	0	0.00	5	0	0.00			
00400	PH	Other-Hi Lim.	9.	25	0	0.00	17	0	0.00	3	0	0.00	5	0	0.00			
		Other-Lo Lim.	6.5	25	0	0.00	17	0	0.00	3	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: ZION0035

NPS Station ID: ZION0035
LAT/LON: 37.222503/-112.680838
Agency: 21USU
Date Created: / /
Location: E F VIRGIN RIVER AT MT CARMEL J
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000202
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0017.32
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 8.740
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008001019.78
RF3 Mile Point: 21.34
Distance from RF3: 0.03
On/Off RF3:
Description:
EAST FORK VIRGIN RIVER AT MT. CARMEL JUNCTION AT BRIDGE CROSSING.

Parameter Inventory for Station: ZION0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	5	7.	8.34	18.	0.2	44.128	6.643	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	2	20.	20.	25.	15.	50.	7.071	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	10.45	9.675	17.	0.8	73.143	8.552	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	5	1210.	1055.2	1355.	660.	88047.7	296.728	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	5	8.5	9.16	11.9	7.	3.873	1.968	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	5	1.6	1.5	2.3	0.7	0.385	0.62	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.1	8.14	8.3	7.9	0.028	0.167	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.1	8.114	8.3	7.9	0.029	0.17	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/15/74	5	0.008	0.008	0.013	0.005	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	38.3	38.4	68.	9.	1006.907	31.732	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	277.	289.2	328.	271.	537.2	23.178	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	171.	175.5	197.	163.	236.333	15.373	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	347.5	356.25	400.	330.	978.917	31.288	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	5	16.	36.4	95.	10.	1274.3	35.697	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.071	0.061	0.107	0.01	0.002	0.041	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.012	0.018	0.036	0.002	0.	0.017	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	1.11	365.516	1824.	0.38	664742.492	815.317	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	5 ##	0.001	0.001	0.002	0.001	0.	0.001	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	5	0.029	0.027	0.035	0.019	0.	0.007	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	4	9.5	10.25	16.	6.	25.583	5.058	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	5	72.	73.6	92.	58.	158.8	12.602	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	4	84.	84.25	105.	64.	280.25	16.741	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	595.	511.2	622.	325.	17825.7	133.513	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	5	96.	93.4	110.	62.	380.8	19.514	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	5	79.	67.8	87.	42.	482.7	21.97	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	5	41.	33.4	50.	9.	310.3	17.615	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	5	5.	5.4	8.	3.	6.3	2.51	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	5	15.	20.6	50.	9.	276.3	16.622	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	5	290.	261.	443.	67.	24264.5	155.771	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.29	0.308	0.44	0.21	0.012	0.112	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	10.	10.	13.	7.	6.	2.449	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	5	60.	54.	130.	0.	3080.	55.498	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	5	1.	4.6	20.	0.	74.8	8.649	**	**	**	**

** - Less than 9 observations ## - 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: ZION0035

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	165.	302.5	800.	80.	112025.	334.701	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	5	0.	6.	30.	0.	180.	13.416	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	5	0.	14.	40.	0.	380.	19.494	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	5	0.	26.8	130.	0.	3331.2	57.717	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	5	0.	4.	10.	0.	30.	5.477	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	5	4300.	12198.6	43000.	93.	307112359.8	17524.622	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/15/74	5	3.633	3.567	4.633	1.968	0.966	0.983	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			3693.807								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	93.	738.	2300.	4.	1006023.5	1003.007	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	1.968	2.196	3.362	0.602	1.196	1.094	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			157.032								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	5	3.5	3.764	8.2	0.	8.504	2.916	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	5	808.	710.8	1032.	374.	73187.2	270.531	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0035

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	3	0.60	3	2	0.67	1	0	0.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	4	0.80	3	2	0.67	1	1	1.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	2	0.40	3	1	0.33	1	0	0.00	1	1	1.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0036

NPS Station ID: ZION0036
LAT/LON: 37.191198/-112.685005
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDDF501R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_37 /5075917
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Mount Carmel UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0036

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/80-07/05/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/05/80-07/05/80	1	475.	475.	475.	475.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/05/80-07/05/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/05/80-07/05/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/05/80-07/05/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/05/80-07/05/80	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/05/80-07/05/80	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/80-07/05/80	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/05/80-07/05/80	1	158.	158.	158.	158.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/05/80-07/05/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/05/80-07/05/80	1	138.	138.	138.	138.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/05/80-07/05/80	1	0.885	0.885	0.885	0.885	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/05/80-07/05/80	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/05/80-07/05/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/05/80-07/05/80	1	56.1	56.1	56.1	56.1	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/05/80-07/05/80	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: ZION0036

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0037

NPS Station ID: ZION0037
LAT/LON: 37.213059/-112.685559
Agency: 112WRD
Date Created: 12/02/81
Location: E. FK. VIRGIN R. AT MT. CARAMEL JUNCTION, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371247112410801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008010
RF1 Mile Point: 7.960
Distance from RF1: 1.80
On/Off RF1: ON
RF3 Index: 15010008001107.69
RF3 Mile Point: 9.15
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/31/82	4	18.75	18.5	23.5	13.	18.5	4.301	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/31/82	4	26.75	26.25	39.5	12.	127.417	11.288	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	4	624.	624.5	630.	620.	17.667	4.203	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/31/82	4	12.	12.25	21.	4.	50.917	7.136	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/31/82	4	1007.5	1011.25	1160.	870.	19739.583	140.498	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/31/82	4	8.25	8.075	9.3	6.5	1.363	1.167	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-08/31/82	4	8.2	8.2	8.4	8.	0.033	0.183	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-08/31/82	4	8.189	8.172	8.4	8.	0.034	0.185	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/31/82	4	0.006	0.007	0.01	0.004	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/12/81-08/31/82	3	8.	7.9	8.1	7.6	0.07	0.265	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/12/81-08/31/82	3	8.	7.843	8.1	7.6	0.075	0.274	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/12/81-08/31/82	3	0.01	0.014	0.025	0.008	0.	0.009	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/12/81-08/31/82	3	0.7	0.733	1.2	0.3	0.203	0.451	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/12/81-08/31/82	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/12/81-08/31/82	3	510.	493.333	540.	430.	3233.333	56.862	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/12/81-08/31/82	3	110.	101.333	112.	82.	281.333	16.773	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/12/81-08/31/82	3	55.	58.	64.	55.	27.	5.196	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/12/81-08/31/82	3	27.	27.	32.	22.	25.	5.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/12/81-08/31/82	3	0.6	0.6	0.7	0.5	0.01	0.1	**	**	**	**
00932	SODIUM, PERCENT	10/12/81-08/31/82	3	10.	10.333	11.	10.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/12/81-08/31/82	3	5.5	5.167	6.2	3.8	1.523	1.234	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/12/81-08/31/82	3	10.	10.333	12.	9.	2.333	1.528	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/12/81-08/31/82	3	230.	236.667	280.	200.	1633.333	40.415	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/12/81-08/31/82	3	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/12/81-08/31/82	3	11.	10.4	11.	9.2	1.08	1.039	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/12/81-08/31/82	3	70.	73.333	100.	50.	633.333	25.166	**	**	**	**
39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/20/81-08/20/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/20/81-08/20/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0037

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/20/81-08/20/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/12/81-08/31/82	3	635.	626.333	705.	539.	6945.333	83.339	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/12/81-08/31/82	3	19.8	24.767	36.3	18.2	100.403	10.02	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/12/81-08/31/82	3	0.86	0.85	0.96	0.73	0.013	0.115	**	**	**	**
81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/20/81-08/20/81	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

EPA Water Quality Criteria Analysis for Station: ZION0037

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	2	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	1	0.33	2	1	0.50	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0038

NPS Station ID: ZION0038 LAT/LON: 37.273059/-112.686671 Agency: 21UTAH Date Created: 12/01/90
Location: MUDDY CK AT 4X4 XING NEAR DEER HOLLOW FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 495158
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 8.30 On/Off RF1:
RF3 Index: 15010008054400.00 RF3 Mile Point: 1.47 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0038

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/92-12/06/95	21	14.	15.767	28.1	0.4	59.124	7.689	5.98	10.05	22.95	26.98
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/92-12/06/95	20	1.	2.345	17.	0.1	13.866	3.724	0.3	0.5	2.75	5.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/09/92-12/06/95	21	1080.	1058.333	1307.	544.	22823.333	151.074	885.	1029.	1120.	1228.
00300	OXYGEN, DISSOLVED MG/L	04/09/92-12/06/95	21	7.5	7.905	10.5	5.9	2.182	1.477	6.3	6.7	9.25	10.4
00400	PH (STANDARD UNITS)	04/09/92-12/06/95	21	8.4	8.352	8.6	7.7	0.044	0.209	8.02	8.3	8.5	8.5
00400	CONVERTED PH (STANDARD UNITS)	04/09/92-12/06/95	21	8.4	8.29	8.6	7.7	0.048	0.219	8.02	8.3	8.5	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/92-12/06/95	21	0.004	0.005	0.02	0.003	0.	0.004	0.003	0.003	0.005	0.01
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/92-12/06/95	21	58.	131.024	691.	1.5	34936.312	186.913	5.	10.	150.	465.6
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/92-12/06/95	21	802.	800.381	952.	646.	4761.848	69.006	718.8	737.	850.	877.2

** - 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

EPA Water Quality Criteria Analysis for Station: ZION0038

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------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.	21	0	0.00	14	0	0.00	3	0	0.00	4	0	0.00			
00400	PH	Other-Hi Lim.	9.	21	0	0.00	14	0	0.00	3	0	0.00	4	0	0.00			
		Other-Lo Lim.	6.5	21	0	0.00	14	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

Station Inventory for Station: ZION0039

NPS Station ID: ZION0039
LAT/LON: 37.105559/-112.688893
Agency: 112WRD
Date Created: 10/31/81
Location: (C-43- 8) 1ACA-S1
FIPS State/County: 49049 UTAH/UTAH
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370620112412001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 23.30
On/Off RF1:
RF3 Index: 15010008047100.00
RF3 Mile Point: 1.12
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0039

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/01/77-05/01/77	1	260.	260.	260.	260.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/01/77-05/01/77	1	115.	115.	115.	115.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/01/77-05/01/77	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/01/77-05/01/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/01/77-05/01/77	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/01/77-05/01/77	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/01/77-05/01/77	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/01/77-05/01/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/01/77-05/01/77	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/01/77-05/01/77	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/01/77-05/01/77	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/01/77-05/01/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/01/77-05/01/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/01/77-05/01/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/01/77-05/01/77	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/01/77-05/01/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/01/77-05/01/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/01/77-05/01/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/01/77-05/01/77	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/01/77-05/01/77	1	161.	161.	161.	161.	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: ZION0039

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						

& - 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: ZION0040

NPS Station ID: ZION0040
LAT/LON: 37.287503/-112.690560
Agency: 21UTAH
Date Created: 12/01/90
Location: MUDDY CK AT MAIN RD XING 1 MI AB DEER HOLLOW
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495159
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 17.60
On/Off RF1:
RF3 Index: 15010008054500.32
RF3 Mile Point: 0.39
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0040

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/02/91-12/06/95	18	15.6	15.856	28.8	0.4	60.411	7.772	6.52	10.6	22.475	26.82
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/02/91-12/06/95	18	1.	1.511	6.	0.1	1.92	1.386	0.28	0.5	2.	3.3
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/02/91-09/02/91	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/02/91-12/06/95	18	1043.5	1046.	1195.	878.	7723.647	87.884	882.5	1009.75	1107.5	1163.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/02/91-09/02/91	1	919.	919.	919.	919.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/02/91-12/06/95	18	7.4	7.656	10.8	5.5	1.892	1.376	5.86	6.85	8.8	9.81
00400	PH (STANDARD UNITS)	09/02/91-12/06/95	18	8.4	8.428	9.7	7.7	0.143	0.379	8.06	8.3	8.5	8.71
00400	CONVERTED PH (STANDARD UNITS)	09/02/91-12/06/95	18	8.4	8.312	9.7	7.7	0.158	0.397	8.06	8.3	8.5	8.71
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/02/91-12/06/95	18	0.004	0.005	0.02	0.	0.	0.004	0.002	0.003	0.005	0.009
00403	PH, LAB, STANDARD UNITS SU	09/02/91-09/02/91	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/02/91-09/02/91	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/02/91-09/02/91	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/02/91-09/02/91	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/02/91-09/02/91	1	174.	174.	174.	174.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/02/91-09/02/91	1	213.	213.	213.	213.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/02/91-09/02/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/02/91-12/06/95	17	37.	176.353	784.	8.	59072.493	243.048	8.8	15.5	315.5	683.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/02/91-09/02/91	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/02/91-09/02/91	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/02/91-09/02/91	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/02/91-09/02/91	1	0.017	0.017	0.017	0.017	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/02/91-09/02/91	1	473.	473.	473.	473.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/02/91-09/02/91	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/02/91-09/02/91	1	73.	73.	73.	73.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/02/91-09/02/91	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/02/91-09/02/91	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/02/91-09/02/91	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/02/91-09/02/91	1	327.2	327.2	327.2	327.2	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/02/91-09/02/91	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/02/91-09/02/91	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/02/91-09/02/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/02/91-09/02/91	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/02/91-09/02/91	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/02/91-09/02/91	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/02/91-09/02/91	1	32.	32.	32.	32.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/02/91-09/02/91	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/02/91-09/02/91	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/02/91-09/02/91	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: ZION0040

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/02/91-12/06/95	17	778.	782.353	944.	682.	5110.618	71.489	698.	710.	835.	886.4
71830	HYDROXIDE ION (MG/L AS OH)	09/02/91-09/02/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/02/91-09/02/91	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/02/91-09/02/91	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/02/91-09/02/91	1	0.27	0.27	0.27	0.27	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: ZION0040

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	18	0	0.00	14	0	0.00	1	0	0.00	3	0	0.00			
00400	PH	Other-Hi Lim.	9.	18	1	0.06	14	1	0.07	1	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	18	0	0.00	14	0	0.00	1	0	0.00	3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
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									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0041

NPS Station ID: ZION0041
LAT/LON: 37.261392/-112.698699
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC511R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_38 /5075841
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Orderville UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0041

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	1	420.	420.	420.	420.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/80-07/22/80	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	1	12.86	12.86	12.86	12.86	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	1	119.	119.	119.	119.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	1	0.766	0.766	0.766	0.766	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/22/80-07/22/80	1	0.29	0.29	0.29	0.29	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/22/80-07/22/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	1	7600.	7600.	7600.	7600.	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: ZION0041

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0042

NPS Station ID: ZION0042
LAT/LON: 37.502227/-112.756115
Agency: 21UTAH
Date Created: 02/05/94
Location: CASCADE FALLS SPRING
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495125
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0042

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/93-06/16/94	8	10.65	10.575	15.4	7.8	6.299	2.51	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/28/93-06/16/94	7	21.	20.743	24.	14.	11.996	3.464	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/28/93-06/16/94	5	12.	13.	20.	7.	34.	5.831	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/28/93-06/28/93	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/28/93-06/16/94	7	261.	235.	276.	130.	2628.	51.264	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/93-06/28/93	1	305.	305.	305.	305.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/28/93-06/16/94	7	7.1	7.629	10.2	5.2	3.502	1.871	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/93-06/16/94	7	7.8	8.014	8.5	7.7	0.118	0.344	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/28/93-06/16/94	7	7.8	7.915	8.5	7.7	0.13	0.36	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/93-06/16/94	7	0.016	0.012	0.02	0.003	0.	0.007	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/28/93-06/28/93	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/28/93-06/28/93	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/93-06/28/93	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/28/93-06/28/93	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	8	134.5	136.625	164.	124.	175.125	13.233	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/28/93-06/28/93	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/28/93-06/28/93	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/28/93-06/16/94	8 ##	1.5	2.438	5.	1.5	1.96	1.4	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/93-06/16/94	8 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/28/93-06/16/94	8	0.205	0.291	0.77	0.05	0.075	0.274	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/28/93-06/16/94	8	0.075	0.082	0.2	0.03	0.003	0.056	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/28/93-06/16/94	8 ##	0.005	0.008	0.022	0.005	0.	0.006	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/28/93-06/16/94	8 ##	0.005	0.008	0.017	0.005	0.	0.005	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	8	132.	134.625	158.	120.	157.411	12.546	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/93-06/16/94	8	39.	39.625	47.	35.	16.554	4.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/93-06/16/94	8	8.4	8.663	10.	8.	0.434	0.659	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/93-06/16/94	8 ##	0.5	0.613	1.4	0.5	0.101	0.318	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/28/93-06/16/94	8 ##	0.5	0.575	1.1	0.5	0.045	0.212	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/28/93-06/16/94	8 ##	0.5	0.688	2.	0.5	0.281	0.53	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/28/93-06/16/94	8 ##	5.1	5.075	7.8	2.5	3.399	1.844	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-06/16/94	7	3.9	3.814	4.3	3.2	0.158	0.398	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/28/93-06/16/94	8 ##	1.5	26.563	202.	1.5	5025.031	70.887	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	07/19/93-06/16/94	7	1.	1.286	3.	0.	1.238	1.113	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	06/28/93-06/28/93	1	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0042

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	4	0	0.00				3	0	0.00			
00400	PH	Other-Hi Lim.	9.	7	0	0.00	4	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	7	0	0.00	4	0	0.00				3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	8	0	0.00	5	0	0.00				3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	8	0	0.00	5	0	0.00				3	0	0.00			
		Drinking Water	250.	8	0	0.00	5	0	0.00				3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	5	0	0.00				3	0	0.00			

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

Station Inventory for Station: ZION0043

NPS Station ID: ZION0043
LAT/LON: 37.502227/-112.756392
Agency: 112WRD
Date Created: 12/02/81
Location: CASCADE SPRINGS, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 373008112452301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.50
On/Off RF1:
RF3 Index: 15010008001025.47
RF3 Mile Point: 25.95
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0043

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	3	12.	11.167	13.5	8.	8.083	2.843	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/23/82	3	18.	16.667	24.	8.	65.333	8.083	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/23/82	3	556.	574.667	615.	553.	1222.333	34.962	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/23/82	3	3.	3.333	6.	1.	6.333	2.517	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	3	195.	200.	220.	185.	325.	18.028	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	3	8.7	8.333	8.8	7.5	0.523	0.723	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-08/23/82	3	7.8	8.083	8.75	7.7	0.336	0.58	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-08/23/82	3	7.8	7.902	8.75	7.7	0.385	0.621	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/23/82	3	0.016	0.013	0.02	0.002	0.	0.01	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	3	8.	7.967	8.3	7.6	0.123	0.351	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-08/23/82	3	8.	7.874	8.3	7.6	0.136	0.369	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/23/82	3	0.01	0.013	0.025	0.005	0.	0.01	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-10/08/81	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	3	0.02	0.018	0.03	0.005	0.	0.013	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	3	110.	112.333	130.	97.	276.333	16.623	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	3	31.	31.	36.	26.	25.	5.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	3	7.9	8.433	10.	7.4	1.903	1.38	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	3	1.1	1.233	1.5	1.1	0.053	0.231	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	3	0.1	0.067	0.1	0.	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-08/23/82	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	3	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/23/82	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/23/82	3 ##	2.5	4.333	10.	0.5	25.083	5.008	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	3	0.1	0.083	0.1	0.05	0.001	0.029	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	3	4.	4.433	5.6	3.7	1.043	1.021	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	3	0.	1.667	5.	0.	8.333	2.887	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	3	118.	104.333	139.	56.	1862.333	43.155	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-08/23/82	3	0.38	0.89	1.91	0.38	0.78	0.883	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-08/23/82	3	0.16	0.143	0.19	0.08	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - 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: ZION0043

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00400	PH	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									

& - 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: ZION0044

NPS Station ID: ZION0044
LAT/LON: 37.453892/-112.759726
Agency: 112WRD
Date Created: 06/20/87
Location: (C-39- 8) 5ABD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372714112453501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.70
On/Off RF1:
RF3 Index: 15010008001028.69
RF3 Mile Point: 29.08
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0044

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/81-09/13/86	2	9.25	9.25	9.5	9.	0.125	0.354	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/86-09/13/86	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/81-09/13/86	2	42.5	42.5	66.	19.	1104.5	33.234	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/81-09/13/86	2	710.	710.	740.	680.	1800.	42.426	**	**	**	**
00400	PH (STANDARD UNITS)	11/16/81-09/13/86	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/16/81-09/13/86	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/16/81-09/13/86	2	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/16/81-09/13/86	2	7.55	7.55	7.7	7.4	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/16/81-09/13/86	2	7.525	7.525	7.7	7.4	0.046	0.215	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/16/81-09/13/86	2	0.03	0.03	0.04	0.02	0.	0.014	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/13/86-09/13/86	1	396.	396.	396.	396.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/16/81-09/13/86	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/16/81-11/16/81	1	380.	380.	380.	380.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/16/81-09/13/86	2	93.5	93.5	100.	87.	84.5	9.192	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/16/81-09/13/86	2	42.5	42.5	46.	39.	24.5	4.95	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/16/81-09/13/86	2	2.5	2.5	2.8	2.2	0.18	0.424	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/16/81-11/16/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/16/81-11/16/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/16/81-09/13/86	2	1.65	1.65	1.7	1.6	0.005	0.071	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/16/81-09/13/86	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/16/81-09/13/86	2	38.	38.	39.	37.	2.	1.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/16/81-09/13/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/16/81-09/13/86	2	9.25	9.25	9.5	9.	0.125	0.354	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/16/81-11/16/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/16/81-09/13/86	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/16/81-09/13/86	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/13/86-09/13/86	1	333.	333.	333.	333.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/16/81-11/16/81	1	380.	380.	380.	380.	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: ZION0044

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	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.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									

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

Station Inventory for Station: ZION0045

NPS Station ID: ZION0045
LAT/LON: 37.501670/-112.763338
Agency: 112WRD
Date Created: 12/19/81
Location: NAVAJO LAKE EAST OF DIKE, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 373006112454801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001028.69
RF3 Mile Point: 28.72
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0045

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	3	18.	13.667	20.	3.	86.333	9.292	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/23/82	3	20.	14.167	22.5	0.	152.083	12.332	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/23/82	3	580.	585.	625.	550.	1425.	37.749	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	3	105.	112.333	135.	97.	401.333	20.033	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	3	9.4	9.5	10.7	8.4	1.33	1.153	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-08/23/82	3	9.	8.967	9.3	8.6	0.123	0.351	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-08/23/82	3	9.	8.874	9.3	8.6	0.136	0.369	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/23/82	3	0.001	0.001	0.003	0.001	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	3	8.4	8.433	8.6	8.3	0.023	0.153	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-08/23/82	3	8.4	8.416	8.6	8.3	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/23/82	3	0.004	0.004	0.005	0.003	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	3	0.1	0.083	0.1	0.05	0.001	0.029	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-10/12/81	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	3	0.02	0.018	0.03	0.005	0.	0.013	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	3	57.	63.	78.	54.	171.	13.077	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	3	12.	14.333	20.	11.	24.333	4.933	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	3	6.6	6.667	6.9	6.5	0.043	0.208	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	3	1.	1.033	1.2	0.9	0.023	0.153	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-08/23/82	3	3.	3.333	4.	3.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	3	0.3	0.333	0.4	0.3	0.003	0.058	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/23/82	3	1.	0.9	1.	0.7	0.03	0.173	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/23/82	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	3	0.05	0.05	0.1	0.	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	3	1.9	1.767	2.4	1.	0.503	0.709	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	3	5.	5.	10.	0.	25.	5.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-10/12/81	2	58.	58.	63.	53.	50.	7.071	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-10/12/81	2	0.08	0.08	0.09	0.07	0.	0.014	**	**	**	**

** - Less than 9 observations ## - 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: ZION0045

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00400	PH	Other-Hi Lim.	9.	3	2	0.67	3	2	0.67									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									

& - 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: ZION0046

NPS Station ID: ZION0046
LAT/LON: 37.267781/-112.766393
Agency: 112WRD
Date Created: 11/07/81
Location: (C-41- 8) 5CDA-
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371604112455901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001008.53
RF3 Mile Point: 9.34
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0046

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-08/26/81	2	19.5	19.5	26.	13.	84.5	9.192	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-08/26/81	2	0.195	0.195	0.3	0.09	0.022	0.148	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-08/26/81	2	2230.	2230.	2340.	2120.	24200.	155.563	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/81-08/26/81	2	8.4	8.4	8.5	8.3	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/81-08/26/81	2	8.389	8.389	8.5	8.3	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-08/26/81	2	0.004	0.004	0.005	0.003	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/22/81-08/26/81	2	8.1	8.1	8.2	8.	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/22/81-08/26/81	2	8.089	8.089	8.2	8.	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-08/26/81	2	0.008	0.008	0.01	0.006	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/26/81	2	850.	850.	860.	840.	200.	14.142	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-08/26/81	2	125.	125.	130.	120.	50.	7.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-08/26/81	2	130.	130.	130.	130.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-08/26/81	2	220.	220.	250.	190.	1800.	42.426	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/22/81-08/26/81	2	3.3	3.3	3.7	2.9	0.32	0.566	**	**	**	**
00932	SODIUM, PERCENT	04/22/81-08/26/81	2	35.5	35.5	38.	33.	12.5	3.536	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-08/26/81	2	9.2	9.2	10.	8.4	1.28	1.131	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-08/26/81	2	21.5	21.5	25.	18.	24.5	4.95	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-08/26/81	2	940.	940.	960.	920.	800.	28.284	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-08/26/81	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-08/26/81	2	7.7	7.7	8.7	6.7	2.	1.414	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/26/81	2	320.	320.	350.	290.	1800.	42.426	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-08/26/81	2	8020.	8020.	16000.	40.	127360800.	11285.424	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	2	8040.	8040.	16000.	80.	126723200.	11257.14	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-08/26/81	2	30.	30.	40.	20.	200.	14.142	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	2	135.	135.	270.	0.	36450.	190.919	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	2	175.	175.	280.	70.	22050.	148.492	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-08/26/81	2	40.	40.	70.	10.	1800.	42.426	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-08/26/81	2	1835.	1835.	1950.	1720.	26450.	162.635	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/26/81	1	1630.	1630.	1630.	1630.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/26/81	2	0.91	0.91	1.35	0.47	0.387	0.622	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/26/81	2	2.495	2.495	2.65	2.34	0.048	0.219	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-08/26/81	2	1452.5	1452.5	2900.	5.	4190512.5	2047.074	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	2	1.15	1.15	2.3	0.	2.645	1.626	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0046

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	2	1.00	1	1	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0047

NPS Station ID: ZION0047 LAT/LON: 37.519448/-112.772227 Agency: 113FORS4 Date Created: 04/02/83
Location: NAVAJO LAKE - ADJACENT TO SPRUCE CAMPGROUND FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 070205D /16030001205D/028070205D /H23
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: GREAT BASIN Elevation: 0 Water Body Id:
Minor Basin: SEVIER RIVER - ASAY CREEK ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 20.40 On/Off RF1:
RF3 Index: 15010008112900.00 RF3 Mile Point: 0.00 Distance from RF3: 0.30 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0047

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	1	19.2	19.2	19.2	19.2	0.	0.	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	13	59.	59.923	67.	54.	16.744	4.092	54.4	57.	63.5	66.6
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	4	0.85	0.875	1.1	0.7	0.029	0.171	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	5	4.2	5.46	12.6	2.1	18.963	4.355	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	14	100.	103.571	180.	39.	1810.571	42.551	41.5	67.75	128.75	175.
00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	6	9.4	9.367	10.8	8.	0.851	0.922	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/75-07/13/77	9	9.	8.844	9.9	7.3	0.618	0.786	7.3	8.35	9.35	9.9
00400	CONVERTED PH (STANDARD UNITS)	07/15/75-07/13/77	9	9.	8.132	9.9	7.3	1.189	1.09	7.3	8.35	9.35	9.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/75-07/13/77	9	0.001	0.007	0.05	0.	0.	0.016	0.	0.	0.006	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	14	0.053	0.216	0.7	0.03	0.077	0.277	0.032	0.037	0.46	0.7
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	14	0.07	0.084	0.2	0.01	0.004	0.062	0.015	0.03	0.15	0.19
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/17/76-07/13/77	5 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			0.5								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			0.5								

** - 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: ZION0047

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	5	0	0.00	4	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	5	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	9	5	0.56	8	5	0.63				1	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	8	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	12	0	0.00				2	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	5	0	0.00	4	0	0.00				1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	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

Station Inventory for Station: ZION0048

NPS Station ID: ZION0048
LAT/LON: 37.462504/-112.772504
Agency: 112WRD
Date Created: 06/20/87
Location: (C-38- 8)32CBB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372745112462101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.80
On/Off RF1:
RF3 Index: 15010008001029.84
RF3 Mile Point: 32.89
Distance from RF3: 0.10
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0048

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	1	440.	440.	440.	440.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/81-07/15/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/15/81-07/15/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	1	249.	249.	249.	249.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	1	0.8	0.8	0.8	0.8	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: ZION0048

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0048

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0049

NPS Station ID: ZION0049
LAT/LON: 37.361392/-112.773337
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 8) 5bcd-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372141112462401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 17.50
On/Off RF1:
RF3 Index: 15010008058601.45
RF3 Mile Point: 11.84
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0049

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/86-06/24/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/24/86-06/24/86	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/24/86-06/24/86	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/24/86-06/24/86	1	710.	710.	710.	710.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/24/86-06/24/86	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/24/86-06/24/86	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/24/86-06/24/86	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/24/86-06/24/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/24/86-06/24/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/24/86-06/24/86	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/24/86-06/24/86	1	411.	411.	411.	411.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/24/86-06/24/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/24/86-06/24/86	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/24/86-06/24/86	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/24/86-06/24/86	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/24/86-06/24/86	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/24/86-06/24/86	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/24/86-06/24/86	1	73.	73.	73.	73.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/24/86-06/24/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/24/86-06/24/86	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/24/86-06/24/86	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/24/86-06/24/86	1	150.	150.	150.	150.	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: ZION0049

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0049

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0050

NPS Station ID: ZION0050
LAT/LON: 37.305838/-112.773337
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 8)29BCA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371821112462401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.30
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 17.79
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0050

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/19/86	2	9.5	9.5	10.	9.	0.5	0.707	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/86-08/19/86	1 ##	12.	12.	12.	12.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/19/86	2	11.65	11.65	15.	8.3	22.445	4.738	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/19/86	2 ##	752.5	752.5	1080.	425.	214512.5	463.155	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/19/86	2	7.05	7.05	7.1	7.	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/19/86	2	7.047	7.047	7.1	7.	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/19/86	2	0.09	0.09	0.1	0.079	0.	0.015	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/19/86	2	7.6	7.6	7.7	7.5	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-08/19/86	2	7.589	7.589	7.7	7.5	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/19/86	2	0.026	0.026	0.032	0.02	0.	0.008	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/19/86	1 ##	172.	172.	172.	172.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/19/86	2 ##	0.04	0.04	0.05	0.03	0.	0.014	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	1	480.	480.	480.	480.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/19/86	2	104.	104.	108.	100.	32.	5.657	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/19/86	2	50.5	50.5	52.	49.	4.5	2.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/19/86	2	9.4	9.4	9.5	9.3	0.02	0.141	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/28/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/19/86	2	3.35	3.35	3.4	3.3	0.005	0.071	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/19/86	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/19/86	2	150.	150.	180.	120.	1800.	42.426	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/19/86	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/19/86	2	9.95	9.95	10.	9.9	0.005	0.071	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/19/86	2 ##	7.	7.	9.	5.	8.	2.828	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/19/86	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/19/86	1	480.	480.	480.	480.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	1	501.	501.	501.	501.	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: ZION0050

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	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.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									

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

Station Inventory for Station: ZION0051

NPS Station ID: ZION0051
LAT/LON: 37.382503/-112.774004
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB513R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_47 /5075830
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0051

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/80-07/07/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/07/80-07/07/80	1	700.	700.	700.	700.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/80-07/07/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/80-07/07/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/80-07/07/80	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/07/80-07/07/80	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/07/80-07/07/80	1	17.9	17.9	17.9	17.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/07/80-07/07/80	1	29.26	29.26	29.26	29.26	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/07/80-07/07/80	1	248.	248.	248.	248.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/07/80-07/07/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/07/80-07/07/80	1	277.	277.	277.	277.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/07/80-07/07/80	1	2.306	2.306	2.306	2.306	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/07/80-07/07/80	1	30.	30.	30.	30.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/07/80-07/07/80	1	204.4	204.4	204.4	204.4	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/07/80-07/07/80	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: ZION0051

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0052

NPS Station ID: ZION0052
LAT/LON: 37.373503/-112.775393
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCE037R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_49 /5083901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Clear Creek Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0052

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	1	730.	730.	730.	730.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/80-07/26/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/26/80-07/26/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/80-07/26/80	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	1	22.6	22.6	22.6	22.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	1	19.37	19.37	19.37	19.37	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	1	253.	253.	253.	253.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	1	255.	255.	255.	255.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	1	2.274	2.274	2.274	2.274	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/26/80-07/26/80	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/26/80-07/26/80	1	6.	6.	6.	6.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/26/80-07/26/80	1	48.5	48.5	48.5	48.5	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	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: ZION0052

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0053

NPS Station ID: ZION0053
LAT/LON: 37.472781/-112.777781
Agency: 112WRD
Date Created: / /
Location: NF VIRGIN R.NR.GLENDALE,UTAH
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405400
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001008.53
RF3 Mile Point: 9.31
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0053

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/73-09/07/78	38	9.25	8.842	17.5	0.	21.637	4.652	1.95	4.5	12.625	15.
00060	FLOW, STREAM, MEAN DAILY CFS	05/04/73-07/02/74	10	9.	10.1	24.	2.	43.656	6.607	2.2	4.75	14.75	23.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/15/74-09/07/78	29	4.	5.469	22.	0.6	22.749	4.77	1.	2.5	7.5	14.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/04/73-09/07/78	39	360.	339.872	440.	235.	3632.22	60.268	245.	280.	390.	410.

** - Less than 9 observations ## - 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: ZION0054

NPS Station ID: ZION0054
LAT/LON: 37.351670/-112.779170
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 8) 7aad-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372106112464501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 11.40
On/Off RF1:
RF3 Index: 15010008058606.77
RF3 Mile Point: 7.40
Distance from RF3: 0.39
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0054

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/86-07/13/86	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/13/86-07/13/86	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/13/86-07/13/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/86-07/13/86	1	560.	560.	560.	560.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/13/86-07/13/86	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/13/86-07/13/86	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/86-07/13/86	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/13/86-07/13/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/13/86-07/13/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/86-07/13/86	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/86-07/13/86	1	280.	280.	280.	280.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/13/86-07/13/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/13/86-07/13/86	1	74.	74.	74.	74.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/86-07/13/86	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/86-07/13/86	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/13/86-07/13/86	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/13/86-07/13/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/13/86-07/13/86	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/13/86-07/13/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/13/86-07/13/86	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/13/86-07/13/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/86-07/13/86	1	6.	6.	6.	6.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/13/86-07/13/86	1	262.	262.	262.	262.	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: ZION0054

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0054

Parameter				Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0055

NPS Station ID: ZION0055 LAT/LON: 37.522226/-112.780560 Agency: 113FORS4 Date Created: 04/02/83
Location: NAVAJO LAKE - ADJACENT TO CHRISTENSEN BOAT DOCK FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 070205C /16030001205C/028070205C /H22
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: GREAT BASIN Elevation: 0 Water Body Id:
Minor Basin: SEVIER RIVER - ASAY CREEK ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 18.70 On/Off RF1:
RF3 Index: 15010008112900.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0055

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	1	20.3	20.3	20.3	20.3	0.	0.	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	13	59.	60.231	67.	54.	17.526	4.186	54.4	57.5	64.	67.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	4	0.85	1.	1.6	0.7	0.18	0.424	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	5	4.2	5.88	14.7	2.1	27.342	5.229	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	14	105.	102.357	170.	40.	1412.093	37.578	43.5	70.75	130.	155.
00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	6	9.6	9.633	10.7	8.	0.927	0.963	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/75-07/13/77	9	8.9	8.922	9.9	8.2	0.347	0.589	8.2	8.3	9.35	9.9
00400	CONVERTED PH (STANDARD UNITS)	07/15/75-07/13/77	9	8.9	8.629	9.9	8.2	0.444	0.666	8.2	8.3	9.35	9.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/75-07/13/77	9	0.001	0.002	0.006	0.	0.	0.003	0.	0.	0.005	0.006
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	14	0.124	0.222	0.65	0.02	0.052	0.227	0.025	0.053	0.438	0.625
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	14	0.1	0.133	0.6	0.005	0.024	0.156	0.013	0.028	0.143	0.45
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/17/76-07/13/77	5 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			0.5								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	0.5	0.875	2.	0.5	0.563	0.75	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	-0.301	-0.151	0.301	-0.301	0.091	0.301	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			0.707								

** - Less than 9 observations ## - 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: ZION0055

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	5	0	0.00	4	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	5	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	9	4	0.44	8	4	0.50				1	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	8	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	12	0	0.00				2	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	5	0	0.00	4	0	0.00				1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	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

Station Inventory for Station: ZION0056

NPS Station ID: ZION0056
LAT/LON: 37.524170/-112.783338
Agency: 21UTAH
Date Created: 11/23/91
Location: NAVAJO LAKE 02 MIDLAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 594682
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 24.90
On/Off RF1:
RF3 Index: 15010008054500.32
RF3 Mile Point: 1.65
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/08/95	34	14.5	12.382	18.6	0.6	33.871	5.82	1.55	8.575	17.175	18.1
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-05/24/94	10	20.	20.7	25.	15.	12.9	3.592	15.1	18.25	25.	25.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/03/88-06/29/93	15	1.	1.7	8.	0.4	4.076	2.019	0.52	0.9	1.3	6.02
00078	TRANSPARENCY, SECCHI DISC (METERS)	03/23/88-08/08/95	22	3.9	3.898	5.8	2.5	0.864	0.93	2.93	3.	4.5	5.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/08/95	34	171.	176.529	249.	104.	2158.56	46.46	115.5	133.	221.25	235.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/88-06/14/90	13	136.	153.231	281.	100.	3009.192	54.856	100.4	117.5	180.5	261.4
00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/08/95	33	8.7	8.427	11.6	0.	5.007	2.238	6.4	8.	9.6	10.56
00310	BOD, 5 DAY, 20 DEG C MG/L	03/23/88-03/23/88	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	02/03/88-09/10/93	13 ##	7.	14.462	40.	7.	154.936	12.447	7.	7.	24.5	38.4
00400	PH (STANDARD UNITS)	03/23/88-08/08/95	34	8.6	8.703	9.8	7.5	0.406	0.637	7.85	8.25	9.225	9.65
00400	CONVERTED PH (STANDARD UNITS)	03/23/88-08/08/95	34	8.589	8.303	9.8	7.5	0.571	0.755	7.85	8.25	9.225	9.65
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/88-08/08/95	34	0.003	0.005	0.032	0.	0.	0.007	0.	0.001	0.006	0.014
00403	PH, LAB, STANDARD UNITS SU	02/03/88-08/15/90	14	8.5	8.543	9.4	7.8	0.241	0.491	7.9	8.1	8.825	9.4
00403	CONVERTED PH, LAB, STANDARD UNITS	02/03/88-08/15/90	14	8.489	8.33	9.4	7.8	0.29	0.538	7.9	8.1	8.825	9.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/88-08/15/90	14	0.003	0.005	0.016	0.	0.	0.004	0.	0.002	0.008	0.013
00405	CARBON DIOXIDE (MG/L AS CO2)	02/03/88-08/15/90	14	0.	0.5	3.	0.	0.885	0.941	0.	0.	1.	2.5
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/88-05/24/94	23	104.	93.826	152.	52.	892.877	29.881	55.6	68.	119.	129.
00440	BICARBONATE ION (MG/L AS HCO3)	02/03/88-08/15/90	14	82.5	89.643	185.	37.	1684.093	41.038	37.	66.25	103.5	165.
00445	CARBONATE ION (MG/L AS CO3)	02/03/88-08/15/90	14	1.	2.857	14.	0.	21.978	4.688	0.	0.	3.	13.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/88-08/08/95	26 ##	1.5	2.	12.	1.5	4.26	2.064	1.5	1.5	1.5	2.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/03/88-08/08/95	35 ##	0.025	0.032	0.082	0.003	0.	0.019	0.025	0.025	0.025	0.068
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/16/88-06/14/90	9 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/88-08/15/90	7 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/16/88-06/14/90	9 ##	0.005	0.008	0.02	0.005	0.	0.007	0.005	0.005	0.013	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/03/88-08/15/90	7 ##	0.005	0.01	0.02	0.005	0.	0.007	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/03/88-05/24/94	30	0.3	0.346	1.16	0.05	0.066	0.256	0.1	0.185	0.408	0.645
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-08/08/95	19 ##	0.01	0.03	0.2	0.005	0.002	0.045	0.01	0.01	0.04	0.08
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/03/88-08/08/95	35	0.005	0.011	0.048	0.	0.	0.011	0.003	0.005	0.015	0.028
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-08/08/95	19 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/16/88-06/14/90	9 ##	0.004	0.004	0.008	0.003	0.	0.002	0.003	0.003	0.007	0.008
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/03/88-09/10/93	13	2.9	4.954	25.1	2.4	37.176	6.097	2.48	2.65	4.1	16.9
00745	SULFIDE, TOTAL (MG/L AS S)	03/23/88-08/15/90	3	0.01	0.011	0.02	0.002	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/88-05/24/94	25	78.	90.68	158.	51.	884.477	29.74	56.8	64.	116.	126.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/88-05/24/94	25	18.	23.72	45.	9.	135.71	11.649	9.6	12.5	33.5	39.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/88-05/24/94	25	7.1	7.644	11.	6.4	0.999	1.	6.86	7.	8.	9.
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/88-05/24/94	25 ##	0.5	0.584	1.1	0.5	0.039	0.197	0.5	0.5	0.5	1.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/88-05/24/94	25 ##	0.5	0.568	2.2	0.5	0.116	0.34	0.5	0.5	0.5	0.5
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/03/88-05/24/94	23 ##	0.5	0.583	2.	0.5	0.102	0.32	0.5	0.5	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 time series plot

Parameter Inventory for Station: ZION0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/03/88-05/24/94	25 ##	1.	1.884	5.7	0.5	2.892	1.701	0.5	0.5	2.5	5.16
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-05/24/94	8	2.55	2.6	3.	2.2	0.069	0.262	**	**	**	**
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	03/23/88-08/15/90	9 ##	0.25	0.361	0.5	0.25	0.017	0.132	0.25	0.25	0.5	0.5
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	06/25/91-08/13/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			2.								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/25/91-08/13/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	06/25/91-08/13/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			2.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/88-08/08/95	21	0.7	1.214	4.7	0.	1.641	1.281	0.	0.35	1.65	3.62
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/03/88-08/08/95	26	52.	48.904	216.	1.5	3088.78	55.577	1.5	1.5	78.	136.4
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-08/08/95	12	1.	1.167	4.	0.	1.242	1.115	0.	0.25	1.75	3.4
71830	HYDROXIDE ION (MG/L AS OH)	02/03/88-08/15/90	14	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/03/88-08/15/90	7 ##	0.003	0.004	0.008	0.003	0.	0.002	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	03/23/88-08/08/95	31	3.	2.81	7.	0.	7.391	2.719	0.	0.	5.5	7.
82702	AS DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	0.55	1.122	2.5	0.5	0.846	0.92	0.5	0.5	2.25	2.5
82703	BA DECNT FLD ACID WTR MG/L	03/23/88-08/15/90	9	30.	40.	130.	20.	1300.	36.056	20.	20.	45.	130.
82705	CD DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
82706	CR DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
82708	CU DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	10.	10.	10.	10.	0.	0.	10.	10.	10.	10.
82710	FE DECNT FLD ACID WTR MG/L	03/23/88-08/15/90	9	0.044	0.101	0.54	0.01	0.03	0.173	0.01	0.01	0.119	0.54
82711	PB DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
82712	MN DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	2.5	13.667	63.	2.5	477.313	21.847	2.5	2.5	22.5	63.
82713	HG DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
82716	AG DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
82719	ZN DECNT FLD ACID WTR UG/L	03/23/88-08/15/90	9 ##	10.	10.	10.	10.	0.	0.	10.	10.	10.	10.

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

EPA Water Quality Criteria Analysis for Station: ZION0056

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	15	0	0.00	9	0	0.00	2	0	0.00	4	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	33	2	0.06	21	1	0.05	2	1	0.50	10	0	0.00			
00400	PH	Other-Hi Lim.	9.	34	14	0.41	21	10	0.48	2	0	0.00	11	4	0.36			
		Other-Lo Lim.	6.5	34	0	0.00	21	0	0.00	2	0	0.00	11	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	14	2	0.14	9	2	0.22	2	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	14	0	0.00	9	0	0.00	2	0	0.00	3	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	9	0	0.00	5	0	0.00				4	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	7	0	0.00	5	0	0.00	2	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	9	0	0.00	5	0	0.00				4	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	7	0	0.00	5	0	0.00	2	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	19	0	0.00	12	0	0.00				7	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	23	0	0.00	16	0	0.00	2	0	0.00	5	0	0.00			
		Drinking Water	250.	23	0	0.00	16	0	0.00	2	0	0.00	5	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	25	0	0.00	17	0	0.00	2	0	0.00	6	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	9	0	0.00	5	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	50.	9	0	0.00	5	0	0.00	2	0	0.00	2	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/08/95	21	16.	13.457	18.6	1.5	37.648	6.136	1.66	9.35	18.1	18.18
00078	TRANSPARENCY, SECCHI DISC (METERS)	03/23/88-08/08/95	14	4.	4.086	5.8	3.	1.032	1.016	3.	3.075	4.9	5.65
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/08/95	21	150.	169.19	236.	104.	2320.062	48.167	106.2	128.	220.5	232.4
00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/08/95	21	8.4	8.2	10.5	2.3	2.879	1.697	6.4	7.75	9.1	10.12
00400	PH (STANDARD UNITS)	03/23/88-08/08/95	21	8.8	8.781	9.8	7.5	0.48	0.693	7.66	8.35	9.3	9.78
00400	CONVERTED PH (STANDARD UNITS)	03/23/88-08/08/95	21	8.8	8.296	9.8	7.5	0.727	0.853	7.66	8.35	9.3	9.78
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/88-08/08/95	21	0.002	0.005	0.032	0.	0.	0.008	0.	0.001	0.004	0.023
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/88-08/08/95	17 ##	1.5	2.147	12.	1.5	6.461	2.542	1.5	1.5	1.5	4.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/03/88-08/08/95	22 ##	0.025	0.028	0.082	0.003	0.	0.016	0.009	0.025	0.025	0.05
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/03/88-08/08/95	22	0.005	0.011	0.048	0.	0.	0.012	0.001	0.005	0.015	0.028
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/88-08/08/95	14	0.7	0.979	3.3	0.	0.839	0.916	0.	0.425	1.375	2.7
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/03/88-08/08/95	17	46.	48.059	216.	1.5	3671.215	60.591	1.5	1.5	65.	168.
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	03/23/88-08/08/95	19	3.1	3.068	7.	0.	7.379	2.716	0.	0.	6.	7.

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/08/95	2	1.1	1.1	1.6	0.6	0.5	0.707	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	03/23/88-08/08/95	1	4.26	4.26	4.26	4.26	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/08/95	2	191.5	191.5	197.	186.	60.5	7.778	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/08/95	2	4.	4.	8.	0.	32.	5.657	**	**	**	**
00400	PH (STANDARD UNITS)	03/23/88-08/08/95	2	8.15	8.15	8.4	7.9	0.125	0.354	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/23/88-08/08/95	2	8.082	8.082	8.4	7.9	0.134	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/88-08/08/95	2	0.008	0.008	0.013	0.004	0.	0.006	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/88-08/08/95	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/03/88-08/08/95	2 ##	0.053	0.053	0.08	0.025	0.002	0.039	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/03/88-08/08/95	2 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/03/88-08/08/95	2	102.	102.	128.	76.	1352.	36.77	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	03/23/88-08/08/95	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0056

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/08/95	11	13.2	12.382	15.4	6.5	8.546	2.923	6.98	9.2	14.5	15.38
00078	TRANSPARENCY, SECCHI DISC (METERS)	03/23/88-08/08/95	7	3.6	3.471	4.3	2.5	0.472	0.687	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/08/95	11	171.	187.818	249.	130.	2178.964	46.679	130.	147.	229.	248.6
00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/08/95	10	10.05	9.79	11.6	8.	1.31	1.145	8.07	8.7	10.65	11.52
00400	PH (STANDARD UNITS)	03/23/88-08/08/95	11	8.7	8.655	9.3	7.8	0.293	0.541	7.86	8.1	9.2	9.3
00400	CONVERTED PH (STANDARD UNITS)	03/23/88-08/08/95	11	8.7	8.377	9.3	7.8	0.377	0.614	7.86	8.1	9.2	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/88-08/08/95	11	0.002	0.004	0.016	0.001	0.	0.005	0.001	0.001	0.008	0.014
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/03/88-08/08/95	7 ##	1.5	1.786	3.	1.5	0.321	0.567	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/03/88-08/08/95	11 ##	0.025	0.035	0.08	0.025	0.	0.019	0.025	0.025	0.05	0.076
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/03/88-08/08/95	11	0.01	0.012	0.032	0.005	0.	0.009	0.005	0.005	0.017	0.031
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/88-08/08/95	7	1.1	1.686	4.7	0.	3.265	1.807	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/03/88-08/08/95	7	3.	35.786	82.	1.5	1712.155	41.378	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	03/23/88-08/08/95	11	0.	2.209	7.	0.	8.081	2.843	0.	0.	4.3	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: ZION0057

NPS Station ID: ZION0057
LAT/LON: 37.451892/-112.783809
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB504R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_52 /5075821
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0057

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	1	600.	600.	600.	600.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/30/80-06/30/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	1	18.38	18.38	18.38	18.38	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	1	129.	129.	129.	129.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	1	247.	247.	247.	247.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	1	1.637	1.637	1.637	1.637	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/30/80-06/30/80	1	23.	23.	23.	23.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/30/80-06/30/80	1	152.9	152.9	152.9	152.9	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	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: ZION0057

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0058

NPS Station ID: ZION0058
LAT/LON: 37.445003/-112.784448
Agency: 112WRD
Date Created: 08/01/87
Location: N.FK. VIRGIN BLW ROSY CANYON
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372642112470401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 20.40
On/Off RF1:
RF3 Index: 15010008060900.00
RF3 Mile Point: 0.63
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0058

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/86-07/16/86	2	12.5	12.5	14.	11.	4.5	2.121	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/11/86-07/16/86	2	23.5	23.5	27.	20.	24.5	4.95	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/11/86-07/16/86	2	13.	13.	13.	13.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/86-07/16/86	2	367.5	367.5	390.	345.	1012.5	31.82	**	**	**	**
00400	PH (STANDARD UNITS)	06/11/86-07/16/86	2	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/11/86-07/16/86	2	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/11/86-07/16/86	2	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/11/86-07/16/86	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/11/86-07/16/86	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/11/86-07/16/86	2	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/11/86-07/16/86	2	212.	212.	219.	205.	98.	9.899	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/86-07/16/86	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/11/86-07/16/86	2	53.5	53.5	55.	52.	4.5	2.121	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/11/86-07/16/86	2	17.5	17.5	18.	17.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/11/86-07/16/86	2	1.55	1.55	1.7	1.4	0.045	0.212	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/11/86-07/16/86	2	1.1	1.1	1.2	1.	0.02	0.141	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/11/86-07/16/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/11/86-07/16/86	2	9.	9.	10.	8.	2.	1.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/11/86-07/16/86	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/11/86-07/16/86	2	10.45	10.45	11.	9.9	0.605	0.778	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/11/86-07/16/86	2	6.	6.	9.	3.	18.	4.243	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/11/86-07/16/86	2	3.	3.	3.	3.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/16/86-07/16/86	1	214.	214.	214.	214.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/11/86-07/16/86	2	27.	27.	36.	18.	162.	12.728	**	**	**	**

** - Less than 9 observations ## - 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: ZION0058

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			

& - 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: ZION0058

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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			

& - 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: ZION0059

NPS Station ID: ZION0059 LAT/LON: 37.522226/-112.786115 Agency: 113FORS4 Date Created: 04/02/83
Location: NAVAJO LAKE - ADJACENT TO NAVAJO LAKE CAMPGROUND FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 070205B /16030001205B/028070205B /H21
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: GREAT BASIN Elevation: 0 Water Body Id:
Minor Basin: SEVIER RIVER - ASAY CREEK ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 17.30 On/Off RF1:
RF3 Index: 15010008015600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.12 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0059

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-06/25/79	2	17.55	17.55	21.	14.1	23.805	4.879	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	13	59.	59.923	67.	54.	15.244	3.904	54.	57.5	63.	66.2
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	4	0.8	0.875	1.2	0.7	0.049	0.222	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-06/25/79	6	7.35	10.5	27.3	4.2	77.616	8.81	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-06/25/79	15	110.	102.2	160.	39.	1056.314	32.501	47.4	85.	120.	148.
00300	OXYGEN, DISSOLVED MG/L	08/08/75-06/25/79	7	9.5	9.5	11.1	8.	1.15	1.072	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/75-06/25/79	10	9.05	8.92	9.7	8.2	0.251	0.501	8.22	8.4	9.275	9.68
00400	CONVERTED PH (STANDARD UNITS)	07/15/75-06/25/79	10	9.047	8.688	9.7	8.2	0.311	0.557	8.22	8.4	9.275	9.68
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/75-06/25/79	10	0.001	0.002	0.006	0.	0.	0.002	0.	0.001	0.004	0.006
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	14	0.056	0.222	0.75	0.02	0.075	0.274	0.028	0.042	0.41	0.725
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	14	0.07	0.122	0.65	0.01	0.027	0.164	0.01	0.02	0.165	0.425
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/79-06/25/79	1	43.	43.	43.	43.	0.	0.	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	06/25/79-06/25/79	1	1.633	1.633	1.633	1.633	0.	0.	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			43.								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-06/25/79	6 ##	0.5	0.417	0.5	0.	0.042	0.204	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/17/76-06/25/79	6 ##	-0.301	-0.251	0.	-0.301	0.015	0.123	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			0.561								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			0.5								

** - 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: ZION0059

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	6	0	0.00	4	0	0.00				2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	5	0	0.00				2	0	0.00			
00400	PH	Other-Hi Lim.	9.	10	6	0.60	8	5	0.63				2	1	0.50			
		Other-Lo Lim.	6.5	10	0	0.00	8	0	0.00				2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	12	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: ZION0059

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	1	0	0.00							1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	6	0	0.00	4	0	0.00				2	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	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

Station Inventory for Station: ZION0060

NPS Station ID: ZION0060
LAT/LON: 37.400559/-112.786948
Agency: 112WRD
Date Created: 08/01/87
Location: (C-39- 8)19cca-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372402112471301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 15.30
On/Off RF1:
RF3 Index: 15010008059300.00
RF3 Mile Point: 0.59
Distance from RF3: 0.68
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0060

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/86-09/10/86	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/86-09/10/86	1	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/10/86-09/10/86	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/86-09/10/86	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/10/86-09/10/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/10/86-09/10/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/10/86-09/10/86	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/10/86-09/10/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/10/86-09/10/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/10/86-09/10/86	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/10/86-09/10/86	1	500.	500.	500.	500.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/86-09/10/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/10/86-09/10/86	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/10/86-09/10/86	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/10/86-09/10/86	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/10/86-09/10/86	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/10/86-09/10/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/10/86-09/10/86	1	550.	550.	550.	550.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/10/86-09/10/86	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/10/86-09/10/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/10/86-09/10/86	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/10/86-09/10/86	1	36.	36.	36.	36.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/10/86-09/10/86	1	1160.	1160.	1160.	1160.	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: ZION0060

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0060

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0061

NPS Station ID: ZION0061
LAT/LON: 37.524448/-112.786948
Agency: 11EPALES
Date Created: / /
Location: NAVAJO LAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 491101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 12
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 16.40
On/Off RF1:
RF3 Index: 15010008001514.55
RF3 Mile Point: 15.40
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0061

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/75-09/25/75	4	16.6	16.625	17.4	15.9	0.702	0.838	**	**	**	**
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	08/13/75-09/25/75	4	95.5	95.25	96.	94.	0.917	0.957	**	**	**	**
00077	TRANSPARENCY, SECCHI DISC (INCHES)	09/25/75-09/25/75	1	132.	132.	132.	132.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/13/75-09/25/75	4	99.	99.	118.	80.	481.333	21.939	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/13/75-09/25/75	4	9.3	9.35	9.8	9.	0.117	0.342	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/75-09/25/75	4	9.375	9.363	9.6	9.1	0.076	0.275	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/75-09/25/75	4	9.319	9.3	9.6	9.1	0.081	0.284	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/75-09/25/75	4	0.	0.001	0.001	0.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/13/75-09/25/75	4	67.	65.25	69.	58.	24.25	4.924	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/13/75-09/25/75	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/13/75-09/25/75	4	0.5	0.5	0.6	0.4	0.013	0.115	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/13/75-09/25/75	4 ##	0.01	0.013	0.02	0.01	0.	0.005	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/13/75-09/25/75	4	0.016	0.016	0.018	0.015	0.	0.002	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/13/75-09/25/75	4	0.004	0.004	0.007	0.002	0.	0.002	**	**	**	**
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	08/13/75-09/25/75	2	2.05	2.05	2.1	2.	0.005	0.071	**	**	**	**
72025	DEPTH OF POND OR RESERVOIR IN FEET	08/13/75-09/25/75	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - 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: ZION0061

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00									
00400	PH	Other-Hi Lim.	9.	4	4	1.00	4	4	1.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	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

Station Inventory for Station: ZION0062

NPS Station ID: ZION0062
LAT/LON: 37.342227/-112.787227
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 8) 7cda-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372032112471401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 12.30
On/Off RF1:
RF3 Index: 15010008058700.00
RF3 Mile Point: 2.00
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0062

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/12/86-07/12/86	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	1	460.	460.	460.	460.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/86-07/12/86	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/12/86-07/12/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/12/86-07/12/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/86-07/12/86	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	1	248.	248.	248.	248.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/12/86-07/12/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/12/86-07/12/86	1	68.	68.	68.	68.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/86-07/12/86	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/86-07/12/86	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/12/86-07/12/86	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/12/86-07/12/86	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/12/86-07/12/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/12/86-07/12/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/12/86-07/12/86	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/12/86-07/12/86	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/86-07/12/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/12/86-07/12/86	1	211.	211.	211.	211.	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: ZION0062

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0062

Parameter				Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0063

NPS Station ID: ZION0063
LAT/LON: 37.343060/-112.788060
Agency: 112WRD
Date Created: 05/21/88
Location: (C-40- 8) 7cad-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372035112471701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 24.70
On/Off RF1:
RF3 Index: 15010008058601.45
RF3 Mile Point: 3.34
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0063

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	1	520.	520.	520.	520.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/86-07/12/86	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	1	295.	295.	295.	295.	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: ZION0063

			Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
Parameter	Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.	6.5	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

Station Inventory for Station: ZION0064

NPS Station ID: ZION0064
LAT/LON: 37.307781/-112.788616
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 8)30BAD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371828112471901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 9.60
On/Off RF1:
RF3 Index: 15010008041000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0064

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	1	695.	695.	695.	695.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-08/28/81	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	1	82.	82.	82.	82.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/28/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	1	260.	260.	260.	260.	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: ZION0064

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0064

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0065

NPS Station ID: ZION0065
LAT/LON: 37.386698/-112.788810
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB507R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_46 /5075824
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0065

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/80-07/01/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/01/80-07/01/80	1	435.	435.	435.	435.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/80-07/01/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/80-07/01/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/80-07/01/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/01/80-07/01/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/01/80-07/01/80	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/01/80-07/01/80	1	9.86	9.86	9.86	9.86	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/01/80-07/01/80	1	66.	66.	66.	66.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/01/80-07/01/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/01/80-07/01/80	1	129.	129.	129.	129.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/01/80-07/01/80	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/01/80-07/01/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/01/80-07/01/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/01/80-07/01/80	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: ZION0065

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0066

NPS Station ID: ZION0066
LAT/LON: 37.526115/-112.788892
Agency: 21UTAH
Date Created: 11/30/91
Location: NAVAJO LAKE 06 NR SPRING #3
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 594686
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 18.30
On/Off RF1:
RF3 Index: 15010008015800.00
RF3 Mile Point: 0.00
Distance from RF3: 0.13
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0066

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: ZION0067

NPS Station ID: ZION0067
LAT/LON: 37.504726/-112.788892
Agency: 112WRD
Date Created: 06/20/87
Location: (C-38- 8)18CBD-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 373017112472001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 14.30
On/Off RF1:
RF3 Index: 15010008039700.00
RF3 Mile Point: 0.00
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0067

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	1	128.	128.	128.	128.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/81-07/15/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/15/81-07/15/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	1	166.	166.	166.	166.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0067

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0067

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0068

NPS Station ID: ZION0068
LAT/LON: 37.362504/-112.789726
Agency: 112WRD
Date Created: 08/01/87
Location: ORDERVILLE GULCH BLW. TWIN HOLLOW
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372145112472301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 13.90
On/Off RF1:
RF3 Index: 15010008058606.77
RF3 Mile Point: 8.06
Distance from RF3: 0.61
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0068

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/86-06/22/86	1		22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/86-06/22/86	1		28.	28.	28.	28.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/86-06/22/86	1		990.	990.	990.	990.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/22/86-06/22/86	1		8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/22/86-06/22/86	1		8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/86-06/22/86	1		0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/22/86-06/22/86	1		7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/22/86-06/22/86	1		7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/86-06/22/86	1		0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/86-06/22/86	1		411.	411.	411.	411.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/86-06/22/86	1	##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/86-06/22/86	1		110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/86-06/22/86	1		63.	63.	63.	63.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/86-06/22/86	1		15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/86-06/22/86	1		3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/86-06/22/86	1		6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/86-06/22/86	1		220.	220.	220.	220.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/86-06/22/86	1		0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/86-06/22/86	1		10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/22/86-06/22/86	1		38.	38.	38.	38.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/86-06/22/86	1		65.	65.	65.	65.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/22/86-06/22/86	1		20.	20.	20.	20.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0068

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0068

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0069

NPS Station ID: ZION0069
LAT/LON: 37.343615/-112.791392
Agency: 112WRD
Date Created: 05/21/88
Location: (C-40- 9)12dad-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372037112472901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 10.50
On/Off RF1:
RF3 Index: 15010008056200.00
RF3 Mile Point: 1.39
Distance from RF3: 0.54
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0069

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/86-07/12/86	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/12/86-07/12/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/86-07/12/86	1	980.	980.	980.	980.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/12/86-07/12/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/86-07/12/86	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/86-07/12/86	1	290.	290.	290.	290.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0069

			Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
Parameter	Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.	6.5	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

Station Inventory for Station: ZION0070

NPS Station ID: ZION0070
LAT/LON: 37.345837/-112.792227
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 9)12daa-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372045112473201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 10.20
On/Off RF1:
RF3 Index: 15010008056200.00
RF3 Mile Point: 1.39
Distance from RF3: 0.47
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0070

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/86-07/13/86	1	11.5	11.5	11.5	11.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/13/86-07/13/86	1	29.5	29.5	29.5	29.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/13/86-07/13/86	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/86-07/13/86	1	610.	610.	610.	610.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/13/86-07/13/86	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/13/86-07/13/86	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/86-07/13/86	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/13/86-07/13/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/13/86-07/13/86	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/86-07/13/86	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/86-07/13/86	1	276.	276.	276.	276.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/13/86-07/13/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/13/86-07/13/86	1	79.	79.	79.	79.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/86-07/13/86	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/86-07/13/86	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/13/86-07/13/86	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/13/86-07/13/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/13/86-07/13/86	1	54.	54.	54.	54.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/13/86-07/13/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/13/86-07/13/86	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/13/86-07/13/86	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/86-07/13/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/13/86-07/13/86	1	347.	347.	347.	347.	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: ZION0070

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0070

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0071

NPS Station ID: ZION0071
LAT/LON: 37.381392/-112.795837
Agency: 112WRD
Date Created: 08/01/87
Location: (C-39- 9)36abd-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372253112474501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 22.90
On/Off RF1:
RF3 Index: 15010008058800.00
RF3 Mile Point: 0.66
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0071

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/86-07/17/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/17/86-07/17/86	1	28.5	28.5	28.5	28.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/17/86-07/17/86	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/86-07/17/86	1	840.	840.	840.	840.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/17/86-07/17/86	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/17/86-07/17/86	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/17/86-07/17/86	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/17/86-07/17/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/17/86-07/17/86	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/17/86-07/17/86	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/17/86-07/17/86	1	314.	314.	314.	314.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/17/86-07/17/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/17/86-07/17/86	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/86-07/17/86	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/86-07/17/86	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/17/86-07/17/86	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/17/86-07/17/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/17/86-07/17/86	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/17/86-07/17/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/17/86-07/17/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/17/86-07/17/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/86-07/17/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/17/86-07/17/86	1	566.	566.	566.	566.	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: ZION0071

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0071

Parameter				Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0072

NPS Station ID: ZION0072 LAT/LON: 37.523615/-112.795837 Agency: 113FORS4 Date Created: 04/02/83
Location: NAVAJO LAKE - ADJACENT TO NAVAJO LAKE LODGE FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 070205A /16030001205A/028070205A /H20
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: GREAT BASIN Elevation: 0 Water Body Id:
Minor Basin: SEVIER RIVER - ASAY CREEK ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 1.70 On/Off RF1:
RF3 Index: 15010008001309.65 RF3 Mile Point: 17.55 Distance from RF3: 0.02 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0072

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/77-07/13/77	1	19.1	19.1	19.1	19.1	0.	0.	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/10/74-09/15/76	13	59.	60.462	69.	54.	21.269	4.612	54.	57.5	65.	67.8
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/15/75-09/25/75	4	1.	0.95	1.7	0.1	0.437	0.661	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/76-07/13/77	5	2.1	4.62	12.6	2.1	20.727	4.553	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/10/74-07/13/77	14	110.	115.857	213.	45.	1716.44	41.43	57.5	94.5	142.5	186.5
00300	OXYGEN, DISSOLVED MG/L	08/08/75-07/13/77	6	10.1	9.8	10.7	8.	0.952	0.976	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/75-07/13/77	9	9.	8.989	10.1	8.2	0.419	0.647	8.2	8.4	9.5	10.1
00400	CONVERTED PH (STANDARD UNITS)	07/15/75-07/13/77	9	9.	8.677	10.1	8.2	0.528	0.727	8.2	8.4	9.5	10.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/75-07/13/77	9	0.001	0.002	0.006	0.	0.	0.002	0.	0.	0.004	0.006
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/74-07/13/77	14	0.15	0.215	0.707	0.01	0.053	0.229	0.02	0.049	0.285	0.704
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/10/74-07/13/77	14	0.14	0.216	0.73	0.01	0.044	0.209	0.015	0.045	0.37	0.615
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/17/76-07/13/77	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/17/76-07/13/77	5 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			0.5								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/15/75-09/25/75	4 ##	-0.301	-0.301	-0.301	-0.301	0.	0.	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			0.5								

** - 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: ZION0072

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	5	0	0.00	4	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	5	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	9	5	0.56	8	5	0.63				1	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	8	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	12	0	0.00				2	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	5	0	0.00	4	0	0.00				1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	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

Station Inventory for Station: ZION0073

NPS Station ID: ZION0073
LAT/LON: 37.434170/-112.797782
Agency: 112WRD
Date Created: 06/05/82
Location: (D-39- 1) 9DAA-
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372603112475201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 14070006
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 14070006
RF1 Mile Point: 0.000
Distance from RF1: 0.60
On/Off RF1:
RF3 Index: 15010008001026.56
RF3 Mile Point: 27.24
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0073

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/81-03/04/82	2	13.75	13.75	22.5	5.	153.125	12.374	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/22/81-03/04/82	2	0.45	0.45	0.7	0.2	0.125	0.354	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/81-03/04/82	2	3080.	3080.	3150.	3010.	9800.	98.995	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/81-03/04/82	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/81-03/04/82	2	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-03/04/82	2	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/22/81-03/04/82	2	8.45	8.45	8.9	8.	0.405	0.636	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/22/81-03/04/82	2	8.25	8.25	8.9	8.	0.485	0.697	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-03/04/82	2	0.006	0.006	0.01	0.001	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-03/04/82	2	290.	290.	320.	260.	1800.	42.426	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-03/04/82	2	63.	63.	64.	62.	2.	1.414	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-03/04/82	2	31.5	31.5	38.	25.	84.5	9.192	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-03/04/82	2	640.	640.	640.	640.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/22/81-03/04/82	2	16.5	16.5	17.	16.	0.5	0.707	**	**	**	**
00932	SODIUM, PERCENT	04/22/81-03/04/82	2	82.5	82.5	84.	81.	4.5	2.121	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-03/04/82	2	4.55	4.55	5.5	3.6	1.805	1.344	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-03/04/82	2	160.	160.	180.	140.	800.	28.284	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-03/04/82	2	1200.	1200.	1300.	1100.	20000.	141.421	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-03/04/82	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-03/04/82	2	7.25	7.25	9.1	5.4	6.845	2.616	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-03/04/82	2	205.	205.	320.	90.	26450.	162.635	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-03/04/82	2	69000.	69000.	74000.	64000.	50000000.	7071.068	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/22/81-03/04/82	2	69000.	69000.	74000.	64000.	50000000.	7071.068	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-03/04/82	2	35.	35.	50.	20.	450.	21.213	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-03/04/82	2	760.	760.	820.	700.	7200.	84.853	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-03/04/82	2	770.	770.	830.	710.	7200.	84.853	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-03/04/82	2	10.	10.	10.	10.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-03/04/82	2	2260.	2260.	2380.	2140.	28800.	169.706	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-03/04/82	2	2.48	2.48	3.93	1.03	4.205	2.051	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-03/04/82	2	3.075	3.075	3.24	2.91	0.054	0.233	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/22/81-03/04/82	2	3920.	3920.	5380.	2460.	4263200.	2064.752	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-03/04/82	2	3.4	3.4	4.5	2.3	2.42	1.556	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	1	4.1	4.1	4.1	4.1	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: ZION0073

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	2	1.00	1	1	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0074

NPS Station ID: ZION0074
Location: NAVAJO LAKE
Station Type: /TYPA/AMBNT/LAKE
RMI-Indexes:
RMI-Miles:
HUC: 16030001
Major Basin:
Minor Basin:
RF1 Index: 16030001
RF3 Index: 15010008112900.00
Description:

LAT/LON: 37.522781/-112.797782
Depth of Water: 11
Elevation: 0
RF1 Mile Point: 0.000
RF3 Mile Point: 0.00

Agency: 11EPALES
FIPS State/County: 49025 UTAH/KANE
STORET Station ID(s): 491102
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 19.70
Distance from RF3: 0.14

Date Created: / /
On/Off RF1:
On/Off RF3:

Parameter Inventory for Station: ZION0074

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/75-09/25/75	4	16.85	16.85	17.7	16.	0.963	0.981	**	**	**	**
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	08/13/75-09/25/75	4	95.	95.	96.	94.	0.667	0.816	**	**	**	**
00077	TRANSPARENCY, SECCHI DISC (INCHES)	09/25/75-09/25/75	1	132.	132.	132.	132.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/13/75-09/25/75	4	100.	99.75	121.	78.	574.917	23.977	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/13/75-09/25/75	4	9.2	9.25	9.6	9.	0.09	0.3	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/75-09/25/75	4	9.35	9.338	9.55	9.1	0.061	0.246	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/75-09/25/75	4	9.305	9.287	9.55	9.1	0.064	0.253	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/75-09/25/75	4	0.	0.001	0.001	0.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/13/75-09/25/75	4	64.	64.75	74.	57.	59.583	7.719	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/13/75-09/25/75	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/13/75-09/25/75	4	0.45	0.45	0.5	0.4	0.003	0.058	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/13/75-09/25/75	4 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/13/75-09/25/75	4	0.017	0.017	0.019	0.014	0.	0.002	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/13/75-09/25/75	4	0.004	0.003	0.005	0.001	0.	0.002	**	**	**	**
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	08/13/75-09/25/75	2	1.95	1.95	2.2	1.7	0.125	0.354	**	**	**	**
72025	DEPTH OF POND OR RESERVOIR IN FEET	08/13/75-09/25/75	2	11.	11.	11.	11.	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: ZION0074

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00									
00400	PH	Other-Hi Lim.	9.	4	4	1.00	4	4	1.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	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

Station Inventory for Station: ZION0075

NPS Station ID: ZION0075
LAT/LON: 37.521948/-112.798892
Agency: 21UTAH
Date Created: 11/30/91
Location: LARSON SPRING NR NAVAJO LAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 594695
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 16.10
On/Off RF1:
RF3 Index: 15010008015700.00
RF3 Mile Point: 0.00
Distance from RF3: 0.07
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0075

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/93-06/16/94	10	4.5	4.74	6.4	3.8	0.629	0.793	3.83	4.175	5.175	6.33
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/11/93-06/16/94	9	16.	17.678	25.	12.	22.009	4.691	12.	13.5	22.5	25.
00058	FLOW, RATE GALLONS/MIN	09/10/93-09/10/93	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/11/93-06/16/94	6	0.6	3.767	18.	0.2	49.751	7.053	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/11/93-06/16/94	9	378.	689.667	3610.	129.	1207482.75	1098.855	129.	270.	402.	3610.
00300	OXYGEN, DISSOLVED MG/L	06/11/93-06/16/94	9	9.3	9.778	11.6	8.6	0.969	0.985	8.6	9.15	10.65	11.6
00400	PH (STANDARD UNITS)	06/11/93-06/16/94	9	7.5	7.679	8.3	7.2	0.184	0.429	7.2	7.4	8.2	8.3
00400	CONVERTED PH (STANDARD UNITS)	06/11/93-06/16/94	9	7.5	7.535	8.3	7.2	0.207	0.455	7.2	7.4	8.2	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/11/93-06/16/94	9	0.032	0.029	0.063	0.005	0.	0.02	0.005	0.006	0.04	0.063
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	9	206.	202.556	209.	191.	50.278	7.091	191.	194.5	208.	209.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/11/93-06/16/94	10 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/11/93-06/16/94	10 ##	0.025	0.033	0.105	0.025	0.001	0.025	0.025	0.025	0.025	0.097
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/28/93-06/16/94	9 ##	0.05	0.131	0.48	0.05	0.02	0.142	0.05	0.05	0.175	0.48
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/93-06/16/94	10	0.06	0.056	0.08	0.01	0.	0.02	0.013	0.048	0.07	0.079
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/11/93-06/16/94	10 ##	0.005	0.006	0.011	0.005	0.	0.002	0.005	0.005	0.006	0.011
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/11/93-06/16/94	10 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/28/93-06/16/94	9	200.	193.	207.	155.	304.25	17.443	155.	183.	207.	207.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/93-06/16/94	9	62.	59.889	65.	44.	45.361	6.735	44.	58.	65.	65.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/93-06/16/94	9	11.	10.622	11.	9.2	0.564	0.751	9.2	10.2	11.	11.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/93-06/16/94	9 ##	0.5	0.567	1.1	0.5	0.04	0.2	0.5	0.5	0.5	1.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/28/93-06/16/94	9 ##	0.5	0.578	1.2	0.5	0.054	0.233	0.5	0.5	0.5	1.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/28/93-06/16/94	9 ##	0.5	0.889	2.	0.5	0.424	0.651	0.5	0.5	1.5	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/28/93-06/16/94	9 ##	5.	4.4	6.9	2.5	3.628	1.905	2.5	2.5	6.35	6.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/28/93-06/16/94	9	4.1	4.1	5.	2.9	0.535	0.731	2.9	3.5	4.75	5.
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/11/93-06/16/94	10 ##	1.5	1.65	3.	1.5	0.225	0.474	1.5	1.5	1.5	2.85
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-06/16/94	10	1.	1.2	2.	0.	0.622	0.789	0.	0.75	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0075

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	9	0	0.00	5	0	0.00				4	0	0.00			
00400	PH	Other-Hi Lim.	9.	9	0	0.00	5	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	5	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: ZION0075

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	10	0	0.00	6	0	0.00				4	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	9	0	0.00	6	0	0.00				3	0	0.00			
		Drinking Water	250.	9	0	0.00	6	0	0.00				3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	9	0	0.00	6	0	0.00				3	0	0.00			

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

Station Inventory for Station: ZION0076

NPS Station ID: ZION0076 LAT/LON: 37.414337/-112.799727 Agency: 11NPSWRD Date Created: 09/13/97
Location: NORTH FORK VIRGIN RIVER ABOVE BULLOCK CANYON FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_NPSWRD_30
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 6200 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE STRAIGHT CANYON KANE CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER ABOVE BULLOCK CANYON NEAR GLENDALE. DATA FOR THIS SITE ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND DATA FOR ADDITIONAL STATIONS NOT UPLOADED TO STORET. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. TEL. (970)225-3516.

Parameter Inventory for Station: ZION0076

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/03/92-10/05/92	10	12.	12.2	16.	8.	6.622	2.573	8.1	10.5	14.25	15.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/03/92-10/05/92	10	8.75	8.89	9.8	8.4	0.219	0.468	8.4	8.475	9.325	9.76
00406	PH, FIELD, STANDARD UNITS SU	06/03/92-10/05/92	10	8.17	8.188	8.35	8.09	0.007	0.085	8.091	8.123	8.235	8.346
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/03/92-10/05/92	10	8.17	8.181	8.35	8.09	0.007	0.086	8.091	8.122	8.235	8.346
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/03/92-10/05/92	10	0.007	0.007	0.008	0.004	0.	0.001	0.005	0.006	0.008	0.008
00600	NITROGEN, TOTAL (MG/L AS N)	06/03/92-10/05/92	10	0.1	0.09	0.2	0.	0.008	0.088	0.	0.	0.2	0.2
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/03/92-10/05/92	10 ##	0.05	0.07	0.2	0.	0.007	0.082	0.	0.	0.125	0.2
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/03/92-10/05/92	10 ##	0.	0.02	0.2	0.	0.004	0.063	0.	0.	0.	0.18
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/03/92-10/05/92	10 ##	0.	0.005	0.03	0.	0.	0.01	0.	0.	0.01	0.028
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/03/92-10/05/92	10	0.415	0.403	0.61	0.23	0.018	0.134	0.231	0.278	0.508	0.608
50793	INVALID PARAMETER	06/03/92-10/05/92	10	0.101	0.472	1.939	0.	0.495	0.704	0.	0.011	1.063	1.885
50794	INVALID PARAMETER	06/03/92-10/05/92	10	0.122	0.163	0.603	0.009	0.03	0.172	0.012	0.049	0.215	0.565
50795	INVALID PARAMETER	06/03/92-10/05/92	10	19.5	40.9	212.	2.	4021.878	63.418	2.2	4.75	45.75	197.1

** - 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: ZION0076

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	10	0	0.00	7	0	0.00				3	0	0.00			
00406	PH, FIELD	Other-Hi Lim.	9.	10	0	0.00	7	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	10	0	0.00	7	0	0.00				3	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	10	0	0.00	7	0	0.00				3	0	0.00			

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

Station Inventory for Station: ZION0077

NPS Station ID: ZION0077
LAT/LON: 37.418337/-112.799727
Agency: 112WRD
Date Created: 02/20/76
Location: N FK VIRGIN R BLW BULLOCH CANYON NR GLENDALE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405420
RMI-Indexes: 1101000 005770 01810
Within Park Boundary: No
RMI-Miles: 0386.50 0151.80 020.50
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008015
RF1 Mile Point: 11.240
Distance from RF1: 16.40
On/Off RF1: ON
RF3 Index: 15010008015600.00
RF3 Mile Point: 0.00
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/74-06/12/86	68	9.	9.529	19.	0.	24.648	4.965	2.95	5.5	14.375	16.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-06/12/86	3	26.5	24.333	28.	18.5	26.083	5.107	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	2	602.5	602.5	605.	600.	12.5	3.536	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/26/74-09/21/76	7	18.	18.	30.	9.	55.	7.416	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/04/74-06/12/86	75	18.	21.907	85.	5.	263.329	16.227	9.	12.	23.	48.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/74-06/12/86	71	405.	412.113	550.	300.	1734.044	41.642	360.	385.	435.	472.
00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/03/82	2	8.4	8.4	8.6	8.2	0.08	0.283	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/12/86	3	8.15	8.25	8.5	8.1	0.048	0.218	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/12/86	3	8.15	8.217	8.5	8.1	0.049	0.222	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/12/86	3	0.007	0.006	0.008	0.003	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/12/86	3	8.1	8.133	8.2	8.1	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/12/86	3	8.1	8.131	8.2	8.1	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/12/86	3	0.008	0.007	0.008	0.006	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/12/86-06/12/86	1	209.	209.	209.	209.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/12/86	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	2	225.	225.	230.	220.	50.	7.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/12/86	3	54.	54.	54.	54.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/12/86	3	21.	21.	22.	20.	1.	1.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/12/86	3	2.6	2.6	3.	2.2	0.16	0.4	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-05/03/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/12/86	3	1.1	1.133	1.4	0.9	0.063	0.252	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-06/12/86	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/12/86	3	20.	20.333	21.	20.	0.333	0.577	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-06/12/86	3	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/12/86	3	11.	10.3	12.	7.9	4.57	2.138	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	2	5.	5.	10.	0.	50.	7.071	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/12/86-06/12/86	1	17.	17.	17.	17.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/12/86-06/12/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	2	229.5	229.5	237.	222.	112.5	10.607	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/03/82	2	15.56	15.56	25.2	5.92	185.859	13.633	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/03/82	2	0.31	0.31	0.32	0.3	0.	0.014	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/26/74-10/02/76	8	27.5	26.625	39.	16.	69.125	8.314	**	**	**	**
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/26/74-10/02/76	8	39.	37.875	59.	21.	184.982	13.601	**	**	**	**
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/26/74-10/02/76	6	65.5	66.	96.	37.	600.8	24.511	**	**	**	**
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/26/74-10/02/76	8	74.5	73.625	100.	49.	376.268	19.398	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/20/75-10/02/76	7	82.	80.857	98.	65.	146.81	12.116	**	**	**	**
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/20/75-10/02/76	7	96.	93.714	99.	86.	25.905	5.09	**	**	**	**
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/20/75-10/02/76	7	100.	99.857	100.	99.	0.143	0.378	**	**	**	**
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	05/19/75-05/19/75	1	100.	100.	100.	100.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/26/74-06/12/86	9	1160.	9747.111	33800.	15.	200153906.611	14147.576	15.	305.	24700.	33800.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/26/74-10/02/76	8	42.5	775.425	2560.	8.4	1147182.588	1071.066	**	**	**	**

** - Less than 9 observations ## - 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: ZION0077

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/74-06/12/86	39	9.	8.872	19.	0.	30.47	5.52	2.	3.5	14.5	16.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/04/74-06/12/86	47	14.	15.128	34.	5.	42.549	6.523	7.8	10.	19.	25.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/74-06/12/86	43	400.	406.163	485.	335.	1164.092	34.119	362.	380.	430.	455.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/74-06/12/86	13	7.5	7.654	12.5	3.	10.266	3.204	3.	5.25	10.5	12.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/04/74-06/12/86	13	22.	32.692	68.	10.	421.731	20.536	10.4	17.	50.	67.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/74-06/12/86	13	440.	451.923	550.	375.	1968.91	44.372	387.	425.	480.	526.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0077

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/74-06/12/86	16	13.5	12.656	16.5	6.	10.091	3.177	7.75	9.375	15.	16.15
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/04/74-06/12/86	15	23.	33.8	85.	15.	476.743	21.834	16.2	20.	52.	76.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/74-06/12/86	15	400.	394.667	450.	300.	1583.81	39.797	330.	360.	420.	450.

** - Less than 9 observations ## - Computed 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: ZION0078

NPS Station ID: ZION0078 LAT/LON: 37.516670/-112.800004 Agency: 21UTDHDW Date Created: 05/26/90
Location: TEAH CAMPGROUND - OLSEN SPRING FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1302001 /UT4901059001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 12.00 On/Off RF1:
RF3 Index: 15010008015600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.41 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0078

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/15/78-09/15/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/15/78-09/15/78	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/15/78-09/15/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/15/78-09/15/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/15/78-09/15/78	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/15/78-09/15/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/15/78-09/15/78	1	167.	167.	167.	167.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/15/78-09/15/78	1	204.	204.	204.	204.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/15/78-09/15/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/15/78-09/15/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/15/78-09/05/84	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/15/78-09/15/78	1	176.	176.	176.	176.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/15/78-09/15/78	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/15/78-09/15/78	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/15/78-09/15/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/15/78-09/15/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/15/78-09/15/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/15/78-09/05/84	2	8.	8.	12.	4.	32.	5.657	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/15/78-09/15/78	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/15/78-09/15/78	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/15/78-09/15/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/15/78-09/15/78	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/15/78-09/15/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/15/78-09/15/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/15/78-09/15/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/15/78-09/15/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/15/78-09/15/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/15/78-09/15/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/15/78-09/15/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/15/78-09/15/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/15/78-09/15/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/15/78-09/15/78	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/15/78-09/15/78	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

Parameter Inventory for Station: ZION0078

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/15/78-09/15/78	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/15/78-09/15/78	1	158.	158.	158.	158.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/15/78-09/15/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/15/78-09/15/78	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: ZION0078

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0079

NPS Station ID: ZION0079
LAT/LON: 37.363392/-112.800115
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB502R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_48 /5075819
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Clear Creek Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0079

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	1	590.	590.	590.	590.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/30/80-06/30/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	1	16.4	16.4	16.4	16.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	1	19.82	19.82	19.82	19.82	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	1	121.	121.	121.	121.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	1	269.	269.	269.	269.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	1	1.879	1.879	1.879	1.879	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/30/80-06/30/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/30/80-06/30/80	1	30.	30.	30.	30.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	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: ZION0079

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0080

NPS Station ID: ZION0080 LAT/LON: 37.516670/-112.800004 Agency: 21UTDHDW Date Created: 05/26/90
Location: BOY SCOUT SPRING - BOY SCOUT SPR. FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1302101 /UT4901053001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 12.00 On/Off RF1:
RF3 Index: 15010008015600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.41 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0080

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/14/78-09/14/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/14/78-09/14/78	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	205.	205.	205.	205.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	204.	204.	204.	204.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	1	67.	67.	67.	67.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	2	12.5	12.5	20.	5.	112.5	10.607	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	1	35.	35.	35.	35.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	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

Parameter Inventory for Station: ZION0080

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	1	214.	214.	214.	214.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	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: ZION0080

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0081

NPS Station ID: ZION0081 LAT/LON: 37.516670/-112.800004 Agency: 21UTDHDW Date Created: 05/26/90
Location: FOURMILE BENCH DUMP STA. - SPRING FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2706401 /UT4905018001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 12.80 On/Off RF1:
RF3 Index: 15010008003503.05 RF3 Mile Point: 3.13 Distance from RF3: 0.31 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0081

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/84-05/22/84	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/84-05/22/84	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0081

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0082

NPS Station ID: ZION0082 LAT/LON: 37.516670/-112.800004 Agency: 21UTDHDW Date Created: 05/26/90
Location: NAVAJO LAKE SPRUCES CG - LARSON LODGE SP FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1301901 /UT4909014001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 8.60 On/Off RF1:
RF3 Index: 15010008052000.00 RF3 Mile Point: 0.59 Distance from RF3: 0.04 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/14/78-09/14/78	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/14/78-09/14/78	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	203.	203.	203.	203.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	1	248.	248.	248.	248.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	204.	204.	204.	204.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	2	8.	8.	11.	5.	18.	4.243	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	1	215.	215.	215.	215.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	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: ZION0082

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0083

NPS Station ID: ZION0083
LAT/LON: 37.355004/-112.800560
Agency: 112WRD
Date Created: 08/01/87
Location: ORDERVILLE GULCH ABV. ROADCROSSING
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372118112480201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 15.70
On/Off RF1:
RF3 Index: 15010008058606.77
RF3 Mile Point: 7.85
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0083

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/86-11/06/86	2	14.5	14.5	26.5	2.5	288.	16.971	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/86-06/22/86	1	29.5	29.5	29.5	29.5	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/86-11/06/86	2	0.3	0.3	0.4	0.2	0.02	0.141	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/86-11/06/86	2	730.	730.	810.	650.	12800.	113.137	**	**	**	**
00400	PH (STANDARD UNITS)	06/22/86-06/22/86	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/22/86-06/22/86	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/86-06/22/86	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/22/86-06/22/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/22/86-06/22/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/86-06/22/86	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/86-06/22/86	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/86-06/22/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/86-06/22/86	1	61.	61.	61.	61.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/86-06/22/86	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/86-06/22/86	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/86-06/22/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/22/86-06/22/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/86-06/22/86	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/86-06/22/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/86-06/22/86	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/22/86-06/22/86	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/86-06/22/86	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0083

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0083

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0084

NPS Station ID: ZION0084
LAT/LON: 37.526115/-112.802226
Agency: 21UTAH
Date Created: 11/23/91
Location: NAVAJO LAKE 03 UPPER END
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 594683
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 20.60
On/Off RF1:
RF3 Index: 15010008112900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.21
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0084

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-08/08/95	30	13.95	12.75	18.4	1.	23.376	4.835	2.48	11.1	15.85	17.69
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-09/09/94	11	20.	19.645	25.	14.	13.143	3.625	14.2	16.	23.	24.82
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/05/88-06/29/93	8	1.15	1.313	3.	0.6	0.573	0.757	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	10/05/88-06/29/95	20	2.6	2.785	4.5	1.2	0.939	0.969	1.52	2.025	3.575	4.18
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-08/08/95	30	213.	189.033	250.	109.	2306.033	48.021	113.2	138.5	230.	239.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/05/88-06/14/90	6	152.	139.5	160.	100.	586.3	24.214	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/05/88-08/08/95	29	8.9	8.652	10.8	2.1	2.654	1.629	7.3	7.95	9.4	10.5
00335	COD, .025N K2CR2O7 MG/L	10/05/88-09/10/93	8 ##	7.	19.375	91.	7.	849.125	29.14	**	**	**	**
00400	PH (STANDARD UNITS)	10/05/88-08/08/95	30	8.5	8.697	10.1	7.7	0.417	0.646	7.91	8.2	9.175	9.6
00400	CONVERTED PH (STANDARD UNITS)	10/05/88-08/08/95	30	8.5	8.366	10.1	7.7	0.53	0.728	7.91	8.2	9.175	9.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-08/08/95	30	0.003	0.004	0.02	0.	0.	0.005	0.	0.001	0.006	0.012
00403	PH, LAB, STANDARD UNITS SU	10/05/88-08/15/90	7	8.3	8.557	9.3	8.	0.24	0.489	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/05/88-08/15/90	7	8.3	8.373	9.3	8.	0.279	0.528	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-08/15/90	7	0.005	0.004	0.01	0.001	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/05/88-08/15/90	7	0.	0.143	1.	0.	0.143	0.378	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/05/88-09/09/94	18	104.	95.611	130.	55.	758.016	27.532	55.	71.75	120.	129.1
00440	BICARBONATE ION (MG/L AS HCO3)	10/05/88-08/15/90	7	92.	78.429	103.	45.	589.619	24.282	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/05/88-08/15/90	7	0.	3.286	11.	0.	22.571	4.751	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-08/08/95	21 ##	1.5	2.31	10.	1.5	5.762	2.4	1.5	1.5	1.5	7.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-08/08/95	30 ##	0.025	0.031	0.085	0.003	0.	0.017	0.025	0.025	0.025	0.07
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-06/14/90	5 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-06/14/90	5	0.01	0.014	0.03	0.005	0.	0.011	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	3	0.02	0.015	0.02	0.005	0.	0.009	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/29/95	26	0.3	0.359	1.1	0.05	0.057	0.238	0.1	0.223	0.44	0.75
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-08/08/95	22 ##	0.01	0.021	0.2	0.005	0.002	0.041	0.01	0.01	0.01	0.037
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-08/08/95	30	0.006	0.009	0.038	0.	0.	0.008	0.005	0.005	0.011	0.021
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-08/08/95	22 ##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.008
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/05/88-06/14/90	5 ##	0.003	0.008	0.028	0.003	0.	0.011	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/05/88-09/10/93	8	4.1	6.25	23.5	2.5	49.52	7.037	**	**	**	**
00745	SULFIDE, TOTAL (MG/L AS S)	08/15/90-08/15/90	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/05/88-09/09/94	19	100.	91.789	126.	51.	760.509	27.577	51.	63.	117.	124.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/05/88-09/09/94	19	28.	24.574	39.	8.9	128.542	11.338	9.	12.	35.	39.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/05/88-09/09/94	19	7.2	7.405	9.	6.5	0.412	0.642	6.8	7.	8.	8.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/05/88-09/09/94	19 ##	0.5	0.553	1.	0.5	0.025	0.158	0.5	0.5	0.5	1.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/05/88-09/09/94	19 ##	0.5	0.574	1.9	0.5	0.103	0.321	0.5	0.5	0.5	0.5
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/05/88-09/09/94	18 ##	0.5	0.489	0.8	0.	0.02	0.141	0.45	0.5	0.5	0.53
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/05/88-09/09/94	19 ##	2.5	3.021	9.1	0.5	5.721	2.392	0.5	1.	5.	5.4

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

Parameter Inventory for Station: ZION0084

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/19/93-09/09/94	10	2.5	2.47	3.	1.5	0.169	0.411	1.58	2.3	2.725	2.98
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/05/88-08/15/90	5 ##	0.5	0.4	0.5	0.25	0.019	0.137	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	2 ##	25.	25.	48.	2.	1058.	32.527	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	06/25/91-08/13/91	2 ##	0.991	0.991	1.681	0.301	0.952	0.976	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			9.798								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/25/91-08/13/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	2 ##	5.	5.	8.	2.	18.	4.243	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	06/25/91-08/13/91	2 ##	0.602	0.602	0.903	0.301	0.181	0.426	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			4.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/08/95	21	0.9	0.886	2.5	0.	0.539	0.734	0.	0.2	1.4	2.02
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-08/08/95	21	3.	26.571	90.	0.	1299.957	36.055	1.5	1.5	69.	84.8
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/11/93-08/08/95	14	1.	1.429	4.	0.	1.648	1.284	0.	0.75	2.	4.
71830	HYDROXIDE ION (MG/L AS OH)	10/05/88-08/15/90	7	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/09/89-08/15/90	3	0.006	0.006	0.009	0.003	0.	0.003	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	10/05/88-08/08/95	29	2.	1.866	5.9	0.	3.962	1.991	0.	0.	3.6	5.
82702	AS DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	0.55	0.92	2.5	0.5	0.781	0.884	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/05/88-08/15/90	5	20.	24.	30.	20.	30.	5.477	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/05/88-08/15/90	5	0.047	0.063	0.15	0.01	0.003	0.056	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	2.5	7.1	14.	2.5	39.675	6.299	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/05/88-08/15/90	5 ##	10.	10.	10.	10.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0084

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	8	0	0.00	4	0	0.00				4	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	1	0.03	19	1	0.05				10	0	0.00			
00400	PH	Other-Hi Lim.	9.	30	10	0.33	19	6	0.32				11	4	0.36			
		Other-Lo Lim.	6.5	30	0	0.00	19	0	0.00				11	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	7	2	0.29	4	2	0.50				3	0	0.00			
		Other-Lo Lim.	6.5	7	0	0.00	4	0	0.00				3	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	2	0	0.00				3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3	0	0.00	3	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	0	0.00	2	0	0.00				3	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3	0	0.00	3	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	22	0	0.00	13	0	0.00				9	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	18	0	0.00	12	0	0.00				6	0	0.00			
		Drinking Water	250.	18	0	0.00	12	0	0.00				6	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	19	0	0.00	13	0	0.00				6	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	50.	5	0	0.00	4	0	0.00				1	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0084

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-08/08/95	19	15.7	12.947	18.4	1.	33.658	5.802	1.8	10.8	17.2	18.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-08/08/95	19	214.	184.105	240.	109.	2647.211	51.451	111.	124.	227.	237.
00300	OXYGEN, DISSOLVED MG/L	10/05/88-08/08/95	19	8.7	8.121	10.	2.1	2.825	1.681	6.7	7.5	9.1	9.3
00400	PH (STANDARD UNITS)	10/05/88-08/08/95	19	8.5	8.721	10.1	7.7	0.508	0.713	7.8	8.3	9.4	10.
00400	CONVERTED PH (STANDARD UNITS)	10/05/88-08/08/95	19	8.5	8.342	10.1	7.7	0.66	0.812	7.8	8.3	9.4	10.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-08/08/95	19	0.003	0.005	0.02	0.	0.	0.005	0.	0.	0.005	0.016
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-08/08/95	13 ##	1.5	2.115	9.	1.5	4.298	2.073	1.5	1.5	1.5	6.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-08/08/95	18 ##	0.025	0.027	0.085	0.003	0.	0.015	0.023	0.025	0.025	0.031
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/29/95	16	0.305	0.348	0.82	0.05	0.035	0.187	0.085	0.26	0.46	0.666
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-08/08/95	18	0.005	0.009	0.038	0.	0.	0.01	0.	0.005	0.01	0.031
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/08/95	13	0.5	0.715	2.1	0.	0.496	0.705	0.	0.1	1.3	1.94
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-08/08/95	13	1.5	22.846	90.	0.	1148.849	33.895	0.6	1.5	61.	82.
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	10/05/88-08/08/95	18	2.05	2.117	5.3	0.	3.471	1.863	0.	0.	3.775	5.03

** - 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 #3: 5/10 to 6/30 - Station ZION0084

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-08/08/95	11	13.4	12.409	15.1	6.8	7.003	2.646	7.18	11.2	14.3	15.08
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-08/08/95	11	186.	197.545	250.	140.	1796.673	42.387	142.2	151.	237.	250.
00300	OXYGEN, DISSOLVED MG/L	10/05/88-08/08/95	10	9.75	9.66	10.8	8.3	0.883	0.94	8.34	8.775	10.575	10.8
00400	PH (STANDARD UNITS)	10/05/88-08/08/95	11	8.5	8.655	9.5	7.9	0.291	0.539	7.96	8.2	9.1	9.48
00400	CONVERTED PH (STANDARD UNITS)	10/05/88-08/08/95	11	8.5	8.411	9.5	7.9	0.356	0.596	7.96	8.2	9.1	9.48
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-08/08/95	11	0.003	0.004	0.013	0.	0.	0.004	0.	0.001	0.006	0.011
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-08/08/95	8 ##	1.5	2.625	10.	1.5	8.911	2.985	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-08/08/95	12 ##	0.025	0.036	0.07	0.025	0.	0.02	0.025	0.025	0.055	0.07
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/29/95	10	0.3	0.376	1.1	0.1	0.098	0.314	0.1	0.145	0.48	1.062
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-08/08/95	12	0.01	0.01	0.021	0.005	0.	0.005	0.005	0.005	0.012	0.02
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/08/95	8	1.05	1.163	2.5	0.	0.548	0.741	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-08/08/95	8	4.5	32.625	86.	1.5	1677.054	40.952	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	10/05/88-08/08/95	11	0.	1.455	5.9	0.	4.895	2.212	0.	0.	3.5	5.64

** - Less than 9 observations ## - Computed 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: ZION0085

NPS Station ID: ZION0085
LAT/LON: 37.523059/-112.803338
Agency: 21UTAH
Date Created: 11/30/91
Location: ELDERBERRY SPRING NR NAVAJO LAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 594694
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 19.10
On/Off RF1:
RF3 Index: 15010008016000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.18
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0085

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: ZION0086

NPS Station ID: ZION0086
LAT/LON: 37.332226/-112.803615
Agency: 112WRD
Date Created: 05/21/88
Location: (C-40- 9)13BDC-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371956112481301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 17.00
On/Off RF1:
RF3 Index: 15010008057302.54
RF3 Mile Point: 3.83
Distance from RF3: 0.10
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0086

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/86-08/22/86	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/22/86-08/22/86	1 ##	11.	11.	11.	11.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/22/86-08/22/86	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/22/86-08/22/86	1	980.	980.	980.	980.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/22/86-08/22/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/22/86-08/22/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/22/86-08/22/86	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/22/86-08/22/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/22/86-08/22/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/22/86-08/22/86	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/22/86-08/22/86	1	324.	324.	324.	324.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/22/86-08/22/86	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/22/86-08/22/86	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/22/86-08/22/86	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/22/86-08/22/86	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/22/86-08/22/86	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/22/86-08/22/86	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/22/86-08/22/86	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/22/86-08/22/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/22/86-08/22/86	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/22/86-08/22/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/22/86-08/22/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/22/86-08/22/86	1	730.	730.	730.	730.	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: ZION0086

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0086

Parameter				Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0087

NPS Station ID: ZION0087 LAT/LON: 37.527505/-112.805005 Agency: 21UTAH Date Created: 11/30/91
Location: STREAM AB NAVAJO LAKE AND BL NAVAJO LAKE SPRING FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 594691
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 16030001 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 16030001 RF1 Mile Point: 0.000 Distance from RF1: 20.40 On/Off RF1:
RF3 Index: 15010008016000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0087

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/27/93-08/08/95	7	6.6	6.457	7.3	5.4	0.43	0.655	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/27/93-06/16/94	4	20.	18.75	22.	13.	15.583	3.948	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/27/93-08/08/95	6	0.95	5.933	30.	0.8	139.207	11.799	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/27/93-08/08/95	7	339.	332.143	381.	227.	2481.476	49.814	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/27/93-08/08/95	7	9.1	9.414	10.5	9.	0.381	0.618	**	**	**	**
00400	PH (STANDARD UNITS)	08/27/93-08/08/95	7	7.5	7.543	8.	6.8	0.173	0.416	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/27/93-08/08/95	7	7.5	7.354	8.	6.8	0.214	0.463	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/27/93-08/08/95	7	0.032	0.044	0.158	0.01	0.003	0.052	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/27/93-08/08/95	7	183.	188.143	202.	182.	63.476	7.967	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/27/93-08/08/95	8 ##	1.5	1.625	2.	1.5	0.054	0.231	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/10/93-08/08/95	7 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/93-08/08/95	6	0.1	0.157	0.35	0.05	0.013	0.114	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/93-08/08/95	7	0.07	0.089	0.2	0.04	0.003	0.052	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/93-08/08/95	7 ##	0.005	0.009	0.024	0.005	0.	0.007	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/10/93-08/08/95	7 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/27/93-08/08/95	7	178.	176.	205.	147.	456.	21.354	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/27/93-08/08/95	7	55.	52.143	64.	39.	77.81	8.821	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/27/93-08/08/95	7	11.	11.143	12.	10.	0.476	0.69	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/27/93-08/08/95	7 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/27/93-08/08/95	7 ##	0.5	0.643	1.5	0.5	0.143	0.378	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/27/93-08/08/95	7 ##	0.5	0.464	0.5	0.25	0.009	0.094	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/27/93-08/08/95	7 ##	5.	4.043	5.8	2.5	2.163	1.471	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/27/93-08/08/95	7	5.2	5.	5.5	4.	0.273	0.523	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/27/93-08/08/95	8 ##	1.5	1.875	3.	1.5	0.482	0.694	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/27/93-08/08/95	8	1.	1.25	2.	0.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - 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: ZION0087

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	4	0	0.00				3	0	0.00			
00400	PH	Other-Hi Lim.	9.	7	0	0.00	4	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	7	0	0.00	4	0	0.00				3	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0087

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	4	0	0.00				3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	7	0	0.00	5	0	0.00				2	0	0.00			
		Drinking Water	250.	7	0	0.00	5	0	0.00				2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	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

Station Inventory for Station: ZION0088

NPS Station ID: ZION0088
LAT/LON: 37.523893/-112.805838
Agency: 112WRD
Date Created: 06/20/87
Location: (C-38- 8)12BDB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 373126112482101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030007
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030007
RF1 Mile Point: 0.000
Distance from RF1: 17.10
On/Off RF1:
RF3 Index: 15010008015900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.23
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0088

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	1	355.	355.	355.	355.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/15/81-07/15/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0088

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0088

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0089

NPS Station ID: ZION0089
LAT/LON: 37.284448/-112.807504
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 9)36CCB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371704112482701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 21.80
On/Off RF1:
RF3 Index: 15010008015500.00
RF3 Mile Point: 0.00
Distance from RF3: 0.14
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0089

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/20/86	4	9.75	13.25	24.5	9.	56.75	7.533	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/14/86-07/14/86	1	28.5	28.5	28.5	28.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/20/86	4	6.15	6.125	10.	2.2	20.023	4.475	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/20/86	4	497.5	485.	520.	425.	1716.667	41.433	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-07/14/86	3	7.6	7.6	7.9	7.3	0.09	0.3	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-07/14/86	3	7.6	7.533	7.9	7.3	0.097	0.311	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-07/14/86	3	0.025	0.029	0.05	0.013	0.	0.019	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-07/14/86	3	7.9	7.9	8.	7.8	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-07/14/86	3	7.9	7.892	8.	7.8	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-07/14/86	3	0.013	0.013	0.016	0.01	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/17/82-07/14/86	2	260.	260.	260.	260.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-07/14/86	3	0.05	0.087	0.2	0.01	0.01	0.1	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/17/82	2	275.	275.	300.	250.	1250.	35.355	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/17/82-08/17/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-07/14/86	3	71.	71.	81.	61.	100.	10.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-07/14/86	3	23.	22.	24.	19.	7.	2.646	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-07/14/86	3	2.1	2.	2.1	1.8	0.03	0.173	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/17/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/17/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-07/14/86	3	0.9	0.967	1.2	0.8	0.043	0.208	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-07/14/86	3	2.	3.	5.	2.	3.	1.732	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-07/14/86	3	21.	20.333	24.	16.	16.333	4.041	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-07/14/86	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-07/14/86	3	11.	9.967	11.	7.9	3.203	1.79	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-07/14/86	3	9.	7.667	9.	5.	5.333	2.309	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-07/14/86	3	1.	2.167	5.	0.5	6.083	2.466	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/86-07/14/86	1	244.	244.	244.	244.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/17/82	2	245.5	245.5	252.	239.	84.5	9.192	**	**	**	**

** - Less than 9 observations ## - 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: ZION0089

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									

& - 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: ZION0090

NPS Station ID: ZION0090
LAT/LON: 37.529170/-112.808060
Agency: 21UTAH
Date Created: 11/30/91
Location: NAVAJO LAKE SPRING NR NAVAJO LAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 594690
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 18.50
On/Off RF1:
RF3 Index: 15010008061800.00
RF3 Mile Point: 0.59
Distance from RF3: 0.09
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0090

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/23/88-08/15/90	2	5.95	5.95	6.5	5.4	0.605	0.778	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/23/88-09/09/94	3	1.	0.9	1.	0.7	0.03	0.173	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/02/88-03/23/88	2	0.55	0.55	0.8	0.3	0.125	0.354	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/23/88-08/15/90	2	341.	341.	354.	328.	338.	18.385	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/02/88-03/23/88	2	239.	239.	358.	120.	28322.	168.291	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/23/88-08/15/90	2	8.	8.	8.6	7.4	0.72	0.849	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/23/88-03/23/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	02/02/88-08/15/90	2 ##	13.	13.	19.	7.	72.	8.485	**	**	**	**
00400	PH (STANDARD UNITS)	03/23/88-08/15/90	2	7.45	7.45	7.9	7.	0.405	0.636	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/23/88-08/15/90	2	7.25	7.25	7.9	7.	0.485	0.697	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/23/88-08/15/90	2	0.056	0.056	0.1	0.013	0.004	0.062	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/02/88-03/23/88	2	8.35	8.35	8.8	7.9	0.405	0.636	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/02/88-03/23/88	2	8.15	8.15	8.8	7.9	0.485	0.697	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/02/88-03/23/88	2	0.007	0.007	0.013	0.002	0.	0.008	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	02/02/88-03/23/88	2	2.	2.	4.	0.	8.	2.828	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/02/88-03/23/88	2	125.	125.	187.	63.	7688.	87.681	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/02/88-03/23/88	2	148.5	148.5	228.	69.	12640.5	112.43	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	02/02/88-03/23/88	2	1.5	1.5	3.	0.	4.5	2.121	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/02/88-08/15/90	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/02/88-08/15/90	3 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/02/88-08/15/90	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/02/88-08/15/90	3	0.04	0.043	0.08	0.01	0.001	0.035	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/02/88-08/15/90	3	0.1	0.15	0.3	0.05	0.018	0.132	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/02/88-08/15/90	3	0.003	0.004	0.01	0.	0.	0.005	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/02/88-08/15/90	2	1.6	1.6	2.5	0.7	1.62	1.273	**	**	**	**
00745	SULFIDE, TOTAL (MG/L AS S)	03/23/88-03/23/88	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/02/88-03/23/88	2	113.	113.	163.	63.	5000.	70.711	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/02/88-03/23/88	2	29.5	29.5	47.	12.	612.5	24.749	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/02/88-03/23/88	2	9.5	9.5	11.	8.	4.5	2.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/02/88-03/23/88	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/02/88-03/23/88	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/02/88-03/23/88	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/02/88-03/23/88	2 ##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	03/23/88-03/23/88	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/02/88-03/23/88	2	130.	130.	184.	76.	5832.	76.368	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	02/02/88-03/23/88	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/02/88-08/15/90	3 ##	0.003	0.003	0.005	0.003	0.	0.001	**	**	**	**
82702	AS DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0090

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82703	BA DECNT FLD ACID WTR MG/L	03/23/88-03/23/88	1	250.	250.	250.	250.	0.	0.	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	03/23/88-03/23/88	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	03/23/88-03/23/88	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0090

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00	1	0	0.00						
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3	0	0.00	2	0	0.00	1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3	0	0.00	2	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						

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

Station Inventory for Station: ZION0091

NPS Station ID: ZION0091
LAT/LON: 37.401392/-112.809170
Agency: 112WRD
Date Created: 08/01/87
Location: N FK VIRGIN NR WILLOW CANYON
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372405112483301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 11.30
On/Off RF1:
RF3 Index: 15010008059200.84
RF3 Mile Point: 1.31
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0091

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/86-06/18/86	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/18/86-06/18/86	1	25.5	25.5	25.5	25.5	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/18/86-06/18/86	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/18/86-06/18/86	1	385.	385.	385.	385.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/18/86-06/18/86	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/18/86-06/18/86	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/86-06/18/86	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/18/86-06/18/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/18/86-06/18/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/86-06/18/86	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/86-06/18/86	1	194.	194.	194.	194.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/18/86-06/18/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/18/86-06/18/86	1	47.	47.	47.	47.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/18/86-06/18/86	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/18/86-06/18/86	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/18/86-06/18/86	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/18/86-06/18/86	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/18/86-06/18/86	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/18/86-06/18/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/18/86-06/18/86	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/18/86-06/18/86	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/18/86-06/18/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/18/86-06/18/86	1	13.	13.	13.	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

EPA Water Quality Criteria Analysis for Station: ZION0091

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0091

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0092

NPS Station ID: ZION0092 LAT/LON: 37.401198/-112.809948 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_52
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 6180 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE STRAIGHT CANYON UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON NEAR GLENDALE. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0092

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/03/82-08/20/82	2	13.25	13.25	14.5	12.	3.125	1.768	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/03/82-08/20/82	2	410.	410.	435.	385.	1250.	35.355	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/03/82-08/20/82	2	8.4	8.4	8.6	8.2	0.08	0.283	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/03/82-08/20/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/03/82-08/20/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/03/82-08/20/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/03/82-08/20/82	2	195.	195.	200.	190.	50.	7.071	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/03/82-08/20/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/03/82-08/20/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/03/82-08/20/82	2	225.	225.	230.	220.	50.	7.071	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/03/82-08/20/82	2	28.	28.	31.	25.	18.	4.243	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/03/82-08/20/82	2	54.	54.	54.	54.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/03/82-08/20/82	2	21.5	21.5	22.	21.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/03/82-08/20/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/03/82-08/20/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/03/82-08/20/82	2	1.15	1.15	1.4	0.9	0.125	0.354	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/03/82-08/20/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/03/82-08/20/82	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/03/82-08/20/82	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/03/82-08/20/82	2	9.95	9.95	12.	7.9	8.405	2.899	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/03/82-08/20/82	2 ##	5.	5.	10.	0.	50.	7.071	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/03/82-08/20/82	2	229.5	229.5	237.	222.	112.5	10.607	**	**	**	**

** - Less than 9 observations ## - 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: ZION0092

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (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						

& - 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: ZION0093

NPS Station ID: ZION0093
LAT/LON: 37.455309/-112.809892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB512R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_53 /5075829
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	1	620.	620.	620.	620.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/80-07/06/80	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/80-07/06/80	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/80-07/06/80	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	1	18.6	18.6	18.6	18.6	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	1	225.	225.	225.	225.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	1	313.	313.	313.	313.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	1	4.984	4.984	4.984	4.984	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/06/80-07/06/80	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/06/80-07/06/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	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: ZION0093

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0094

NPS Station ID: ZION0094 LAT/LON: 37.401198/-112.809948 Agency: 11NPSWRD Date Created: 09/13/97
Location: NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_NPSWRD_27 /UTDNR_52
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 6180 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE STRAIGHT CANYON KANE CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER BELOW BULLOCK CANYON NEAR GLENDALE. DATA FOR THIS SITE ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND ADDITIONAL STATIONS NOT UPLOADED TO STORET. ADDITIONAL DATA FOR THIS LOCATION MAY BE FOUND AT THE SECONDARY STATION ID ZION_UTDNR_52. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA WERE PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. TEL. (970)225-3516.

Parameter Inventory for Station: ZION0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/03/92-10/05/92	9	16.	14.	20.	6.	29.25	5.408	6.	8.	19.	20.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/03/92-10/05/92	9	8.7	8.589	9.5	7.5	0.681	0.825	7.5	7.65	9.4	9.5
00406	PH, FIELD, STANDARD UNITS SU	06/03/92-10/05/92	9	8.17	8.17	8.28	8.08	0.004	0.062	8.08	8.115	8.21	8.28
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/03/92-10/05/92	9	8.17	8.166	8.28	8.08	0.004	0.062	8.08	8.115	8.21	8.28
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/03/92-10/05/92	9	0.007	0.007	0.008	0.005	0.	0.001	0.005	0.006	0.008	0.008
00600	NITROGEN, TOTAL (MG/L AS N)	06/03/92-10/05/92	9 ##	0.	0.089	0.5	0.	0.026	0.162	0.	0.	0.1	0.5
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/03/92-10/05/92	9 ##	0.	0.089	0.5	0.	0.026	0.162	0.	0.	0.1	0.5
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/03/92-10/05/92	9 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/03/92-10/05/92	9	0.01	0.012	0.04	0.	0.	0.014	0.	0.	0.02	0.04
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/03/92-10/05/92	9	0.37	0.393	0.56	0.26	0.011	0.107	0.26	0.305	0.49	0.56
50793	INVALID PARAMETER	06/03/92-10/05/92	9	0.059	0.353	2.705	0.	0.781	0.883	0.	0.005	0.124	2.705
50794	INVALID PARAMETER	06/03/92-10/05/92	9	0.132	0.254	0.855	0.035	0.078	0.279	0.035	0.046	0.432	0.855
50795	INVALID PARAMETER	06/03/92-10/05/92	9	27.	22.	38.	2.	154.25	12.42	2.	11.	32.	38.

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

EPA Water Quality Criteria Analysis for Station: ZION0094

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	9	0	0.00	6	0	0.00				3	0	0.00			
00406	PH, FIELD	Other-Hi Lim.	9.	9	0	0.00	6	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	6	0	0.00				3	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	9	0	0.00	6	0	0.00				3	0	0.00			

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

Station Inventory for Station: ZION0095

NPS Station ID: ZION0095
LAT/LON: 37.523893/-112.812227
Agency: 112WRD
Date Created: 06/20/87
Location: (C-38- 9)12BDB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 373126112481101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030007
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030007
RF1 Mile Point: 0.000
Distance from RF1: 8.20
On/Off RF1:
RF3 Index: 15010008015100.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0095

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/81-07/15/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/81-07/15/81	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/81-07/15/81	1	355.	355.	355.	355.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/81-07/15/81	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/81-07/15/81	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/81-07/15/81	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/81-07/15/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/15/81-07/15/81	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/81-07/15/81	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/81-07/15/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/81-07/15/81	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/15/81-07/15/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/15/81-07/15/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/81-07/15/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/81-07/15/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/81-07/15/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/81-07/15/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/81-07/15/81	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/81-07/15/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/81-07/15/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/15/81-07/15/81	1	205.	205.	205.	205.	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	07/15/81-07/15/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0095

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0095

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0096

NPS Station ID: ZION0096
LAT/LON: 37.298892/-112.819727
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 9)26CDA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371756112491101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.30
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 17.74
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	2	9.5	9.5	10.	9.	0.5	0.707	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-06/07/82	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	2	492.5	492.5	510.	475.	612.5	24.749	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.35	7.35	7.4	7.3	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.347	7.347	7.4	7.3	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	2	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-06/07/82	2	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	2	0.065	0.065	0.1	0.03	0.002	0.049	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	2	310.	310.	350.	270.	3200.	56.569	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	2	83.5	83.5	93.	74.	180.5	13.435	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	2	24.	24.	28.	20.	32.	5.657	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	2	2.8	2.8	3.7	1.9	1.62	1.273	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-06/07/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	2	1.2	1.2	1.4	1.	0.08	0.283	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	2	43.	43.	62.	24.	722.	26.87	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	2	9.45	9.45	11.	7.9	4.805	2.192	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	2 ##	3.25	3.25	5.	1.5	6.125	2.475	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	2	280.5	280.5	293.	268.	312.5	17.678	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0096

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			

& - 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: ZION0096

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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: ZION0097

NPS Station ID: ZION0097
LAT/LON: 37.297782/-112.820281
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 9)26CDA-S2
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371752112491301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.40
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 17.63
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0097

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	2	10.75	10.75	12.	9.5	3.125	1.768	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-06/07/82	2	4.65	4.65	4.7	4.6	0.005	0.071	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	2	607.5	607.5	615.	600.	112.5	10.607	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.2	7.2	7.3	7.1	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.189	7.189	7.3	7.1	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.065	0.065	0.079	0.05	0.	0.021	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	2	7.9	7.9	8.	7.8	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-06/07/82	2	7.889	7.889	8.	7.8	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.013	0.013	0.016	0.01	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	1	280.	280.	280.	280.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	2	300.	300.	330.	270.	1800.	42.426	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	1	47.	47.	47.	47.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	2	81.5	81.5	88.	75.	84.5	9.192	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	2	23.	23.	26.	20.	18.	4.243	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	2	2.6	2.6	3.2	2.	0.72	0.849	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-06/07/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	2	1.05	1.05	1.2	0.9	0.045	0.212	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	2	43.5	43.5	58.	29.	420.5	20.506	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	2	8.85	8.85	9.5	8.2	0.845	0.919	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	2 ##	3.25	3.25	5.	1.5	6.125	2.475	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	2	287.	287.	358.	216.	10082.	100.409	**	**	**	**

** - Less than 9 observations ## - 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: ZION0097

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			

& - 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: ZION0097

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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: ZION0098

NPS Station ID: ZION0098
LAT/LON: 37.296670/-112.822226
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 9)26CDC-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371748112492001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.20
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 17.45
Distance from RF3: 0.07
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0098

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/21/86	3	10.5	10.5	11.	10.	0.25	0.5	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/21/86	3	6.	5.933	6.	5.8	0.013	0.115	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/21/86	3	510.	503.333	530.	470.	933.333	30.551	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/21/86	3	7.5	7.467	7.6	7.3	0.023	0.153	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/21/86	3	7.5	7.448	7.6	7.3	0.024	0.154	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/21/86	3	0.032	0.036	0.05	0.025	0.	0.013	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	2	8.05	8.05	8.1	8.	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-06/07/82	2	8.047	8.047	8.1	8.	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.009	0.009	0.01	0.008	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	2 ##	0.04	0.04	0.05	0.03	0.	0.014	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	2	270.	270.	270.	270.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	2	72.	72.	72.	72.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	2	23.	23.	23.	23.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	2	2.9	2.9	3.	2.8	0.02	0.141	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-06/07/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	2	1.55	1.55	1.6	1.5	0.005	0.071	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	2	37.	37.	38.	36.	2.	1.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	2	8.1	8.1	8.3	7.9	0.08	0.283	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	2 ##	3.25	3.25	5.	1.5	6.125	2.475	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	2	266.5	266.5	294.	239.	1512.5	38.891	**	**	**	**

** - Less than 9 observations ## - 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: ZION0098

			Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
Parameter	Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			

& - 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: ZION0098

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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: ZION0099

NPS Station ID: ZION0099
LAT/LON: 37.295837/-112.822504
Agency: 112WRD
Date Created: 01/08/83
Location: (C-40- 9)35BAB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371745112492101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 22.30
On/Off RF1:
RF3 Index: 15010008053100.00
RF3 Mile Point: 0.35
Distance from RF3: 0.16
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0099

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-06/07/82	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**	**
00058	FLOW, RATE GALLONS/MIN	06/07/82-06/07/82	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-07/06/82	3	3.6	3.367	3.6	2.9	0.163	0.404	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-06/07/82	2	522.5	522.5	525.	520.	12.5	3.536	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.35	7.35	7.4	7.3	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-06/07/82	2	7.347	7.347	7.4	7.3	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-06/07/82	2	7.95	7.95	8.1	7.8	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-06/07/82	2	7.925	7.925	8.1	7.8	0.046	0.215	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-06/07/82	2	0.012	0.012	0.016	0.008	0.	0.006	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/07/82-06/07/82	1	260.	260.	260.	260.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-06/07/82	2 ##	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-06/07/82	2	280.	280.	280.	280.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/07/82-06/07/82	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-06/07/82	2	74.	74.	74.	74.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-06/07/82	2	22.5	22.5	23.	22.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-06/07/82	2	3.05	3.05	3.2	2.9	0.045	0.212	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-06/07/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-06/07/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-06/07/82	2	1.5	1.5	1.7	1.3	0.08	0.283	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-06/07/82	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-06/07/82	2	34.	34.	37.	31.	18.	4.243	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-06/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-06/07/82	2	8.25	8.25	8.5	8.	0.125	0.354	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-06/07/82	2 ##	3.25	3.25	5.	1.5	6.125	2.475	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-06/07/82	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-06/07/82	2	278.	278.	291.	265.	338.	18.385	**	**	**	**

** - Less than 9 observations ## - 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: ZION0099

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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: ZION0100

NPS Station ID: ZION0100
LAT/LON: 37.293059/-112.822504
Agency: 112WRD
Date Created: 06/20/87
Location: (C-40- 9)35BAB-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371735112492101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 11.70
On/Off RF1:
RF3 Index: 15010008040800.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0100

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/28/81-08/28/81	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-08/28/81	1	520.	520.	520.	520.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-08/28/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-08/28/81	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-08/28/81	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-08/28/81	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-08/28/81	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-08/28/81	1	280.	280.	280.	280.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-08/28/81	1	74.	74.	74.	74.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-08/28/81	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-08/28/81	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-08/28/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-08/28/81	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-08/28/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-08/28/81	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-08/28/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-08/28/81	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-08/28/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/28/81-08/28/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/28/81-08/28/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-08/28/81	1	265.	265.	265.	265.	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: ZION0100

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0100

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0101

NPS Station ID: ZION0101
LAT/LON: 37.346948/-112.823059
Agency: 112WRD
Date Created: 12/02/81
Location: ORDERVILLE GULCH AT ROADCROSSING, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372049112492301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.00
On/Off RF1:
RF3 Index: 15010008001012.18
RF3 Mile Point: 12.48
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/86	3	16.5	19.667	26.5	16.	35.083	5.923	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-05/03/82	2	23.5	23.5	26.5	20.5	18.	4.243	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	2	609.	609.	612.	606.	18.	4.243	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/86	3	0.5	0.467	0.7	0.2	0.063	0.252	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-06/21/86	3	680.	730.	850.	660.	10900.	104.403	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/03/82	2	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/21/86	3	8.5	8.433	8.5	8.3	0.013	0.115	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/21/86	3	8.5	8.423	8.5	8.3	0.014	0.116	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/86	3	0.003	0.004	0.005	0.003	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/86	3	8.2	8.2	8.3	8.1	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/21/86	3	8.2	8.192	8.3	8.1	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/86	3	0.006	0.006	0.008	0.005	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/86-06/21/86	1	192.	192.	192.	192.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/86	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	2	360.	360.	390.	330.	1800.	42.426	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/21/86	3	65.	66.667	78.	57.	112.333	10.599	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/86	3	47.	45.	48.	40.	19.	4.359	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/86	3	23.	23.333	26.	21.	6.333	2.517	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-05/03/82	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/86	3	3.4	3.467	3.6	3.4	0.013	0.115	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-06/21/86	3	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/86	3	200.	196.667	230.	160.	1233.333	35.119	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-06/21/86	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/21/86	3	8.9	8.667	9.1	8.	0.343	0.586	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	2	55.	55.	60.	50.	50.	7.071	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/21/86-06/21/86	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/86-06/21/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	2	470.5	470.5	522.	419.	5304.5	72.832	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/03/82	2	0.745	0.745	0.79	0.7	0.004	0.064	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/03/82	2	0.64	0.64	0.71	0.57	0.01	0.099	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	06/21/86-06/21/86	1	109.	109.	109.	109.	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: ZION0101

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0102

NPS Station ID: ZION0102
LAT/LON: 37.346810/-112.823948
Agency: 11NPSWRD
Date Created: 08/02/97
Location: ORDERVILLE GULCH
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_44.1
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 6140
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE CLEAR CREEK MOUNTAIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS IN ORDERVILLE GULCH NEAR THE ROAD CROSSING NEAR SPRINGDALE DOWNSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-05/03/82	2	16.25	16.25	16.5	16.	0.125	0.354	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-05/03/82	2	765.	765.	850.	680.	14450.	120.208	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/20/81-05/03/82	2	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-05/03/82	2	8.4	8.4	8.5	8.3	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-05/03/82	2	8.389	8.389	8.5	8.3	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-05/03/82	2	0.004	0.004	0.005	0.003	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/20/81-05/03/82	2	200.	200.	210.	190.	200.	14.142	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-05/03/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/03/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/03/82	2	360.	360.	390.	330.	1800.	42.426	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/81-05/03/82	2	160.	160.	180.	140.	800.	28.284	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-05/03/82	2	71.5	71.5	78.	65.	84.5	9.192	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-05/03/82	2	43.5	43.5	47.	40.	24.5	4.95	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-05/03/82	2	22.	22.	23.	21.	2.	1.414	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-05/03/82	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-05/03/82	2	3.5	3.5	3.6	3.4	0.02	0.141	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/20/81-05/03/82	2	6.	6.	6.	6.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/20/81-05/03/82	2	195.	195.	230.	160.	2450.	49.497	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-05/03/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-05/03/82	2	8.45	8.45	8.9	8.	0.405	0.636	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/03/82	2	55.	55.	60.	50.	50.	7.071	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/03/82	2	470.5	470.5	522.	419.	5304.5	72.832	**	**	**	**

** - Less than 9 observations ## - 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: ZION0102

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (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						

& - 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: ZION0103

NPS Station ID: ZION0103
LAT/LON: 37.293059/-112.823892
Agency: 112WRD
Date Created: 08/01/87
Location: Clear Creek
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371735112492601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 25.20
On/Off RF1:
RF3 Index: 15010008058200.00
RF3 Mile Point: 1.03
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0103

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/14/86-09/14/86	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/14/86-09/14/86	1	21.5	21.5	21.5	21.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/14/86-09/14/86	1	75.	75.	75.	75.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/86-09/14/86	1	470.	470.	470.	470.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/14/86-09/14/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/14/86-09/14/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/14/86-09/14/86	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/14/86-09/14/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/14/86-09/14/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/14/86-09/14/86	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/86-09/14/86	1	238.	238.	238.	238.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/14/86-09/14/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/86-09/14/86	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/86-09/14/86	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/86-09/14/86	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/86-09/14/86	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/14/86-09/14/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/14/86-09/14/86	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/86-09/14/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/86-09/14/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/14/86-09/14/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/14/86-09/14/86	1	7.	7.	7.	7.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/86-09/14/86	1	264.	264.	264.	264.	0.	0.	**	**	**	**
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	09/14/86-09/14/86	1	34.	34.	34.	34.	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	09/14/86-09/14/86	1	73.	73.	73.	73.	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: ZION0103

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0103

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0104

NPS Station ID: ZION0104
LAT/LON: 37.390559/-112.825005
Agency: 112WRD
Date Created: 05/24/80
Location: N. FORK VIRGIN R. ABV ZION NARROWS NR GLENDALE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405450
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.20
On/Off RF1:
RF3 Index: 15010008051600.00
RF3 Mile Point: 0.15
Distance from RF3: 0.10
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0104

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/79-07/16/86	53	11.	10.943	22.	0.5	29.333	5.416	3.2	6.75	15.	18.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-07/16/86	6	23.5	22.667	28.	16.5	19.367	4.401	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/03/82	3	615.	613.667	616.	610.	10.333	3.215	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/26/79-07/16/86	57	18.	23.211	92.	6.	338.669	18.403	7.8	12.	24.	58.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/26/79-07/16/86	55	440.	451.636	620.	165.	4922.273	70.159	384.	415.	500.	550.
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/23/82	4	8.05	7.825	8.2	7.	0.309	0.556	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/81-07/16/86	8	8.45	8.413	8.6	8.	0.033	0.181	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/81-07/16/86	8	8.447	8.372	8.6	8.	0.035	0.186	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-07/16/86	8	0.004	0.004	0.01	0.003	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/22/81-07/16/86	8	8.15	8.15	8.5	7.7	0.051	0.227	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/22/81-07/16/86	8	8.147	8.093	8.5	7.7	0.055	0.235	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/81-07/16/86	8	0.007	0.008	0.02	0.003	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/18/86-07/16/86	2	215.	215.	218.	212.	18.	4.243	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-07/16/86	6 ##	0.05	0.083	0.2	0.05	0.004	0.061	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/03/82	3	0.06	0.05	0.06	0.03	0.	0.017	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	4	0.015	0.014	0.02	0.005	0.	0.008	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/22/81-08/23/82	6	230.	231.667	260.	200.	376.667	19.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/22/81-07/16/86	8	53.5	52.375	59.	45.	19.982	4.47	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/81-07/16/86	8	23.5	24.	28.	22.	4.857	2.204	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/81-07/16/86	8	6.6	6.65	8.6	4.8	2.169	1.473	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/22/81-08/23/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	04/22/81-08/23/82	6	6.5	6.	7.	4.	1.6	1.265	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/22/81-07/16/86	8	1.45	1.413	1.6	1.2	0.021	0.146	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/22/81-07/16/86	8	2.	3.	8.	2.	4.571	2.138	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/22/81-07/16/86	8	39.	38.875	59.	27.	99.268	9.963	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/22/81-07/16/86	8	0.2	0.188	0.3	0.1	0.004	0.064	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/22/81-07/16/86	8	11.5	11.075	13.	8.5	2.402	1.55	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/22/81-08/23/82	6	20.	18.333	20.	10.	16.667	4.082	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/22/81-04/22/81	1	1400.	1400.	1400.	1400.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/22/81-08/26/81	2	860.	860.	1400.	320.	583200.	763.675	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/22/81-07/16/86	4	28.	26.75	46.	5.	378.25	19.449	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/22/81-08/26/81	2	35.	35.	50.	20.	450.	21.213	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/22/81-08/26/81	2	40.	40.	60.	20.	800.	28.284	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/81-07/16/86	4	3.5	4.	6.	3.	2.	1.414	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/22/81-07/16/86	3	234.	245.	300.	201.	2541.	50.408	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	5	250.	250.	278.	222.	400.	20.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/22/81-08/23/82	6	6.635	11.198	22.6	4.36	74.656	8.64	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/22/81-08/23/82	6	0.335	0.347	0.41	0.3	0.002	0.041	**	**	**	**

** - Less than 9 observations ## - 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: ZION0104

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)	04/22/81-07/16/86	4	156.	143.25	248.	13.	14820.917	121.741	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/22/81-08/26/81	2	9.6	9.6	18.	1.2	141.12	11.879	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/22/81-04/22/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0104

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	250.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			

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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0104

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/79-07/16/86	33	10.5	10.621	22.	0.5	39.266	6.266	2.1	4.	15.75	19.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/26/79-07/16/86	35	16.	14.857	26.	6.	36.42	6.035	7.	10.	19.	24.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/26/79-07/16/86	34	430.	432.941	620.	165.	5547.148	74.479	365.	405.	460.	540.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0104

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/79-07/16/86	10	9.5	9.1	14.5	6.	7.044	2.654	6.05	6.5	10.625	14.15
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/26/79-07/16/86	11	27.	35.273	74.	15.	436.418	20.891	15.4	22.	59.	72.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/26/79-07/16/86	11	520.	515.909	560.	445.	1789.091	42.298	447.	475.	560.	560.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0104

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/79-07/16/86	10	13.75	13.85	20.	9.5	9.281	3.046	9.65	11.	15.625	19.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/26/79-07/16/86	11	23.	37.727	92.	13.	700.218	26.462	13.4	18.	58.	86.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/26/79-07/16/86	10	442.5	444.5	500.	400.	780.278	27.933	401.5	426.25	465.	496.5

** - 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: ZION0105

NPS Station ID: ZION0105
LAT/LON: 37.475003/-112.826699
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB503R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_50 /5075820
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0105

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/80-06/30/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/80-06/30/80	1	690.	690.	690.	690.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/30/80-06/30/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/30/80-06/30/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/30/80-06/30/80	1	280.	280.	280.	280.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/30/80-06/30/80	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/30/80-06/30/80	1	19.88	19.88	19.88	19.88	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/30/80-06/30/80	1	86.	86.	86.	86.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/30/80-06/30/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/30/80-06/30/80	1	282.	282.	282.	282.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/30/80-06/30/80	1	2.564	2.564	2.564	2.564	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/30/80-06/30/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/30/80-06/30/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/30/80-06/30/80	1	197.7	197.7	197.7	197.7	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/30/80-06/30/80	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: ZION0105

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0106

NPS Station ID: ZION0106
LAT/LON: 37.434115/-112.828616
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB506R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_51 /5075823
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0106

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/80-07/01/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/01/80-07/01/80	1	510.	510.	510.	510.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/80-07/01/80	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/80-07/01/80	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/80-07/01/80	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/01/80-07/01/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/01/80-07/01/80	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/01/80-07/01/80	1	15.9	15.9	15.9	15.9	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/01/80-07/01/80	1	86.	86.	86.	86.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/01/80-07/01/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/01/80-07/01/80	1	251.	251.	251.	251.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/01/80-07/01/80	1	2.466	2.466	2.466	2.466	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/01/80-07/01/80	1	21.	21.	21.	21.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/01/80-07/01/80	1	25.7	25.7	25.7	25.7	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/01/80-07/01/80	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: ZION0106

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0107

NPS Station ID: ZION0107
LAT/LON: 37.289309/-112.828893
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCE019R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_32 /5083899
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Clear Creek Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0107

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	1	420.	420.	420.	420.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/80-07/26/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/26/80-07/26/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/80-07/26/80	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	1	9.72	9.72	9.72	9.72	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	1	115.	115.	115.	115.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	1	498.	498.	498.	498.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	1	0.711	0.711	0.711	0.711	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/26/80-07/26/80	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/26/80-07/26/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	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: ZION0107

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0108

NPS Station ID: ZION0108
LAT/LON: 37.303615/-112.831116
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 9)27adc-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371813112495201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 1.60
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 17.38
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0108

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/86-07/15/86	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/15/86-07/15/86	1	21.5	21.5	21.5	21.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/86-07/15/86	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/86-07/15/86	1	450.	450.	450.	450.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/86-07/15/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/86-07/15/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/86-07/15/86	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/86-07/15/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/86-07/15/86	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/86-07/15/86	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/86-07/15/86	1	254.	254.	254.	254.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/86-07/15/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/86-07/15/86	1	82.	82.	82.	82.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/86-07/15/86	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/86-07/15/86	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/86-07/15/86	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/86-07/15/86	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/86-07/15/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/86-07/15/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/86-07/15/86	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/86-07/15/86	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/86-07/15/86	1	29.	29.	29.	29.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/15/86-07/15/86	1	242.	242.	242.	242.	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: ZION0108

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0108

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0109

NPS Station ID: ZION0109
LAT/LON: 37.328309/-112.831392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCE024R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_36 /5083900
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Clear Creek Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0109

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	1	700.	700.	700.	700.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/80-07/26/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/26/80-07/26/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/80-07/26/80	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	1	56.2	56.2	56.2	56.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	1	31.88	31.88	31.88	31.88	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	1	208.	208.	208.	208.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/26/80-07/26/80	1	5244.	5244.	5244.	5244.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	1	3.556	3.556	3.556	3.556	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/26/80-07/26/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/26/80-07/26/80	1	60.2	60.2	60.2	60.2	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/26/80-07/26/80	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: ZION0109

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0110

NPS Station ID: ZION0110
LAT/LON: 37.238892/-112.831948
Agency: 112WRD
Date Created: 04/14/78
Location: (C-41- 9)15DDB- 1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371420112495501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.50
On/Off RF1:
RF3 Index: 15010008001019.78
RF3 Mile Point: 21.18
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0110

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/12/77-06/19/90	2	15.25	15.25	16.	14.5	1.125	1.061	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/19/90-06/19/90	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/12/77-06/19/90	2	715.	715.	730.	700.	450.	21.213	**	**	**	**
00400	PH (STANDARD UNITS)	11/12/77-06/19/90	2	7.05	7.05	7.3	6.8	0.125	0.354	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/12/77-06/19/90	2	6.982	6.982	7.3	6.8	0.134	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/77-06/19/90	2	0.104	0.104	0.158	0.05	0.006	0.077	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/19/90-06/19/90	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/19/90-06/19/90	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/90-06/19/90	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/12/77-11/12/77	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/12/77-11/12/77	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/12/77-11/12/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/19/90-06/19/90	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/19/90-06/19/90	1	317.	317.	317.	317.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/19/90-06/19/90	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	1	380.	380.	380.	380.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/12/77-11/12/77	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/12/77-06/19/90	2	76.5	76.5	78.	75.	4.5	2.121	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/12/77-06/19/90	2	42.5	42.5	45.	40.	12.5	3.536	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/12/77-06/19/90	2	15.5	15.5	16.	15.	0.5	0.707	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/12/77-11/12/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/12/77-11/12/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/12/77-06/19/90	2	1.95	1.95	2.	1.9	0.005	0.071	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/12/77-06/19/90	2	13.	13.	13.	13.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/12/77-06/19/90	2	120.	120.	130.	110.	200.	14.142	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/12/77-06/19/90	2	0.6	0.6	0.7	0.5	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/12/77-06/19/90	2	13.5	13.5	14.	13.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/19/90-06/19/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/19/90-06/19/90	1	68.	68.	68.	68.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/12/77-11/12/77	1	140.	140.	140.	140.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/19/90-06/19/90	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/19/90-06/19/90	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/19/90-06/19/90	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/12/77-06/19/90	2	23.	23.	40.	6.	578.	24.042	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/19/90-06/19/90	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/12/77-06/19/90	2 ##	2.75	2.75	5.	0.5	10.125	3.182	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/19/90-06/19/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0110

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/19/90-06/19/90	1	620.	620.	620.	620.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/19/90-06/19/90	1	4.	4.	4.	4.	0.	0.	**	**	**	**
03515	BETA, DISSOLVED GROSS, AS CS-137, PC/L	06/19/90-06/19/90	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
32104	BROMOFORM,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34301	CHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34311	CHLOROETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34371	ETHYLBENZENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34413	METHYL BROMIDE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34418	METHYL CHLORIDE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34561	1,3-DICHLOROPROPENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34668	DICHLORODIFUOROMETHANE TOTWUG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34699	TRANS-1,3-DICHLOROPROPENETOTAL IN WATER UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
34704	CIS-1,3-DICHLOROPROPENE TOTAL IN WATER UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
39034	PERTHANE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/19/90-06/19/90	1	260.	260.	260.	260.	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	06/19/90-06/19/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
39250	NAPTHALENES, POLYCHLORINATED (UG/L)	06/19/90-06/19/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39388	ENDOSULFAN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39755	MIREX, TOTAL (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/19/90-06/19/90	1	422.	422.	422.	422.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/12/77-11/12/77	1	460.	460.	460.	460.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/12/77-11/12/77	1	0.63	0.63	0.63	0.63	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/19/90-06/19/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
75986	ALPHA GROSS,1 SIGMA PRC EST AS NAT U,DISS,WTR UG/L	06/19/90-06/19/90	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
75987	ALPHA GROSS,DISS,1 SIGMA PRC EST AS TH230,WTR PC/L	06/19/90-06/19/90	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0110

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
75988	BETA GROSS,DISS,1 SIGMA PRC EST AS SR90/Y90 PC/L	06/19/90-06/19/90	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
75989	BETA GROSS,1 SIGMA PRC EST AS CS-137,DISS,WTR PC/L	06/19/90-06/19/90	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
77128	STYRENE WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
77651	1,2-DIBROMOETHANE WHOLE WATER,UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
80030	ALPHA,DISSOLVED GROSS,AS URANIUM-NATURAL,UG/L	06/19/90-06/19/90	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
80050	BETA,DISSOLVED GROSS,AS SR-Y-90, PC/L	06/19/90-06/19/90	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
81551	XYLENE WHL WATER SMPL UG/L	06/19/90-06/19/90	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
82183	2,4-DP (DICHLORPROP) TOTAL UG/L	06/19/90-06/19/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0110

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 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	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			
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			
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.	1	0	0.00							1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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	1	1.00							1	1	1.00			
		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			
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			
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE E	Fresh Acute	17500.	1	0	0.00							1	0	0.00			
		Drinking Water	1000.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE, TOTAL	Drinking Water	100.	1	0	0.00							1	0	0.00			
34371	ETHYLBENZENE, TOTAL	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			
34475	TETRACHLOROETHYLENE, TOTAL	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, TOTAL	Drinking Water	7.	1	0	0.00							1	0	0.00			
34506	1,1,1-TRICHLOROETHANE, TOTAL	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			

& - 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: ZION0110

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00							1	0	0.00			
34541	1,2-DICHLOROPROPANE, TOTAL	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			
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00							1	0	0.00			
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	1	0	0.00							1	0	0.00			
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			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1	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	1	0	0.00							1	0	0.00			
		Drinking Water	2.	1	0	0.00							1	0	0.00			
39360	DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0.00							1	0	0.00			
39365	DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0.00							1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	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			
39388	ENDOSULFAN IN WHOLE WATER SAMPLE	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00							1	0	0.00			
		Drinking Water	2.	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.	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			
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			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	1	0	0.00							1	0	0.00			
77651	1,2-DIBROMOETHANE, WHOLE WATER	Drinking Water	0.05	0 &	0	0.00												

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Station Inventory for Station: ZION0111

NPS Station ID: ZION0111
LAT/LON: 37.429170/-112.832226
Agency: 112WRD
Date Created: 05/21/88
Location: (C-39- 9)10DDC-S1
FIPS State/County: 49035 UTAH/SALT LAKE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372545112495601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 1.00
On/Off RF1:
RF3 Index: 15010008057300.00
RF3 Mile Point: 0.38
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0111

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/26/86-08/26/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/26/86-08/26/86	1 ##	12.	12.	12.	12.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/26/86-08/26/86	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/26/86-08/26/86	1	650.	650.	650.	650.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/26/86-08/26/86	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/26/86-08/26/86	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/26/86-08/26/86	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/26/86-08/26/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/26/86-08/26/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/26/86-08/26/86	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/26/86-08/26/86	1	291.	291.	291.	291.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/26/86-08/26/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/26/86-08/26/86	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/26/86-08/26/86	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/26/86-08/26/86	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/26/86-08/26/86	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/26/86-08/26/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/26/86-08/26/86	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/26/86-08/26/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/26/86-08/26/86	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/26/86-08/26/86	1	560.	560.	560.	560.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/26/86-08/26/86	1	55.	55.	55.	55.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/26/86-08/26/86	1	333.	333.	333.	333.	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: ZION0111

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0111

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0112

NPS Station ID: ZION0112
LAT/LON: 37.253337/-112.836670
Agency: 112WRD
Date Created: 04/14/78
Location: (C-41- 9)10CDD- 1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371512112501201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 17.00
On/Off RF1:
RF3 Index: 15010008057302.54
RF3 Mile Point: 3.83
Distance from RF3: 0.10
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0112

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/12/77-11/12/77	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/12/77-11/12/77	1	1250.	1250.	1250.	1250.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/12/77-11/12/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/12/77-11/12/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/77-11/12/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/12/77-11/12/77	1	122.	122.	122.	122.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	1	390.	390.	390.	390.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/12/77-11/12/77	1	480.	480.	480.	480.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/12/77-11/12/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/12/77-11/12/77	1	600.	600.	600.	600.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/12/77-11/12/77	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/12/77-11/12/77	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/12/77-11/12/77	1	66.	66.	66.	66.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/12/77-11/12/77	1	82.	82.	82.	82.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/12/77-11/12/77	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/12/77-11/12/77	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/12/77-11/12/77	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/12/77-11/12/77	1	52.	52.	52.	52.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/12/77-11/12/77	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/12/77-11/12/77	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/12/77-11/12/77	1	29.	29.	29.	29.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/12/77-11/12/77	1	330.	330.	330.	330.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/12/77-11/12/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/12/77-11/12/77	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/12/77-11/12/77	1	869.	869.	869.	869.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/12/77-11/12/77	1	1.18	1.18	1.18	1.18	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: ZION0112

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0112

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0113

NPS Station ID: ZION0113 LAT/LON: 37.384920/-112.838532 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK VIRGIN RIVER NEAR GLENDALE FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_51
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 5840 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE STRAIGHT CANYON UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER NEAR GLENDALE ABOVE ZION NARROWS. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0113

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/23/82	4	15.25	16.75	22.	14.5	12.75	3.571	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/23/82	4	427.5	417.5	455.	360.	1675.	40.927	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/20/81-08/23/82	4	8.05	7.825	8.2	7.	0.309	0.556	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/23/82	4	8.4	8.325	8.5	8.	0.049	0.222	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-08/23/82	4	8.4	8.277	8.5	8.	0.052	0.228	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/23/82	4	0.004	0.005	0.01	0.003	0.	0.003	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/20/81-08/23/82	4	185.	189.25	210.	177.	222.25	14.908	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/23/82	4 ##	0.075	0.1	0.2	0.05	0.005	0.071	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/23/82	4	0.015	0.014	0.02	0.005	0.	0.008	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/23/82	4	230.	225.	240.	200.	300.	17.321	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/81-08/23/82	4	35.5	37.75	54.	26.	138.917	11.786	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/23/82	4	53.5	51.75	55.	45.	20.917	4.573	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/23/82	4	23.5	23.75	26.	22.	2.917	1.708	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/23/82	4	6.5	6.75	9.	5.	4.25	2.062	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-08/23/82	4	0.25	0.25	0.3	0.2	0.003	0.058	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/23/82	4	1.45	1.4	1.5	1.2	0.02	0.141	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/20/81-08/23/82	4	2.	2.5	4.	2.	1.	1.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/20/81-08/23/82	4	39.	37.25	44.	27.	52.25	7.228	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/23/82	4	0.2	0.175	0.2	0.1	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/23/82	4	12.	11.125	12.	8.5	3.063	1.75	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/23/82	4	20.	20.	20.	20.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/23/82	4	248.	249.	278.	222.	526.667	22.949	**	**	**	**

** - Less than 9 observations ## - 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: ZION0113

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0114

NPS Station ID: ZION0114
LAT/LON: 37.311670/-112.840005
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 9)22cdc-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371842112502401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 5.20
On/Off RF1:
RF3 Index: 15010008040600.00
RF3 Mile Point: 0.00
Distance from RF3: 0.63
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0114

Parameter		Period of Record	Obs		Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/86-07/15/86	1		8.	8.	8.	8.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/15/86-07/15/86	1		23.	23.	23.	23.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/15/86-07/15/86	1		12.6	12.6	12.6	12.6	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/86-07/15/86	1		490.	490.	490.	490.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/86-07/15/86	1		7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/86-07/15/86	1		7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/86-07/15/86	1		0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/15/86-07/15/86	1		7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/15/86-07/15/86	1		7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/86-07/15/86	1		0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/86-07/15/86	1		268.	268.	268.	268.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/15/86-07/15/86	1	##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/15/86-07/15/86	1		70.	70.	70.	70.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/86-07/15/86	1		26.	26.	26.	26.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/86-07/15/86	1		4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/15/86-07/15/86	1		1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/15/86-07/15/86	1		3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/15/86-07/15/86	1		40.	40.	40.	40.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/15/86-07/15/86	1		0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/15/86-07/15/86	1		7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/15/86-07/15/86	1		6.	6.	6.	6.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/86-07/15/86	1	##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/15/86-07/15/86	1		273.	273.	273.	273.	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: ZION0114

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0114

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0115

NPS Station ID: ZION0115
LAT/LON: 37.532781/-112.847227
Agency: 21UTAH
Date Created: 11/30/91
Location: BOY SCOUT SPRING NR NAVAJO LAKE
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 594689
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 16030001
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 16030001
RF1 Mile Point: 0.000
Distance from RF1: 20.30
On/Off RF1:
RF3 Index: 15010008112900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.22
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/05/88-06/28/93	6	8.3	8.6	11.	6.4	3.34	1.828	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/91-06/28/93	3	20.	14.167	20.	2.5	102.083	10.104	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/05/88-06/28/93	5	0.6	14.68	71.	0.3	991.297	31.485	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/05/88-06/11/93	2	0.65	0.65	1.	0.3	0.245	0.495	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/88-06/28/93	6	330.	311.167	358.	176.	4600.167	67.825	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/05/88-10/05/88	1	341.	341.	341.	341.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/05/88-06/28/93	6	8.6	8.733	10.1	7.7	0.611	0.781	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	10/05/88-08/15/90	3 ##	7.	10.	16.	7.	27.	5.196	**	**	**	**
00400	PH (STANDARD UNITS)	10/05/88-06/28/93	6	8.15	8.383	10.	7.5	0.734	0.857	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/05/88-06/28/93	6	8.147	8.006	10.	7.5	0.904	0.951	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-06/28/93	6	0.007	0.01	0.032	0.	0.	0.011	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/05/88-10/05/88	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/05/88-10/05/88	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-10/05/88	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/05/88-10/05/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/05/88-06/28/93	3	183.	183.333	185.	182.	2.333	1.528	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/05/88-10/05/88	1	226.	226.	226.	226.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/05/88-10/05/88	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/05/88-06/28/93	6 ##	1.5	2.917	10.	1.5	12.042	3.47	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/05/88-06/28/93	7 ##	0.025	0.022	0.025	0.003	0.	0.009	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-10/05/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/05/88-10/05/88	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/89-08/15/90	2	0.06	0.06	0.1	0.02	0.003	0.057	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/05/88-06/28/93	6 ##	0.075	0.083	0.15	0.05	0.002	0.041	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/25/91-06/28/93	4	0.035	0.05	0.1	0.03	0.001	0.034	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/05/88-06/28/93	7 ##	0.005	0.005	0.011	0.	0.	0.003	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/25/91-06/28/93	4 ##	0.005	0.007	0.011	0.005	0.	0.003	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/05/88-10/05/88	1 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/05/88-08/15/90	3	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/05/88-06/28/93	3	160.	168.667	192.	154.	417.333	20.429	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/05/88-06/28/93	3	52.	52.667	57.	49.	16.333	4.041	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/05/88-06/28/93	3	7.6	9.	12.	7.4	6.76	2.6	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/05/88-06/28/93	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/05/88-06/28/93	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/05/88-06/28/93	3 ##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/05/88-06/28/93	3	5.8	5.2	7.8	2.	8.68	2.946	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/28/93-06/28/93	1	3.1	3.1	3.1	3.1	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: ZION0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/05/88-08/09/89	2 ##	0.375	0.375	0.5	0.25	0.031	0.177	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	06/25/91-08/13/91	2	72.	72.	136.	8.	8192.	90.51	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	06/25/91-08/13/91	2	1.518	1.518	2.134	0.903	0.757	0.87	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			32.985								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/25/91-08/13/91	2 ##	3.	3.	4.	2.	2.	1.414	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/25/91-08/13/91	2 ##	0.452	0.452	0.602	0.301	0.045	0.213	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.828								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	06/25/91-08/13/91	2	14.	14.	16.	12.	8.	2.828	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	06/25/91-08/13/91	2	1.142	1.142	1.204	1.079	0.008	0.088	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			13.856								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/05/88-06/28/93	5	184.	114.5	192.	1.5	10511.	102.523	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/25/91-06/28/93	4	1.	2.5	8.	0.	13.667	3.697	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/05/88-10/05/88	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/09/89-08/15/90	2	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82702	AS DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/05/88-08/09/89	2	245.	245.	250.	240.	50.	7.071	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/05/88-08/09/89	2 ##	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/05/88-08/09/89	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0115

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	4	0	0.00				2	0	0.00			
00400	PH	Other-Hi Lim.	9.	6	1	0.17	4	1	0.25				2	0	0.00			
		Other-Lo Lim.	6.5	6	0	0.00	4	0	0.00				2	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00	2	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00				3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	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: ZION0116

NPS Station ID: ZION0116
LAT/LON: 37.379726/-112.847504
Agency: 112WRD
Date Created: 05/21/88
Location: (C-39- 9)33ADA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372247112505101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 2.30
On/Off RF1:
RF3 Index: 15010008001502.68
RF3 Mile Point: 11.06
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/87-07/28/87	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	07/28/87-07/28/87	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	07/28/87-07/28/87	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/28/87-07/28/87	1	2450.	2450.	2450.	2450.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/28/87-07/28/87	1	7.16	7.16	7.16	7.16	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/28/87-07/28/87	1	7.16	7.16	7.16	7.16	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/87-07/28/87	1	0.069	0.069	0.069	0.069	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/28/87-07/28/87	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/28/87-07/28/87	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/87-07/28/87	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/87-07/28/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/28/87-07/28/87	1	320.	320.	320.	320.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/28/87-07/28/87	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/28/87-07/28/87	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/28/87-07/28/87	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/28/87-07/28/87	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/28/87-07/28/87	1	1400.	1400.	1400.	1400.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/28/87-07/28/87	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/28/87-07/28/87	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/28/87-07/28/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/28/87-07/28/87	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/28/87-07/28/87	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	07/28/87-07/28/87	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/28/87-07/28/87	1	2360.	2360.	2360.	2360.	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: ZION0116

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0116

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									

& - 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: ZION0117

NPS Station ID: ZION0117
LAT/LON: 37.336670/-112.849170
Agency: 112WRD
Date Created: 05/21/88
Location: ORDERVILLE GULCH BELOW SW 19
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372012112505701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 3.40
On/Off RF1:
RF3 Index: 15010008001309.65
RF3 Mile Point: 18.12
Distance from RF3: 0.84
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0117

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/87-09/18/87	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/18/87-09/18/87	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/18/87-09/18/87	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/87-09/18/87	1	605.	605.	605.	605.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/18/87-09/18/87	1	8.61	8.61	8.61	8.61	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/18/87-09/18/87	1	8.61	8.61	8.61	8.61	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/87-09/18/87	1	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/18/87-09/18/87	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/18/87-09/18/87	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/87-09/18/87	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/87-09/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/87-09/18/87	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/87-09/18/87	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/87-09/18/87	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/87-09/18/87	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/87-09/18/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/87-09/18/87	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/87-09/18/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/87-09/18/87	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/18/87-09/18/87	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/87-09/18/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/87-09/18/87	1	366.	366.	366.	366.	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: ZION0117

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0117

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0118

NPS Station ID: ZION0118
LAT/LON: 37.414170/-112.854448
Agency: 112WRD
Date Created: 08/01/87
Location: (C-39- 9)16dcc-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372451112511601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 0.90
On/Off RF1:
RF3 Index: 15010008001509.81
RF3 Mile Point: 9.98
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0118

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/86-09/11/86	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/11/86-09/11/86	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/86-09/11/86	1	580.	580.	580.	580.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/11/86-09/11/86	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/11/86-09/11/86	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/11/86-09/11/86	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/11/86-09/11/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/11/86-09/11/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/11/86-09/11/86	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/11/86-09/11/86	1	217.	217.	217.	217.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/86-09/11/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/11/86-09/11/86	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/11/86-09/11/86	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/11/86-09/11/86	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/11/86-09/11/86	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/11/86-09/11/86	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/11/86-09/11/86	1	94.	94.	94.	94.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/11/86-09/11/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/11/86-09/11/86	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/11/86-09/11/86	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/11/86-09/11/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/11/86-09/11/86	1	335.	335.	335.	335.	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: ZION0118

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0118

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0119

NPS Station ID: ZION0119 LAT/LON: 37.376253/-112.858560 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK VIRGIN RIVER 2.5 MI UP FROM ZION NP FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_USU_NFVRCR
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 5680 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE STRAIGHT CANYON UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER 2.5 MILES ABOVE ZION NP NORTH BOUNDARY NEAR THE CHAMBERLAIN RANCH. DATA FOR THIS SITE ARE FROM THE 1977 REPORT "THE BIOLOGICAL AND CHEMICAL INPUTS TO ZION NATIONAL PARK" BY J. DAIN MADDOX AND GEORGE E. HART OF THE DEPARTMENT OF FORESTRY AND OUTDOOR RECREATION UTAH STATE UNIV. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0119

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/23/76-07/23/76	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/23/76-07/23/76	1	570.	570.	570.	570.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/23/76-07/23/76	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/23/76-07/23/76	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/23/76-07/23/76	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	07/23/76-07/23/76	1	206.	206.	206.	206.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/23/76-07/23/76	1	251.	251.	251.	251.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/23/76-07/23/76	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	07/23/76-07/23/76	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	07/23/76-07/23/76	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/23/76-07/23/76	1	208.	208.	208.	208.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/23/76-07/23/76	1	47.2	47.2	47.2	47.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/23/76-07/23/76	1	21.6	21.6	21.6	21.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/23/76-07/23/76	1	18.7	18.7	18.7	18.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/23/76-07/23/76	1	1.62	1.62	1.62	1.62	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/23/76-07/23/76	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/23/76-07/23/76	1	18.7	18.7	18.7	18.7	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/23/76-07/23/76	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/23/76-07/23/76	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	07/23/76-07/23/76	1	89.	89.	89.	89.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/76-07/23/76	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/23/76-07/23/76	1	100.	100.	100.	100.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0119

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/76-07/23/76	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/76-07/23/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/76-07/23/76	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/76-07/23/76	1	65.	65.	65.	65.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/76-07/23/76	1	7.	7.	7.	7.	0.	0.	**	**	**	**
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/27/77-09/04/77	12	10500.	9254.167	14600.	4600.	11678844.697	3417.432	4810.	5412.5	11825.	14060.
31503	LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	07/27/77-09/04/77	12	4.021	3.935	4.164	3.663	0.031	0.177	3.681	3.733	4.073	4.147
31503	GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35	GEOMETRIC MEAN =			8616.67								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	12	440.	610.	1600.	100.	241418.182	491.343	130.	205.	1055.	1510.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	12	2.643	2.65	3.204	2.	0.137	0.37	2.09	2.311	3.007	3.177
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			446.713								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/27/77-09/04/77	12	700.	661.667	1000.	400.	25996.97	161.236	430.	515.	750.	940.
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	07/27/77-09/04/77	12	2.845	2.809	3.	2.602	0.012	0.108	2.631	2.711	2.875	2.971
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			643.535								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/23/76-07/23/76	1	370.	370.	370.	370.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/23/76-07/23/76	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/76-07/23/76	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/23/76-07/23/76	1	0.11	0.11	0.11	0.11	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: ZION0119

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00723	CYANIDE, DISSOLVED STD METHOD	Fresh Acute	22.	1	0	0.00	1	0	0.00									
		Drinking Water	200.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
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									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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									
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									
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	12	12	1.00	12	12	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	12	11	0.92	12	11	0.92									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	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: ZION0120

NPS Station ID: ZION0120
LAT/LON: 37.492615/-112.869115
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC501R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_39 /5075831
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Straight Canyon UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/17/80-07/17/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/80-07/17/80	1	235.	235.	235.	235.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/17/80-07/17/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/17/80-07/17/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/17/80-07/17/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/17/80-07/17/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/17/80-07/17/80	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/17/80-07/17/80	1	13.39	13.39	13.39	13.39	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/17/80-07/17/80	1	89.	89.	89.	89.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/17/80-07/17/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/17/80-07/17/80	1	3.087	3.087	3.087	3.087	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/17/80-07/17/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/17/80-07/17/80	1	6100.	6100.	6100.	6100.	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: ZION0120

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0121

NPS Station ID: ZION0121
LAT/LON: 37.371670/-112.869448
Agency: 112WRD
Date Created: 05/21/88
Location: N. F. VIRGIN RIVER PAST
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372218112521001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 10.10
On/Off RF1:
RF3 Index: 15010008058606.77
RF3 Mile Point: 7.40
Distance from RF3: 0.55
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0121

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/87-09/18/87	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	09/18/87-09/18/87	1	2785.	2785.	2785.	2785.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/18/87-09/18/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/87-09/18/87	1	425.	425.	425.	425.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/18/87-09/18/87	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/18/87-09/18/87	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/87-09/18/87	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/18/87-09/18/87	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/18/87-09/18/87	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/87-09/18/87	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/87-09/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/87-09/18/87	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/87-09/18/87	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/87-09/18/87	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/87-09/18/87	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/87-09/18/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/87-09/18/87	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/87-09/18/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/87-09/18/87	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/18/87-09/18/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/87-09/18/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/87-09/18/87	1	243.	243.	243.	243.	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: ZION0121

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0121

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0122

NPS Station ID: ZION0122
LAT/LON: 37.296309/-112.875309
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC510R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_35 /5075840
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0122

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	1	370.	370.	370.	370.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/80-07/22/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/80-07/22/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/80-07/22/80	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	1	12.97	12.97	12.97	12.97	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	1	114.	114.	114.	114.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	1	4.589	4.589	4.589	4.589	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/22/80-07/22/80	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/22/80-07/22/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	1	6900.	6900.	6900.	6900.	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: ZION0122

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0123

NPS Station ID: ZION0123
LAT/LON: 37.369698/-112.882310
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC506R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_43 /5075836
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0123

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/20/80-07/20/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/20/80-07/20/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/20/80-07/20/80	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/20/80-07/20/80	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/20/80-07/20/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/20/80-07/20/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/20/80-07/20/80	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/20/80-07/20/80	1	11.25	11.25	11.25	11.25	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/20/80-07/20/80	1	81.	81.	81.	81.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/20/80-07/20/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/20/80-07/20/80	1	1.769	1.769	1.769	1.769	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/20/80-07/20/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/20/80-07/20/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/20/80-07/20/80	1	12000.	12000.	12000.	12000.	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: ZION0123

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0124

NPS Station ID: ZION0124
LAT/LON: 37.509726/-112.882781
Agency: 112WRD
Date Created: 01/07/89
Location: EAST FORK DEEP CREEK NR CEDAR CITY, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405250
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.40
On/Off RF1:
RF3 Index: 15010008001706.57
RF3 Mile Point: 10.98
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0124

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/87-08/21/91	23	11.	10.83	18.	0.	15.82	3.977	5.4	9.5	13.5	16.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/08/87-08/21/91	22	18.5	17.75	25.	5.5	28.304	5.32	7.5	15.	22.	24.
00061	FLOW, STREAM, INSTANTANEOUS CFS	07/08/87-08/21/91	24	1.5	2.296	13.	0.3	7.424	2.725	0.35	0.625	3.	5.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/87-08/21/91	21	405.	402.714	450.	340.	786.514	28.045	362.	380.	424.	438.8

** - 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

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

Station Inventory for Station: ZION0125

NPS Station ID: ZION0125
LAT/LON: 37.522226/-112.883337
Agency: 112WRD
Date Created: 12/19/81
Location: DEEP CREEK AT ROAD CROSSING, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 373120112530001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 20.70
On/Off RF1:
RF3 Index: 15010008001515.64
RF3 Mile Point: 21.22
Distance from RF3: 0.33
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0125

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-08/20/81	1	16.5	16.5	16.5	16.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-08/20/81	1	28.4	28.4	28.4	28.4	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-08/20/81	1	577.	577.	577.	577.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-08/20/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-08/20/81	1	415.	415.	415.	415.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-08/20/81	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-08/20/81	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-08/20/81	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/20/81	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-08/20/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-08/20/81	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-08/20/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-08/20/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-08/20/81	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-08/20/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-08/20/81	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-08/20/81	1	75.	75.	75.	75.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-08/20/81	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-08/20/81	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-08/20/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-08/20/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-08/20/81	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-08/20/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-08/20/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-08/20/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-08/20/81	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-08/20/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-08/20/81	1	236.	236.	236.	236.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-08/20/81	1	1.27	1.27	1.27	1.27	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-08/20/81	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0125

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0126

NPS Station ID: ZION0126 LAT/LON: 37.583338/-112.883337 Agency: 21UTDHDW Date Created: 05/26/90
Location: DEER HAVEN CAMPGROUND - DEER HAVEN SPR FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1101901 /UT4901055001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008009100.00 RF3 Mile Point: 0.97 Distance from RF3: 0.37 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/14/78-09/14/78	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/14/78-09/14/78	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/14/78-09/14/78	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/14/78-09/14/78	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/14/78-09/14/78	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/14/78-09/14/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	126.	126.	126.	126.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/14/78-09/14/78	1	154.	154.	154.	154.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/14/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/14/78-09/05/84	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/14/78-09/14/78	1	124.	124.	124.	124.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/78-09/14/78	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/78-09/14/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/78-09/14/78	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/78-09/14/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/14/78-09/14/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/14/78-09/05/84	2	9.5	9.5	14.	5.	40.5	6.364	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/14/78-09/14/78	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/78-09/14/78	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/14/78-09/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/14/78-09/14/78	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/14/78-09/14/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/14/78-09/14/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/14/78-09/14/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/14/78-09/14/78	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/14/78-09/14/78	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

Parameter Inventory for Station: ZION0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/14/78-09/14/78	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/78-09/14/78	1	148.	148.	148.	148.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/14/78-09/14/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/14/78-09/14/78	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: ZION0126

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0127

NPS Station ID: ZION0127
LAT/LON: 37.521671/-112.883616
Agency: 112WRD
Date Created: 01/07/89
Location: DEEP CREEK NEAR CEDAR CITY, UT
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405200
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.10
On/Off RF1:
RF3 Index: 15010008001506.48
RF3 Mile Point: 7.19
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0127

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/87-08/21/91	27	9.3	9.307	17.	0.	19.559	4.423	2.1	5.5	12.5	15.4
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	07/08/87-08/21/91	26	16.25	14.692	24.	-3.	49.922	7.066	5.8	10.875	20.25	23.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	07/08/87-08/21/91	27	1.	1.219	6.	0.3	1.248	1.117	0.4	0.5	2.	2.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/87-08/21/91	25	445.	427.88	490.	12.	8016.11	89.533	399.	432.5	462.5	474.

** - Less than 9 observations ## - 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: ZION0128

NPS Station ID: ZION0128
LAT/LON: 37.438198/-112.884392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC504R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_40 /5075834
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cogswell Point UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/80-07/19/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/80-07/19/80	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/19/80-07/19/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/19/80-07/19/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/19/80-07/19/80	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/80-07/19/80	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/19/80-07/19/80	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/19/80-07/19/80	1	12.62	12.62	12.62	12.62	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/19/80-07/19/80	1	98.	98.	98.	98.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/19/80-07/19/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/19/80-07/19/80	1	2.348	2.348	2.348	2.348	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/19/80-07/19/80	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/19/80-07/19/80	1	6.	6.	6.	6.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/19/80-07/19/80	1	6900.	6900.	6900.	6900.	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: ZION0128

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0129

NPS Station ID: ZION0129
LAT/LON: 37.577781/-112.890837
Agency: 112WRD
Date Created: 06/20/87
Location: (C-37- 9)20DAC-S1
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 373440112532701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008003003.04
RF3 Mile Point: 3.03
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0129

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/11/82-06/11/82	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/11/82-06/11/82	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/11/82-06/11/82	1	465.	465.	465.	465.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/11/82-06/11/82	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/11/82-06/11/82	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/11/82-06/11/82	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/11/82-06/11/82	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/11/82-06/11/82	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/11/82-06/11/82	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/11/82-06/11/82	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/11/82-06/11/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/11/82-06/11/82	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/11/82-06/11/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/11/82-06/11/82	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/11/82-06/11/82	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/11/82-06/11/82	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/11/82-06/11/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/11/82-06/11/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/11/82-06/11/82	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/11/82-06/11/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/11/82-06/11/82	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/11/82-06/11/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/11/82-06/11/82	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/11/82-06/11/82	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/11/82-06/11/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0129

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	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: ZION0129

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0130

NPS Station ID: ZION0130
LAT/LON: 37.449198/-112.893004
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB511R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_45 /5075828
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cogswell Point UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	1	370.	370.	370.	370.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/80-07/06/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/80-07/06/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/80-07/06/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	1	109.	109.	109.	109.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	1	142.	142.	142.	142.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	1	1.988	1.988	1.988	1.988	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/06/80-07/06/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/06/80-07/06/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	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: ZION0130

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0131

NPS Station ID: ZION0131
LAT/LON: 37.346198/-112.895893
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB510R
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_42 /5075827
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0131

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/80-07/05/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/05/80-07/05/80	1	135.	135.	135.	135.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/05/80-07/05/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/05/80-07/05/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/05/80-07/05/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/05/80-07/05/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/05/80-07/05/80	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/80-07/05/80	1	6.52	6.52	6.52	6.52	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/05/80-07/05/80	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/05/80-07/05/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/05/80-07/05/80	1	133.	133.	133.	133.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/05/80-07/05/80	1	1.599	1.599	1.599	1.599	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/05/80-07/05/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/05/80-07/05/80	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: ZION0131

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0132

NPS Station ID: ZION0132
LAT/LON: 37.287503/-112.896671
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40- 9)31CBA-S1
FIPS State/County: 49025 UTAH/KANE
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371715112534801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 16.60
On/Off RF1:
RF3 Index: 15010008015800.00
RF3 Mile Point: 0.00
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0132

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/23/86-08/23/86	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/23/86-08/23/86	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/23/86-08/23/86	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/23/86-08/23/86	1	685.	685.	685.	685.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/23/86-08/23/86	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/23/86-08/23/86	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/23/86-08/23/86	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/23/86-08/23/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/23/86-08/23/86	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/23/86-08/23/86	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/23/86-08/23/86	1	353.	353.	353.	353.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/23/86-08/23/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/23/86-08/23/86	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/23/86-08/23/86	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/23/86-08/23/86	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/23/86-08/23/86	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/23/86-08/23/86	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/23/86-08/23/86	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/23/86-08/23/86	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/23/86-08/23/86	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/23/86-08/23/86	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/23/86-08/23/86	1	33.	33.	33.	33.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/23/86-08/23/86	1	217.	217.	217.	217.	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: ZION0132

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	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: ZION0132

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0133

NPS Station ID: ZION0133 LAT/LON: 37.371255/-112.899865 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK VIRGIN R ABOVE ZION NP NORTH BNDY FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_USU_NFVRNP
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 5320 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER ABOVE ZION NP NORTH BOUNDARY. DATA FOR THIS SITE ARE FROM THE 1977 REPORT "THE BIOLOGICAL AND CHEMICAL INPUTS TO ZION NATIONAL PARK" BY J. DAIN MADDOX AND GEORGE E. HART OF THE DEPARTMENT OF FORESTRY AND OUTDOOR RECREATION UTAH STATE UNIV. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0133

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/27/77-09/04/77	12	1260.	1483.333	3700.	120.	878096.97	937.068	174.	1115.	1950.	3280.
31503	LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	07/27/77-09/04/77	12	3.1	3.053	3.568	2.079	0.161	0.401	2.199	3.047	3.29	3.506
31503	GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35	GEOMETRIC MEAN =			1128.808								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	12	70.	95.417	360.	0.	14442.992	120.179	0.	5.	97.5	348.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/27/77-09/04/77	12	1.841	1.454	2.556	0.	0.886	0.941	0.	0.325	1.989	2.541
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			28.429								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/27/77-09/04/77	12	120.	186.667	520.	60.	21187.879	145.561	66.	85.	270.	484.
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	07/27/77-09/04/77	12	2.079	2.17	2.716	1.778	0.089	0.298	1.816	1.927	2.43	2.682
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			147.748								

** - Less than 9 observations ## - 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: ZION0133

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	12	10	0.83	12	10	0.83									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	12	2	0.17	12	2	0.17									

& - 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: ZION0134

NPS Station ID: ZION0134 | LAT/LON: 37.182003/-112.902004 | Agency: 11NPSWRD | Date Created: 09/13/97
Location: EAST FORK VIRGIN RIVER ABOVE PARUNUWEAP CANYON | FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): ZION_NPSWRD_161
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 | Depth of Water: 0 | Aquifer:
Major Basin: COLORADO RIVER | Elevation: 4000 | Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER | ECO Region:
RF1 Index: 15010008 | RF1 Mile Point: 0.000 | Distance from RF1: 3.60 | On/Off RF1:
RF3 Index: 15010008039000.00 | RF3 Mile Point: 0.00 | Distance from RF3: 0.01 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE EAST WASHINGTON CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE EAST FORK VIRGIN RIVER ABOVE PARUNUWEAP CANYON. DATA ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND ADDITIONAL STATIONS NOT UPLOADED TO STORET. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA WERE PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. TEL. (970)225-3516.

Parameter Inventory for Station: ZION0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/92-09/18/92	6	18.	17.167	18.	14.	2.567	1.602	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/26/92-09/18/92	4	8.6	8.8	9.7	8.3	0.407	0.638	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	05/20/92-09/18/92	6	8.19	8.152	8.3	7.79	0.035	0.187	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/20/92-09/18/92	6	8.19	8.112	8.3	7.79	0.037	0.192	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/92-09/18/92	6	0.006	0.008	0.016	0.005	0.	0.004	**	**	**	**
00600	NITROGEN, TOTAL (MG/L AS N)	05/20/92-09/18/92	6	1.	1.	1.2	0.7	0.036	0.19	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/20/92-09/18/92	6	0.1	0.117	0.3	0.	0.018	0.133	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/20/92-09/18/92	6	0.95	0.883	1.	0.5	0.038	0.194	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/20/92-09/18/92	6 ##	0.025	0.032	0.07	0.	0.001	0.035	**	**	**	**
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/20/92-09/18/92	5	1.1	1.098	1.33	0.97	0.021	0.145	**	**	**	**
50793	INVALID PARAMETER	05/20/92-09/18/92	6	0.21	1.548	8.494	0.028	11.59	3.404	**	**	**	**
50794	INVALID PARAMETER	05/20/92-09/18/92	6	0.223	0.389	1.334	0.11	0.217	0.466	**	**	**	**
50795	INVALID PARAMETER	05/20/92-09/18/92	6	10.	16.333	59.	1.	469.467	21.667	**	**	**	**

** - Less than 9 observations ## - 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: ZION0134

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00				1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0134

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	6	0	0.00	3	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	6	0	0.00	3	0	0.00				3	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	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 Inventory for Station: ZION0135

NPS Station ID: ZION0135
LAT/LON: 37.538060/-112.910004
Agency: 21UTDHDW
Date Created: 05/26/90
Location: TROSSACH LOCH ESTATES - HOP SPRING
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 1105001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.00
On/Off RF1:
RF3 Index: 15010008001710.35
RF3 Mile Point: 13.64
Distance from RF3: 0.29
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0135

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: ZION0136

NPS Station ID: ZION0136
LAT/LON: 37.359809/-112.911004
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC505R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_41 /5075835
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0136

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/80-07/19/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/80-07/19/80	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/19/80-07/19/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/19/80-07/19/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/19/80-07/19/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/19/80-07/19/80	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/19/80-07/19/80	1	10.13	10.13	10.13	10.13	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/19/80-07/19/80	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/19/80-07/19/80	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/19/80-07/19/80	1	0.302	0.302	0.302	0.302	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/19/80-07/19/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/19/80-07/19/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/19/80-07/19/80	1	12.3	12.3	12.3	12.3	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/19/80-07/19/80	1	8200.	8200.	8200.	8200.	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: ZION0136

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0137

NPS Station ID: ZION0137
LAT/LON: 37.284448/-112.919449
Agency: 21UTAH
Date Created: 01/16/79
Location: VIRGIN RIVER-ZION NTL PK NARROWS
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495120
RMI-Indexes: 1101000 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0386.50 0151.80 010.00
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER-VIRGINRIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 13.40
On/Off RF1:
RF3 Index: 15010008057800.00
RF3 Mile Point: 1.02
Distance from RF3: 0.12
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/77-11/10/93	38	10.95	10.616	19.1	2.7	19.162	4.377	5.	6.95	13.95	17.21
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/04/91-04/04/91	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/78-08/18/93	16	30.5	50.438	350.	8.	6622.396	81.378	12.9	17.5	40.	156.1
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/18/77-11/10/93	40	5.5	52.438	350.	0.8	8002.714	89.458	1.12	2.175	67.75	216.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/10/78-11/10/93	37	561.	602.	2290.	320.	95624.667	309.232	384.	481.5	602.5	790.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-11/10/93	43	540.	559.163	850.	250.	15666.997	125.168	409.	500.	610.	770.
00300	OXYGEN, DISSOLVED MG/L	05/24/77-11/10/93	37	9.5	9.584	13.	6.6	1.701	1.304	8.	8.75	10.4	11.24
00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/77-09/11/79	10	1.35	1.72	4.5	1.	1.111	1.054	1.	1.15	2.05	4.27
00335	COD, .025N K2CR2O7 MG/L	05/24/77-07/26/90	29 ##	7.5	16.483	90.	4.	389.384	19.733	5.	7.25	17.5	35.
00400	PH (STANDARD UNITS)	05/24/77-11/10/93	37	8.4	8.273	8.7	7.6	0.085	0.291	7.7	8.15	8.5	8.6
00400	CONVERTED PH (STANDARD UNITS)	05/24/77-11/10/93	37	8.4	8.163	8.7	7.6	0.097	0.312	7.7	8.15	8.5	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/77-11/10/93	37	0.004	0.007	0.025	0.002	0.	0.006	0.003	0.003	0.007	0.02
00403	PH, LAB, STANDARD UNITS SU	01/18/77-11/10/93	25	8.3	8.288	8.7	7.9	0.034	0.183	8.06	8.2	8.4	8.54
00403	CONVERTED PH, LAB, STANDARD UNITS	01/18/77-11/10/93	25	8.3	8.252	8.7	7.9	0.035	0.187	8.06	8.2	8.4	8.54
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-11/10/93	25	0.005	0.006	0.013	0.002	0.	0.002	0.003	0.004	0.006	0.009
00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/77-11/10/93	40	2.	2.2	13.	1.	3.395	1.843	1.	2.	2.	3.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	40	165.5	165.15	198.	125.	243.926	15.618	146.	153.	177.75	184.9
00440	BICARBONATE ION (MG/L AS HCO3)	01/18/77-11/10/93	40	201.	200.45	242.	148.	375.997	19.391	177.1	186.	216.	225.8
00445	CARBONATE ION (MG/L AS CO3)	01/18/77-11/10/93	40	0.	0.525	6.	0.	2.102	1.45	0.	0.	0.	2.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/24/77-10/19/83	24	21.	280.179	2850.	0.3	392380.492	626.403	1.5	2.875	233.25	990.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-11/10/93	26	14.5	136.5	1260.	1.5	81195.14	284.948	1.5	5.5	128.75	549.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/18/77-11/10/93	41 ##	0.05	0.052	0.1	0.	0.001	0.03	0.025	0.025	0.05	0.1
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	21 ##	0.025	0.022	0.05	0.	0.	0.013	0.005	0.015	0.025	0.045
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	15 ##	0.025	0.024	0.025	0.005	0.	0.005	0.017	0.025	0.025	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	26	0.12	0.151	0.6	0.005	0.018	0.133	0.025	0.048	0.213	0.309
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	16	0.15	0.171	0.6	0.005	0.025	0.159	0.019	0.025	0.288	0.411
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/77-11/10/93	39	0.2	0.363	2.5	0.05	0.21	0.458	0.05	0.1	0.4	0.72
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-10/30/91	27	0.1	0.158	0.65	0.025	0.026	0.161	0.025	0.025	0.2	0.39
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/04/91-11/10/93	7	0.1	0.141	0.4	0.02	0.016	0.126	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/24/77-11/10/93	38	0.04	0.082	0.55	0.003	0.015	0.121	0.005	0.021	0.1	0.194
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/04/91-11/10/93	7 ##	0.005	0.01	0.026	0.005	0.	0.008	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/77-07/26/90	21 ##	0.01	0.014	0.03	0.003	0.	0.008	0.003	0.01	0.02	0.03
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/77-07/26/90	26	6.65	12.812	135.	0.6	670.535	25.895	0.91	1.45	12.15	23.
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	40	230.	230.7	332.	172.	913.241	30.22	200.	209.25	248.	251.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/77-11/10/93	40	54.5	55.13	82.	34.	92.307	9.608	44.	48.25	59.	68.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-11/10/93	40	23.	22.563	34.	13.	16.733	4.091	17.1	19.25	25.	27.
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-11/10/93	40	28.5	32.927	89.	6.	310.087	17.609	17.1	22.25	36.075	61.6
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/77-11/10/93	40	2.	2.427	5.	1.	0.529	0.727	2.	2.	3.	3.

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Parameter Inventory for Station: ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/77-09/15/87	32	29.	37.375	110.	5.	762.5	27.613	8.3	24.	39.	93.9
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-11/10/93	31	29.	36.129	103.	5.	613.383	24.767	8.2	23.	42.	80.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/18/77-11/10/93	40	80.5	84.85	187.	38.	748.985	27.368	49.6	72.	93.	105.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/18/77-10/26/82	20	0.15	0.174	0.32	0.11	0.003	0.055	0.112	0.14	0.2	0.268
00955	SILICA, DISSOLVED (MG/L AS SI02)	01/18/77-10/26/82	20	10.	9.9	11.	7.	1.463	1.21	8.	9.	11.	11.
01000	ARSENIC, DISSOLVED (UG/L AS AS)	01/18/77-11/10/93	5 ##	2.5	2.1	2.5	1.	0.425	0.652	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/17/78-07/31/91	30 ##	0.5	0.827	2.5	0.25	0.444	0.667	0.25	0.5	1.	2.45
01005	BARIUM, DISSOLVED (UG/L AS BA)	01/18/77-11/10/93	5	84.	53.2	97.	0.	2384.7	48.833	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/06/78-07/31/91	31	0.08	20.694	120.	0.	1590.841	39.885	0.025	0.025	0.2	98.
01020	BORON, DISSOLVED (UG/L AS B)	01/18/77-10/26/82	20	80.	76.35	120.	5.	477.503	21.852	60.5	70.5	80.	108.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	01/18/77-11/10/93	5 ##	0.5	0.3	0.5	0.	0.075	0.274	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-07/31/91	29 ##	0.5	0.603	2.	0.5	0.096	0.31	0.5	0.5	0.5	1.
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	03/07/78-11/10/93	4 ##	2.5	1.875	2.5	0.	1.563	1.25	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	01/18/77-10/26/82	16 ##	2.5	2.188	2.5	0.	0.729	0.854	0.	2.5	2.5	2.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-07/31/91	29 ##	2.5	2.81	7.5	1.5	1.275	1.129	2.5	2.5	2.5	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	01/18/77-11/10/93	5 ##	10.	7.	15.	0.	45.	6.708	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/06/78-07/31/91	31 ##	5.	7.645	19.	5.	13.77	3.711	5.	5.	10.	13.6
01046	IRON, DISSOLVED (UG/L AS FE)	01/18/77-11/10/93	5	10.	11.2	21.	0.	59.7	7.727	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	01/18/77-11/10/93	5 ##	1.5	1.1	2.5	0.	1.175	1.084	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-07/31/91	29 ##	2.5	4.052	12.5	2.5	6.881	2.623	2.5	2.5	5.	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	09/06/78-07/31/91	31	20.	47.613	260.	5.	4047.845	63.623	5.	11.	55.	140.4
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-11/10/93	5	5.	4.8	14.	0.	32.7	5.718	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/18/77-03/07/78	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-10/26/82	22 ##	5.	8.795	25.	5.	39.968	6.322	5.	5.	10.625	22.6
01075	SILVER, DISSOLVED (UG/L AS AG)	01/18/77-11/10/93	5 ##	1.	0.6	1.	0.	0.3	0.548	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-07/31/91	28 ##	1.	1.536	5.	1.	1.647	1.283	1.	1.	1.	5.
01090	ZINC, DISSOLVED (UG/L AS ZN)	01/18/77-11/10/93	5 ##	10.	8.	15.	0.	57.5	7.583	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/12/78-07/31/91	31	10.	16.403	55.	2.5	186.724	13.665	5.	7.5	23.	34.8
01145	SELENIUM, DISSOLVED (UG/L AS SE)	01/18/77-11/10/93	5 ##	0.5	0.8	2.5	0.	1.075	1.037	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-07/31/91	29 ##	0.5	0.569	2.5	0.25	0.299	0.546	0.25	0.25	0.5	0.5
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/30/91-08/26/92	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	03/07/78-03/07/78	1	9.	9.	9.	9.	0.	0.	**	**	**	**
03501	BETA, TOTAL	03/07/78-03/07/78	1	27.	27.	27.	27.	0.	0.	**	**	**	**
03509	BETA, SPECIFIC ACTIVITY (PC/GM OF SUSP. SOLIDS)	03/07/78-03/07/78	1	27.	27.	27.	27.	0.	0.	**	**	**	**
07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	03/07/78-03/07/78	1	0.	0.	0.	0.	0.	0.	**	**	**	**
09501	RADIUM 226, TOTAL	03/07/78-03/07/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/01/84-10/03/84	10	350.	3030.	25000.	0.	60337888.889	7767.747	10.	250.	1125.	22800.
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/01/84-10/03/84	10	2.54	2.521	4.398	0.	1.235	1.111	0.2	2.358	2.894	4.306
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			331.857								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/24/77-09/11/79	11	23.	490.727	4300.	23.	1612702.818	1269.922	23.	23.	230.	3526.
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/24/77-09/11/79	11	1.362	1.923	3.633	1.362	0.564	0.751	1.362	1.362	2.362	3.433
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			83.722								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/01/84-10/03/84	10	24.	773.8	7100.	0.	4949342.622	2224.712	0.	0.	218.5	6415.
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/01/84-10/03/84	10	1.318	1.436	3.851	0.	1.601	1.265	0.	0.	2.338	3.706
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			27.297								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/24/77-09/11/79	11	230.	215.727	430.	11.5	26467.368	162.688	13.5	40.	430.	430.
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/24/77-09/11/79	11	2.362	2.118	2.633	1.061	0.306	0.553	1.115	1.602	2.633	2.633
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			131.186								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/01/84-10/03/84	10	166.	2190.8	19000.	0.	34998282.844	5915.935	2.	101.	850.	17200.
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/01/84-10/03/84	10	2.211	2.282	4.279	0.	1.258	1.121	0.13	1.906	2.927	4.151
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			191.332								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	01/18/77-04/19/79	4 ##	0.008	0.008	0.015	0.	0.	0.009	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/18/77-11/10/93	43	327.	338.814	562.	0.	8263.869	90.906	256.8	307.	370.	467.
71830	HYDROXIDE ION (MG/L AS OH)	01/18/77-11/10/93	40	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-10/26/82	14 ##	0.01	0.015	0.03	0.01	0.	0.008	0.01	0.01	0.02	0.03
71890	MERCURY, DISSOLVED (UG/L AS HG)	10/14/92-11/10/93	3 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	01/18/77-07/31/91	30 ##	0.05	0.212	4.	0.05	0.514	0.717	0.05	0.05	0.1	0.2
71910	GOLD, TOTAL (UG/L AS AU)	10/01/85-10/01/85	1	1.	1.	1.	1.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	01/18/77-07/31/91	34	0.18	0.783	7.2	0.04	1.921	1.386	0.055	0.087	0.838	2.4
80000	ALPHA ACTIVITY (PC/MG)	03/07/78-03/07/78	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82702	AS DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/30/91-08/26/92	2	5045.	5045.	10000.	90.	49104050.	7007.428	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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Parameter Inventory for Station: ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82706	CR DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/30/91-08/26/92	2 ##	0.047	0.047	0.083	0.01	0.003	0.052	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2	10.	10.	11.	9.	2.	1.414	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	0.3	0.3	0.5	0.1	0.08	0.283	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/30/91-08/26/92	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0137

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	40	11	0.28	32	5	0.16	5	5	1.00	3	1	0.33			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	37	0	0.00	26	0	0.00	7	0	0.00	4	0	0.00			
00400	PH	Other-Hi Lim.	9.	37	0	0.00	26	0	0.00	7	0	0.00	4	0	0.00			
		Other-Lo Lim.	6.5	37	0	0.00	26	0	0.00	7	0	0.00	4	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	25	0	0.00	20	0	0.00	4	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	25	0	0.00	20	0	0.00	4	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	21	0	0.00	17	0	0.00	3	0	0.00	1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	15	0	0.00	11	0	0.00	3	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	26	0	0.00	21	0	0.00	3	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	16	0	0.00	12	0	0.00	3	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	27	0	0.00	20	0	0.00	4	0	0.00	3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	6	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	32	0	0.00	25	0	0.00	4	0	0.00	3	0	0.00			
		Drinking Water	250.	32	0	0.00	25	0	0.00	4	0	0.00	3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	31	0	0.00	23	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	250.	31	0	0.00	23	0	0.00	5	0	0.00	3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	40	0	0.00	32	0	0.00	5	0	0.00	3	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	20	0	0.00	16	0	0.00	3	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	5	0	0.00									
		Drinking Water	50.	5	0	0.00	5	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	30	0	0.00	22	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	50.	30	0	0.00	22	0	0.00	5	0	0.00	3	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	5	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	31	0	0.00	23	0	0.00	5	0	0.00	3	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	5	0	0.00									
		Drinking Water	5.	5	0	0.00	5	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	5.	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	4	0	0.00	4	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	16	0	0.00	12	0	0.00	3	0	0.00	1	0	0.00			
		Drinking Water	100.	16	0	0.00	12	0	0.00	3	0	0.00	1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	5	0	0.00									
		Drinking Water	1300.	5	0	0.00	5	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	31	1	0.03	23	1	0.04	5	0	0.00	3	0	0.00			
		Drinking Water	1300.	31	0	0.00	23	0	0.00	5	0	0.00	3	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	5	0	0.00									
		Drinking Water	15.	5	0	0.00	5	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	15.	29	0	0.00	21	0	0.00	5	0	0.00	3	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									
01067	NICKEL, TOTAL	Fresh Acute	1400.	22	0	0.00	15	0	0.00	4	0	0.00	3	0	0.00			
		Drinking Water	100.	22	0	0.00	15	0	0.00	4	0	0.00	3	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	5	0	0.00									
		Drinking Water	100.	5	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

EPA Water Quality Criteria Analysis for Station: ZION0137

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01077	SILVER, TOTAL	Fresh Acute	4.1	26 &	1	0.04	18	0	0.00	5	1	0.20	3	0	0.00			
		Drinking Water	100.	28	0	0.00	20	0	0.00	5	0	0.00	3	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	5	0	0.00									
		Drinking Water	5000.	5	0	0.00	5	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	31	0	0.00	24	0	0.00	4	0	0.00	3	0	0.00			
		Drinking Water	5000.	31	0	0.00	24	0	0.00	4	0	0.00	3	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	5	0	0.00									
		Drinking Water	50.	5	0	0.00	5	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
		Drinking Water	50.	29	0	0.00	21	0	0.00	5	0	0.00	3	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
07000	TRITIUM, TOTAL	Drinking Water	20000.	1	0	0.00	1	0	0.00									
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	10	2	0.20	6	2	0.33	1	0	0.00	3	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	11	1	0.09	8	1	0.13	2	0	0.00	1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	9 &	2	0.22	5	2	0.40	1	0	0.00	3	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	11	7	0.64	8	6	0.75	2	1	0.50	1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	3	0	0.00									
		Drinking Water	2.	3	0	0.00	3	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	30	1	0.03	22	1	0.05	5	0	0.00	3	0	0.00			
		Drinking Water	2.	30	1	0.03	22	1	0.05	5	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 3/19 - Station ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/77-11/10/93	27	11.1	10.793	19.1	2.7	23.165	4.813	4.68	6.8	15.	17.54
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/78-08/18/93	14	30.	52.429	350.	8.	7602.418	87.192	11.5	16.75	40.	211.5
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/18/77-11/10/93	32	4.2	37.038	350.	0.8	7022.128	83.798	1.1	2.1	12.25	156.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/10/78-11/10/93	27	590.	650.704	2290.	455.	115808.524	340.307	477.4	537.	630.	790.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-11/10/93	33	565.	587.879	850.	465.	9266.235	96.261	494.	520.	620.	770.
00300	OXYGEN, DISSOLVED MG/L	05/24/77-11/10/93	26	9.55	9.627	13.	6.6	1.698	1.303	8.	8.825	10.275	11.32
00335	COD, .025N K2CR2O7 MG/L	05/24/77-07/26/90	21 ##	7.5	14.762	90.	4.	353.915	18.813	5.	6.	17.	32.
00400	PH (STANDARD UNITS)	05/24/77-11/10/93	26	8.4	8.273	8.7	7.7	0.084	0.289	7.7	8.175	8.5	8.53
00400	CONVERTED PH (STANDARD UNITS)	05/24/77-11/10/93	26	8.4	8.166	8.7	7.7	0.096	0.309	7.7	8.175	8.5	8.53
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/77-11/10/93	26	0.004	0.007	0.02	0.002	0.	0.006	0.003	0.003	0.007	0.02
00403	PH, LAB, STANDARD UNITS SU	01/18/77-11/10/93	20	8.3	8.28	8.7	7.9	0.034	0.185	8.01	8.2	8.375	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	01/18/77-11/10/93	20	8.3	8.243	8.7	7.9	0.036	0.189	8.01	8.2	8.375	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-11/10/93	20	0.005	0.006	0.013	0.002	0.	0.002	0.003	0.004	0.006	0.01
00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/77-11/10/93	32	2.	1.938	3.	1.	0.383	0.619	1.	2.	2.	3.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	32	164.5	163.563	189.	125.	228.577	15.119	144.6	151.5	176.5	183.7
00440	BICARBONATE ION (MG/L AS HCO3)	01/18/77-11/10/93	32	199.	198.75	230.	148.	364.452	19.091	175.6	184.5	215.5	224.
00445	CARBONATE ION (MG/L AS CO3)	01/18/77-11/10/93	32	0.	0.406	6.	0.	1.539	1.241	0.	0.	0.	2.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/24/77-10/19/83	16	10.	157.675	1260.	0.3	116822.823	341.794	1.14	1.625	113.25	847.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-11/10/93	19	8.	103.5	1260.	1.5	83783.222	289.453	1.5	6.	45.	299.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/18/77-11/10/93	32 ##	0.05	0.048	0.1	0.	0.001	0.027	0.025	0.025	0.05	0.1
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	17 ##	0.025	0.022	0.05	0.	0.	0.014	0.004	0.005	0.025	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	11 ##	0.025	0.023	0.025	0.005	0.	0.006	0.009	0.025	0.025	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	21	0.1	0.114	0.3	0.005	0.008	0.087	0.025	0.033	0.15	0.29
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	12	0.1	0.109	0.3	0.005	0.01	0.098	0.011	0.025	0.15	0.285
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/77-11/10/93	30	0.2	0.317	1.49	0.05	0.104	0.322	0.05	0.1	0.425	0.716
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-10/30/91	20	0.1	0.118	0.65	0.025	0.02	0.141	0.025	0.025	0.15	0.245
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/24/77-11/10/93	29	0.025	0.062	0.52	0.003	0.01	0.101	0.005	0.018	0.055	0.15
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/77-07/26/90	17 ##	0.01	0.013	0.03	0.003	0.	0.008	0.003	0.01	0.02	0.03
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/77-07/26/90	19	6.2	7.526	21.8	0.6	46.871	6.846	0.7	1.3	12.1	20.
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	32	232.	231.688	332.	196.	677.06	26.02	203.3	210.5	247.5	251.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/77-11/10/93	32	54.5	54.569	77.	39.2	62.764	7.922	44.	48.5	58.75	65.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-11/10/93	32	23.	23.141	34.	15.	13.665	3.697	18.3	21.	25.375	27.
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-11/10/93	32	30.5	35.847	89.	18.	286.525	16.927	22.	26.25	36.775	69.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/77-11/10/93	32	2.6	2.597	5.	2.	0.469	0.685	2.	2.	3.	3.
00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/77-09/15/87	25	30.	41.48	110.	8.	789.51	28.098	23.2	25.	40.	100.6
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-11/10/93	23	32.	40.87	103.	8.	619.664	24.893	22.8	26.	47.	92.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/18/77-11/10/93	32	82.5	88.75	187.	64.	524.494	22.902	67.9	77.2	93.3	105.
01002	ARSENIC, TOTAL (UG/L AS AS)	10/17/78-07/31/91	22 ##	0.5	0.83	2.5	0.25	0.443	0.665	0.25	0.5	1.	2.35
01007	BARIUM, TOTAL (UG/L AS BA)	09/06/78-07/31/91	23	0.09	22.654	110.	0.	1581.669	39.77	0.025	0.025	60.	96.
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-07/31/91	21 ##	0.5	0.595	2.	0.5	0.115	0.34	0.5	0.5	0.5	0.9
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-07/31/91	21 ##	2.5	2.69	5.	1.5	0.637	0.798	2.5	2.5	2.5	4.5
01042	COPPER, TOTAL (UG/L AS CU)	09/06/78-07/31/91	23 ##	5.	7.522	19.	5.	14.897	3.86	5.	5.	10.	13.8
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-07/31/91	21 ##	2.5	4.167	12.5	2.5	8.958	2.993	2.5	2.5	5.	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	09/06/78-07/31/91	23	15.	32.783	260.	5.	2750.087	52.441	5.	10.	40.	62.8
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-07/31/91	20 ##	1.	1.55	5.	1.	1.603	1.266	1.	1.	1.	4.75
01092	ZINC, TOTAL (UG/L AS ZN)	07/12/78-07/31/91	24	10.	13.563	36.	2.5	91.268	9.553	3.75	7.125	20.	30.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-07/31/91	21 ##	0.5	0.524	2.5	0.25	0.218	0.467	0.25	0.25	0.5	0.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/18/77-11/10/93	33	342.	349.788	492.	0.	7263.297	85.225	290.4	324.	384.	467.
71830	HYDROXIDE ION (MG/L AS OH)	01/18/77-11/10/93	32	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	01/18/77-07/31/91	22 ##	0.05	0.261	4.	0.05	0.7	0.836	0.05	0.05	0.1	0.2
74010	IRON, TOTAL (MG/L AS FE)	01/18/77-07/31/91	26	0.145	0.627	7.2	0.04	2.155	1.468	0.057	0.078	0.488	1.696

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/77-11/10/93	7	10.9	9.286	12.8	4.1	9.838	3.137	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/78-08/18/93	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/18/77-11/10/93	5	170.	162.4	240.	52.	5658.8	75.225	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/10/78-11/10/93	7	450.	498.714	805.	320.	26445.571	162.621	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-11/10/93	6	505.	516.5	850.	320.	33789.5	183.819	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/77-11/10/93	7	9.2	9.657	11.2	8.3	1.053	1.026	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/24/77-07/26/90	4	16.5	18.125	32.	7.5	105.063	10.25	**	**	**	**
00400	PH (STANDARD UNITS)	05/24/77-11/10/93	7	8.4	8.4	8.7	8.	0.05	0.224	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/77-11/10/93	7	8.4	8.347	8.7	8.	0.053	0.231	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/77-11/10/93	7	0.004	0.004	0.01	0.002	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/18/77-11/10/93	4	8.3	8.325	8.6	8.1	0.049	0.222	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/18/77-11/10/93	4	8.289	8.285	8.6	8.1	0.051	0.226	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-11/10/93	4	0.005	0.005	0.008	0.003	0.	0.002	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/77-11/10/93	5	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	5	180.	178.2	198.	159.	223.7	14.957	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	01/18/77-11/10/93	5	216.	216.8	242.	194.	339.2	18.417	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	01/18/77-11/10/93	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/24/77-10/19/83	4	183.5	272.75	720.	4.	98584.917	313.982	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-11/10/93	4	299.	330.5	720.	4.	107651.667	328.103	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/18/77-11/10/93	5 ##	0.05	0.065	0.1	0.025	0.001	0.034	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	3 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	3 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/77-11/10/93	5	0.2	0.28	0.6	0.1	0.047	0.217	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-10/30/91	4	0.25	0.219	0.35	0.025	0.021	0.143	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/24/77-11/10/93	5	0.114	0.205	0.55	0.07	0.039	0.198	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/77-07/26/90	3	0.02	0.02	0.03	0.01	0.	0.01	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/77-07/26/90	3	10.9	14.833	25.8	7.8	92.603	9.623	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	5	248.	242.8	320.	198.	2463.2	49.631	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/77-11/10/93	5	60.	62.8	82.	49.	170.7	13.065	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-11/10/93	5	19.	20.8	28.	15.	26.7	5.167	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-11/10/93	5	21.	25.8	58.	9.	355.7	18.86	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/77-11/10/93	5	2.	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/77-09/15/87	4	24.	30.5	67.	7.	673.	25.942	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-11/10/93	5	21.	28.6	67.	7.	522.8	22.865	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/18/77-11/10/93	5	72.	80.2	158.	45.	2100.2	45.828	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/17/78-07/31/91	5 ##	0.8	1.06	2.5	0.5	0.693	0.832	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/06/78-07/31/91	5	0.08	24.066	120.	0.025	2876.046	53.629	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-07/31/91	5 ##	0.5	0.6	1.	0.5	0.05	0.224	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-07/31/91	5 ##	2.5	3.5	7.5	2.5	5.	2.236	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/06/78-07/31/91	5	10.	9.8	14.	5.	10.2	3.194	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-07/31/91	5 ##	5.	4.	5.	2.5	1.875	1.369	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/06/78-07/31/91	5	110.	126.4	235.	29.	5571.3	74.641	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-07/31/91	5 ##	1.	1.8	5.	1.	3.2	1.789	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/12/78-07/31/91	4	17.5	23.75	55.	5.	506.25	22.5	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-07/31/91	5 ##	0.5	0.85	2.5	0.25	0.863	0.929	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/18/77-11/10/93	6	320.	344.	562.	240.	12676.8	112.591	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	01/18/77-11/10/93	5	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	01/18/77-07/31/91	5 ##	0.05	0.09	0.2	0.05	0.004	0.065	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	01/18/77-07/31/91	5	1.86	1.824	3.	0.66	0.69	0.831	**	**	**	**

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0137

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/77-11/10/93	4	11.85	11.75	15.	8.3	9.777	3.127	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/78-08/18/93	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/18/77-11/10/93	3	26.	33.433	73.	1.3	1326.663	36.423	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/10/78-11/10/93	3	390.	404.667	504.	320.	8625.333	92.873	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-11/10/93	4	400.	386.25	495.	250.	11606.25	107.732	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/77-11/10/93	4	9.25	9.175	11.4	6.8	3.909	1.977	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/24/77-07/26/90	4 ##	7.5	23.875	73.	7.5	1072.563	32.75	**	**	**	**
00400	PH (STANDARD UNITS)	05/24/77-11/10/93	4	8.1	8.05	8.4	7.6	0.117	0.342	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/77-11/10/93	4	8.089	7.945	8.4	7.6	0.131	0.362	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/77-11/10/93	4	0.008	0.011	0.025	0.004	0.	0.01	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/18/77-11/10/93	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/18/77-11/10/93	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-11/10/93	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/77-11/10/93	3	2.	5.333	13.	1.	44.333	6.658	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	3	153.	160.333	179.	149.	265.333	16.289	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	01/18/77-11/10/93	3	186.	191.333	206.	182.	165.333	12.858	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	01/18/77-11/10/93	3	0.	2.	6.	0.	12.	3.464	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/24/77-10/19/83	4	129.	777.625	2850.	2.5	1915502.563	1384.017	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-11/10/93	3	60.	86.833	198.	2.5	10095.083	100.474	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/18/77-11/10/93	4	0.075	0.063	0.1	0.	0.002	0.048	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/18/77-07/26/90	2	0.215	0.215	0.33	0.1	0.026	0.163	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-09/15/87	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/77-11/10/93	4	0.35	0.813	2.5	0.05	1.287	1.135	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-10/30/91	3	0.33	0.343	0.55	0.15	0.04	0.2	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/24/77-11/10/93	4	0.058	0.071	0.15	0.02	0.004	0.061	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/77-07/26/90	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/77-07/26/90	4	4.25	36.4	135.	2.1	4321.94	65.741	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/77-11/10/93	3	212.	200.	216.	172.	592.	24.331	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/77-11/10/93	3	45.	48.333	66.	34.	264.333	16.258	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-11/10/93	3	21.	19.333	24.	13.	32.333	5.686	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-11/10/93	3	12.	13.667	23.	6.	74.333	8.622	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/77-11/10/93	3	1.	1.333	2.	1.	0.333	0.577	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/77-09/15/87	3	9.	12.333	23.	5.	89.333	9.452	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-11/10/93	3	9.	12.333	23.	5.	89.333	9.452	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/18/77-11/10/93	3	46.	51.	69.	38.	259.	16.093	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/17/78-07/31/91	3 ##	0.5	0.417	0.5	0.25	0.021	0.144	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/06/78-07/31/91	3	0.05	0.045	0.06	0.025	0.	0.018	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-07/31/91	3 ##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-07/31/91	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/06/78-07/31/91	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-07/31/91	3 ##	2.5	3.333	5.	2.5	2.083	1.443	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/06/78-07/31/91	3	24.	30.	61.	5.	811.	28.478	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-07/31/91	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/12/78-07/31/91	3	23.	29.333	55.	10.	536.333	23.159	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-07/31/91	3 ##	0.5	0.417	0.5	0.25	0.021	0.144	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/18/77-11/10/93	4	243.	240.5	290.	186.	2825.	53.151	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	01/18/77-11/10/93	3	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	01/18/77-07/31/91	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	01/18/77-07/31/91	3	0.36	0.397	0.78	0.05	0.134	0.366	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0138

NPS Station ID: ZION0138
LAT/LON: 37.428059/-112.920004
Agency: 112WRD
Date Created: 12/02/81
Location: (C-39-10)11DDD-
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372541112551201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.20
On/Off RF1:
RF3 Index: 15010008002217.11
RF3 Mile Point: 17.11
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0138

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	3	18.	16.167	18.	12.5	10.083	3.175	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	3	10.	49.	127.	10.	4563.	67.55	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	3	335.	336.667	360.	315.	508.333	22.546	**	**	**	**
00400	PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.3	8.467	9.	8.1	0.223	0.473	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.3	8.332	9.	8.1	0.25	0.5	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.005	0.005	0.008	0.001	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	3	8.2	8.233	8.3	8.2	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/23/81-08/16/82	3	8.2	8.231	8.3	8.2	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.006	0.006	0.006	0.005	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	3	180.	183.333	190.	180.	33.333	5.774	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	3	45.	46.667	52.	43.	22.333	4.726	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	3	17.	16.	20.	11.	21.	4.583	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	3	5.8	5.267	6.6	3.4	2.773	1.665	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	04/23/81-08/16/82	3	7.	6.	7.	4.	3.	1.732	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	3	1.7	1.733	1.9	1.6	0.023	0.153	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	3	3.	12.667	33.	2.	310.333	17.616	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	3	31.	32.333	36.	30.	10.333	3.215	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	3	10.	9.467	11.	7.4	3.453	1.858	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	3	20.	16.667	20.	10.	33.333	5.774	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	2	1890.	1890.	3500.	280.	5184200.	2276.884	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	3	290.	1290.	3500.	80.	3674100.	1916.794	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	3	12.	15.667	30.	5.	166.333	12.897	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	3	20.	42.333	100.	7.	2536.333	50.362	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	3	20.	46.667	110.	10.	3033.333	55.076	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	3	3.	5.333	10.	3.	16.333	4.041	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	3	213.	253.667	350.	198.	7016.333	83.764	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/16/82	2	228.5	228.5	233.	224.	40.5	6.364	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	3	9.17	29.12	73.	5.19	1448.051	38.053	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	3	0.29	0.347	0.48	0.27	0.013	0.116	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/23/81-08/26/81	2	295.	295.	544.	46.	124002.	352.139	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/23/81-08/26/81	2	94.1	94.1	187.	1.2	17260.82	131.38	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0138

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	3	1	0.33	2	1	0.50	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0139

NPS Station ID: ZION0139
LAT/LON: 37.237551/-112.963471
Agency: 21UTAH
Date Created: 03/24/79
Location: ZION PARK WWTP INFLUENT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495112
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN R
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 7.60
On/Off RF1:
RF3 Index: 15010008066500.00
RF3 Mile Point: 0.51
Distance from RF3: 0.25
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0139

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/77-03/31/77	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00058	FLOW, RATE GALLONS/MIN	12/12/78-12/12/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/31/77-12/12/78	4	28.5	28.025	54.	1.1	570.869	23.893	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	01/10/78-12/12/78	3	85.	176.333	400.	44.	37940.333	194.783	**	**	**	**
00400	PH (STANDARD UNITS)	03/31/77-01/10/78	2	7.3	7.3	7.5	7.1	0.08	0.283	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/31/77-01/10/78	2	7.255	7.255	7.5	7.1	0.084	0.29	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/77-01/10/78	2	0.056	0.056	0.079	0.032	0.001	0.034	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/31/77-12/12/78	4	7.8	7.825	8.3	7.4	0.143	0.377	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/31/77-12/12/78	4	7.789	7.714	8.3	7.4	0.159	0.399	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/77-12/12/78	4	0.016	0.019	0.04	0.005	0.	0.015	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/31/77-12/12/78	4	20.	27.5	70.	0.	908.333	30.139	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/31/77-12/12/78	4	12.25	12.9	27.	0.1	172.207	13.123	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/31/77-03/31/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/31/77-12/12/78	4	13.	13.625	27.8	0.7	183.089	13.531	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-12/12/78	3	0.4	9.133	26.75	0.25	232.766	15.257	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/31/77-12/12/78	4	3.75	3.758	7.5	0.03	9.382	3.063	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/31/77-12/12/78	4	18.	22.5	49.	5.	430.333	20.744	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	03/31/77-12/12/78	4	175000.	147505.75	240000.	23.13422738465.583		115856.543	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	03/31/77-12/12/78	4	5.211	4.291	5.38	1.362	3.839	1.959	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			19538.254								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/31/77-12/12/78	4	175000.	147500.	240000.	0.13425000000.		115866.302	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/31/77-12/12/78	4	5.211	3.95	5.38	0.	6.962	2.638	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			8921.827								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/31/77-12/12/78	4	369.	366.5	486.	242.	12411.667	111.408	**	**	**	**

** - Less than 9 observations ## - 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: ZION0139

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0139

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	1	0.33	3	1	0.33									
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	4	3	0.75	3	3	1.00	1	0	0.00						
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	4	3	0.75	3	3	1.00	1	0	0.00						

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

Station Inventory for Station: ZION0140

NPS Station ID: ZION0140
LAT/LON: 37.237551/-112.963471
Agency: 21UTAH
Date Created: 04/07/79
Location: N FK VIRGIN R. ABOVE ZION NP WTP
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495113
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 7.60
On/Off RF1:
RF3 Index: 15010008066500.00
RF3 Mile Point: 0.51
Distance from RF3: 0.25
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0140

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/01/77-11/29/77	9	14.	14.667	22.	6.	28.75	5.362	6.	10.5	19.5	22.
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/31/77-03/31/77	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/01/77-05/03/77	2	19.5	19.5	20.	19.	0.5	0.707	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/01/77-05/03/77	2	732.5	732.5	735.	730.	12.5	3.536	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	01/25/77-11/29/77	11	20.	20.455	29.	13.	16.873	4.108	13.6	19.	23.	27.8
00335	COD, .025N K2CR2O7 MG/L	08/02/77-10/05/77	3	81.	76.667	92.	57.	320.333	17.898	**	**	**	**
00400	PH (STANDARD UNITS)	03/01/77-05/31/77	3	6.5	6.833	7.5	6.5	0.333	0.577	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/01/77-05/31/77	3	6.5	6.655	7.5	6.5	0.381	0.617	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/01/77-05/31/77	3	0.316	0.221	0.316	0.032	0.027	0.164	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/25/77-11/29/77	11	7.7	7.736	8.1	7.5	0.037	0.191	7.5	7.6	7.9	8.06
00403	CONVERTED PH, LAB, STANDARD UNITS	01/25/77-11/29/77	11	7.7	7.701	8.1	7.5	0.038	0.195	7.5	7.6	7.9	8.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/25/77-11/29/77	11	0.02	0.02	0.032	0.008	0.	0.008	0.009	0.013	0.025	0.032
00405	CARBON DIOXIDE (MG/L AS CO2)	03/01/77-05/03/77	2	5.	5.	6.	4.	2.	1.414	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/01/77-05/03/77	2	224.	224.	235.	213.	242.	15.556	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/01/77-05/03/77	2	273.	273.	286.	260.	338.	18.385	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	01/25/77-11/29/77	11	30.	35.	70.	10.	530.	23.022	11.	15.	65.	70.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/25/77-10/05/77	8	7.4	8.025	12.	4.5	10.122	3.182	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/01/77-05/03/77	2	0.325	0.325	0.6	0.05	0.151	0.389	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	01/25/77-10/05/77	8	3.5	4.069	8.1	1.25	6.253	2.501	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/25/77-10/05/77	6	9.25	9.5	12.	7.6	2.896	1.702	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/25/77-10/05/77	5	5.5	5.4	7.	3.4	1.715	1.31	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/77-09/07/77	3	5.05	5.15	5.5	4.9	0.097	0.312	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/31/77-10/05/77	5	20.	24.1	46.	6.	222.55	14.918	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/01/77-05/03/77	2	232.	232.	236.	228.	32.	5.657	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/01/77-05/03/77	2	61.	61.	61.	61.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/01/77-05/03/77	2	19.	19.	20.	18.	2.	1.414	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/01/77-05/03/77	2	45.	45.	50.	40.	50.	7.071	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/01/77-05/03/77	2	6.	6.	7.	5.	2.	1.414	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/01/77-05/03/77	2	43.	43.	44.	42.	2.	1.414	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/01/77-05/03/77	2	80.	80.	90.	70.	200.	14.142	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/01/77-05/03/77	2	0.63	0.63	0.7	0.56	0.01	0.099	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/01/77-05/03/77	2	18.	18.	19.	17.	2.	1.414	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/01/77-05/03/77	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/01/77-05/03/77	2	512.5	512.5	560.	465.	4512.5	67.175	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	03/01/77-05/03/77	2	30.5	30.5	52.	9.	924.5	30.406	**	**	**	**

** - Less than 9 observations ## - 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: ZION0140

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01040	COPPER, DISSOLVED (UG/L AS CU)	03/01/77-05/03/77	2	27.5	27.5	35.	20.	112.5	10.607	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/01/77-05/03/77	2	30.	30.	40.	20.	200.	14.142	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/01/77-05/03/77	2	12.5	12.5	25.	0.	312.5	17.678	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/01/77-05/03/77	2	32.5	32.5	35.	30.	12.5	3.536	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/01/77-05/03/77	2	1.	1.	1.	1.	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-11/29/77	11	2400.	5938.455	24000.	23.	47813286.273	6914.715	318.4	2300.	9300.	21060.
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-11/29/77	11	3.38	3.428	4.38	1.362	0.613	0.783	1.725	3.362	3.968	4.298
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			2678.076								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-11/29/77	10	49.	100.	400.	23.	15263.333	123.545	23.	23.	125.	383.
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-11/29/77	10	1.618	1.756	2.602	1.362	0.217	0.466	1.362	1.362	2.056	2.578
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			56.964								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	03/01/77-05/03/77	2	0.51	0.51	1.02	0.	0.52	0.721	**	**	**	**
50051	FLOW, RATE, INSTANTANEOUS MGD	10/05/77-10/05/77	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/03/77-11/29/77	7	0.4	0.843	3.	0.1	1.133	1.064	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/25/77-11/29/77	9	390.	409.333	600.	314.	7162.	84.629	314.	344.	442.	600.
71830	HYDROXIDE ION (MG/L AS OH)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/01/77-05/03/77	2	0.	0.	0.	0.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/01/77-05/03/77	2	0.525	0.525	0.53	0.52	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

EPA Water Quality Criteria Analysis for Station: ZION0140

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	2	0.67	1	1	1.00	1	0	0.00	1	1	1.00			
00403	PH, LAB	Other-Hi Lim.	9.	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			
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.	8	0	0.00	6	0	0.00	2	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						
00946	SULFATE, DISSOLVED (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						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	50.	2	0	0.00	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						
01025	CADMIUM, DISSOLVED	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						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	2	1	0.50	1	0	0.00	1	1	1.00						
		Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	2	2	1.00	1	1	1.00	1	1	1.00						
		Drinking Water	1300.	2	0	0.00	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.	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						
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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						
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						
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	50.	2	0	0.00	1	0	0.00	1	0	0.00						
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	11	10	0.91	8	7	0.88	2	2	1.00	1	1	1.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	10	2	0.20	7	1	0.14	2	1	0.50	1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0140

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	7	7	1.00	5	5	1.00	1	1	1.00	1	1	1.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0141

NPS Station ID: ZION0141
LAT/LON: 37.237551/-112.963471
Agency: 21UTAH
Date Created: 01/16/79
Location: N FK VIRGIN R. BELOW ZION NP WTP
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495110
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0586.00 0151.80 003.52
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER MAIN STEM
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 7.60
On/Off RF1:
RF3 Index: 15010008066500.00
RF3 Mile Point: 0.51
Distance from RF3: 0.25
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0141

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/84-10/31/84	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	02/10/69-12/18/75	45	46.	48.156	79.	28.	150.816	12.281	34.2	39.	55.	67.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/84-10/31/84	1	51.	51.	51.	51.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-07/26/74	4	5.6	5.75	10.	1.8	16.843	4.104	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/31/84-10/31/84	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/31/84-10/31/84	1	524.	524.	524.	524.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-10/31/84	5	725.	720.	825.	570.	9037.5	95.066	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/31/84-10/31/84	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	01/04/67-12/18/75	62	1.55	1.853	11.	0.5	2.828	1.682	0.5	1.175	2.025	2.61
00335	COD, .025N K2CR2O7 MG/L	10/31/84-10/31/84	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/04/67-10/31/84	66	8.4	8.277	8.7	7.	0.09	0.301	7.95	8.188	8.45	8.55
00400	CONVERTED PH (STANDARD UNITS)	01/04/67-10/31/84	66	8.4	8.107	8.7	7.	0.12	0.346	7.95	8.188	8.45	8.55
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/04/67-10/31/84	66	0.004	0.008	0.1	0.002	0.	0.013	0.003	0.004	0.007	0.011
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-10/31/84	5	8.	12.84	36.	2.	201.528	14.196	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-10/31/84	5	180.	180.8	203.	167.	228.2	15.106	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-04/09/74	3	108.	106.667	112.	100.	37.333	6.11	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-10/31/84	5	220.	220.8	248.	204.	339.2	18.417	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-10/31/84	5	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	10/31/84-10/31/84	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/04/67-10/31/84	63	75.	413.937	9735.	0.	1959336.544	1399.763	5.8	15.	220.	770.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/84-10/31/84	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/84-10/31/84	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/31/73-10/31/84	5	0.	0.001	0.005	0.	0.	0.002	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/84-10/31/84	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/31/73-10/31/84	5	0.05	0.07	0.15	0.	0.003	0.057	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/31/84-10/31/84	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/26/74	4	0.06	0.068	0.15	0.	0.004	0.067	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/84-10/31/84	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/31/84-10/31/84	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/84-10/31/84	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-10/31/84	5	244.	246.8	258.	240.	53.2	7.294	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-10/31/84	5	58.	58.6	64.	54.	15.8	3.975	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-10/31/84	5	24.	24.4	26.	24.	0.8	0.894	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-10/31/84	5	55.	51.2	65.	28.	197.7	14.061	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-10/31/84	5	2.	2.	3.	1.	0.5	0.707	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-10/31/84	5	82.	72.2	92.	28.	692.2	26.31	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/31/84-10/31/84	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/26/74	4	80.5	82.75	95.	75.	86.917	9.323	**	**	**	**

** - Less than 9 observations ## - 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: ZION0141

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/31/84-10/31/84	1	76.	76.	76.	76.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-07/26/74	4	0.14	0.145	0.21	0.09	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-07/26/74	4	10.	10.	11.	9.	1.333	1.155	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/26/74	4	5.	7.5	20.	0.	91.667	9.574	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/31/84-10/31/84	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	10/31/84-10/31/84	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/26/74	4	165.	180.	390.	0.	26066.667	161.452	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/26/74	4	0.	0.75	3.	0.	2.25	1.5	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/31/84-10/31/84	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/26/74	4	1.5	3.	9.	0.	18.	4.243	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/31/84-10/31/84	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/31/84-10/31/84	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-07/26/74	4	80.	80.	160.	0.	4533.333	67.33	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/26/74	4	5.	7.5	20.	0.	91.667	9.574	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/31/84-10/31/84	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/31/84-10/31/84	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/26/74	4	0.	5.	20.	0.	100.	10.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/26/74	4	5.5	4.75	8.	0.	12.917	3.594	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	10/31/84-10/31/84	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/31/84-10/31/84	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	10/31/84-10/31/84	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/01/84-09/12/84	8	500.	5287.5	38000.	100.	174918392.857	13225.672	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/01/84-09/12/84	8	2.699	2.889	4.58	2.	0.607	0.779	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			773.727								
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	01/04/67-12/18/75	62	750.	2869.065	43000.	15.	63252341.668	7953.134	99.6	230.	2300.	4300.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	01/04/67-12/18/75	62	2.875	2.84	4.633	1.176	0.484	0.696	1.996	2.362	3.362	3.633
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			692.199								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/01/84-09/12/84	8	84.	1646.	12100.	0.	17876160.	4228.021	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/01/84-09/12/84	8	1.924	1.912	4.083	0.	1.613	1.27	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			81.72								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/16/71-12/18/75	34	33.	200.897	2300.	11.5	288636.421	537.249	15.	23.	123.75	230.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/16/71-12/18/75	34	1.498	1.745	3.362	1.061	0.326	0.571	1.176	1.362	2.09	2.362
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			55.618								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/01/84-09/12/84	8	234.	5581.25	40000.	12.	194395447.929	13942.577	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/01/84-09/12/84	8	2.368	2.611	4.602	1.079	1.172	1.082	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			408.657								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10/31/73-07/26/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-10/31/84	5	436.	426.	476.	330.	3628.	60.233	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-10/31/84	5	0.	0.	0.	0.	0.	0.	**	**	**	**
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	10/31/73-07/26/74	4	0.	0.075	0.3	0.	0.023	0.15	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/31/84-10/31/84	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-10/31/84	5	0.	0.01	0.05	0.	0.001	0.022	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	10/31/84-10/31/84	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

EPA Water Quality Criteria Analysis for Station: ZION0141

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	3	0	0.00	1	0	0.00						
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	66	0	0.00	48	0	0.00	12	0	0.00	6	0	0.00			
		Other-Lo Lim.	6.5	66	0	0.00	48	0	0.00	12	0	0.00	6	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0141

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	5	0	0.00	4	0	0.00	1	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	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.	4	0	0.00	3	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	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	5.	4	0	0.00	3	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									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	1300.	4	0	0.00	3	0	0.00	1	0	0.00						
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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	15.	4	0	0.00	3	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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01075	SILVER, DISSOLVED	Fresh Acute	4.1	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	5000.	4	0	0.00	3	0	0.00	1	0	0.00						
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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	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									
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	8	3	0.38	5	3	0.60	1	0	0.00	2	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	62	19	0.31	44	11	0.25	11	6	0.55	7	2	0.29			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	7 &	2	0.29	4	2	0.50	1	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	34	6	0.18	24	4	0.17	6	2	0.33	4	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	2.	5	0	0.00	4	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0141

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	02/10/69-12/18/75	32	44.	47.969	79.	28.	186.096	13.642	32.3	38.	58.75	69.
00310	BOD, 5 DAY, 20 DEG C MG/L	01/04/67-12/18/75	44	1.5	1.909	11.	0.5	3.892	1.973	0.5	1.025	1.975	2.85
00400p	PH (STANDARD UNITS)	01/04/67-10/31/84	48	8.4	8.249	8.6	7.	0.109	0.329	7.87	8.15	8.45	8.55
00400p	CONVERTED PH (STANDARD UNITS)	01/04/67-10/31/84	48	8.4	8.049	8.6	7.	0.149	0.386	7.87	8.15	8.45	8.55
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/04/67-10/31/84	48	0.004	0.009	0.1	0.003	0.	0.016	0.003	0.004	0.007	0.014
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/04/67-10/31/84	45	55.	435.378	9735.	0.	2693526.195	1641.197	5.	12.5	140.	394.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	01/04/67-12/18/75	44	590.	3014.909	43000.	15.	80553358.085	8975.152	95.	230.	1357.5	4300.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	01/04/67-12/18/75	44	2.754	2.788	4.633	1.176	0.506	0.711	1.968	2.362	3.124	3.633
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			613.905								

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0141

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	02/10/69-12/18/75	9	45.	45.667	52.	38.	31.75	5.635	38.	39.5	51.	52.
00310	BOD, 5 DAY, 20 DEG C MG/L	01/04/67-12/18/75	11	2.	1.827	2.3	1.1	0.19	0.436	1.12	1.5	2.3	2.3
00400p	PH (STANDARD UNITS)	01/04/67-10/31/84	12	8.4	8.346	8.7	8.05	0.032	0.18	8.065	8.2	8.45	8.625
00400p	CONVERTED PH (STANDARD UNITS)	01/04/67-10/31/84	12	8.4	8.312	8.7	8.05	0.034	0.184	8.065	8.2	8.45	8.625
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/04/67-10/31/84	12	0.004	0.005	0.009	0.002	0.	0.002	0.002	0.004	0.006	0.009
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/04/67-10/31/84	11	300.	373.455	910.	8.	123081.273	350.829	11.4	50.	695.	910.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	01/04/67-12/18/75	11	2300.	3344.818	21000.	43.	35939585.364	5994.963	64.4	240.	2300.	17660.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	01/04/67-12/18/75	11	3.362	3.048	4.322	1.633	0.558	0.747	1.742	2.38	3.362	4.184
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1117.176								

** - 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 box-and-whisker plot

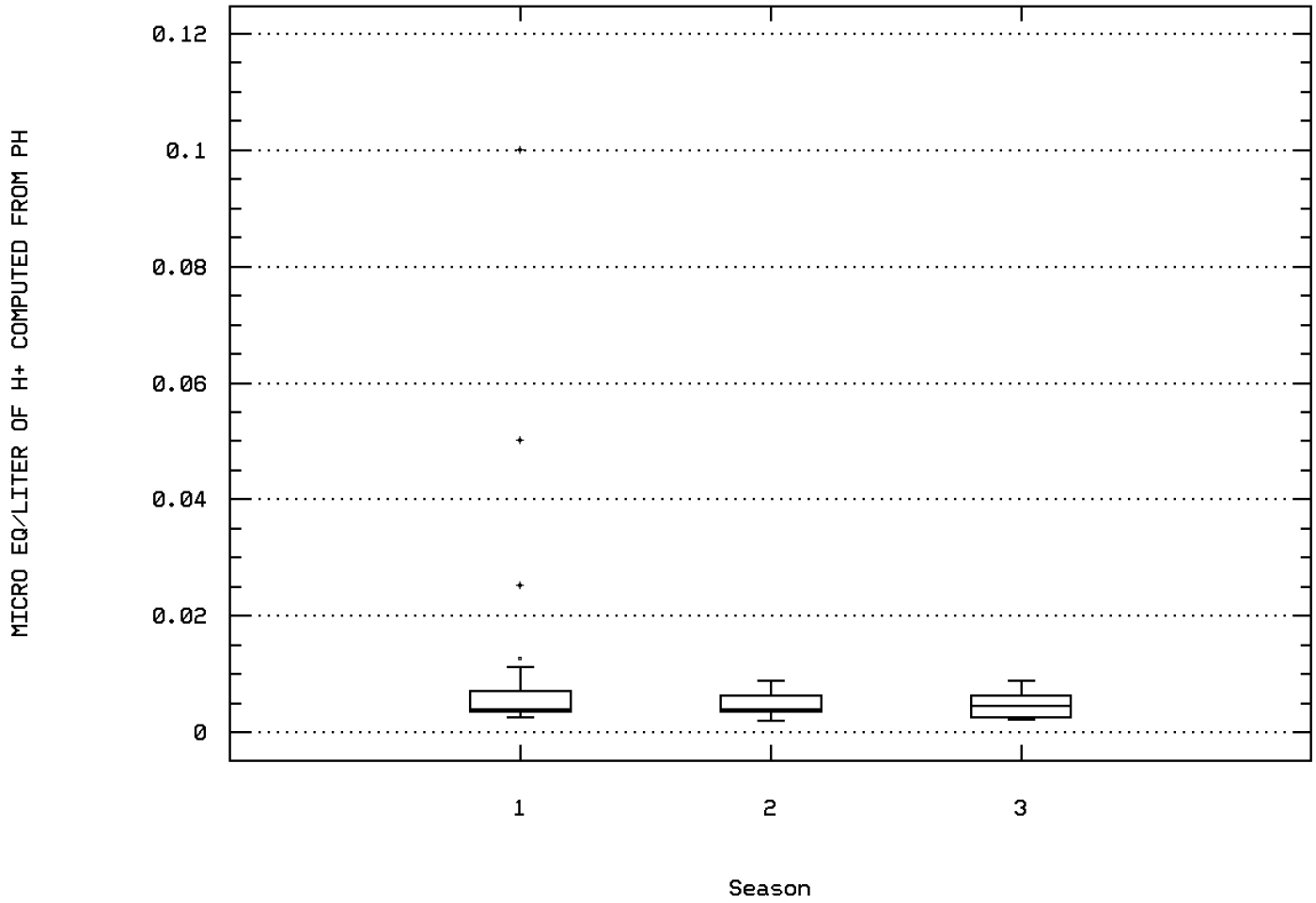
Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0141

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	02/10/69-12/18/75	4	58.5	55.25	64.	40.	118.25	10.874	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	01/04/67-12/18/75	7	1.7	1.543	2.4	0.5	0.403	0.635	**	**	**	**
00400p	PH (STANDARD UNITS)	01/04/67-10/31/84	6	8.35	8.367	8.65	8.05	0.054	0.232	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	01/04/67-10/31/84	6	8.347	8.316	8.65	8.05	0.057	0.238	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/04/67-10/31/84	6	0.004	0.005	0.009	0.002	0.	0.003	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/04/67-10/31/84	7	95.	339.714	1450.	5.	275937.238	525.297	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	01/04/67-12/18/75	7	750.	1204.714	4300.	93.	2064415.571	1436.807	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	01/04/67-12/18/75	7	2.875	2.841	3.633	1.968	0.268	0.517	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			693.773								

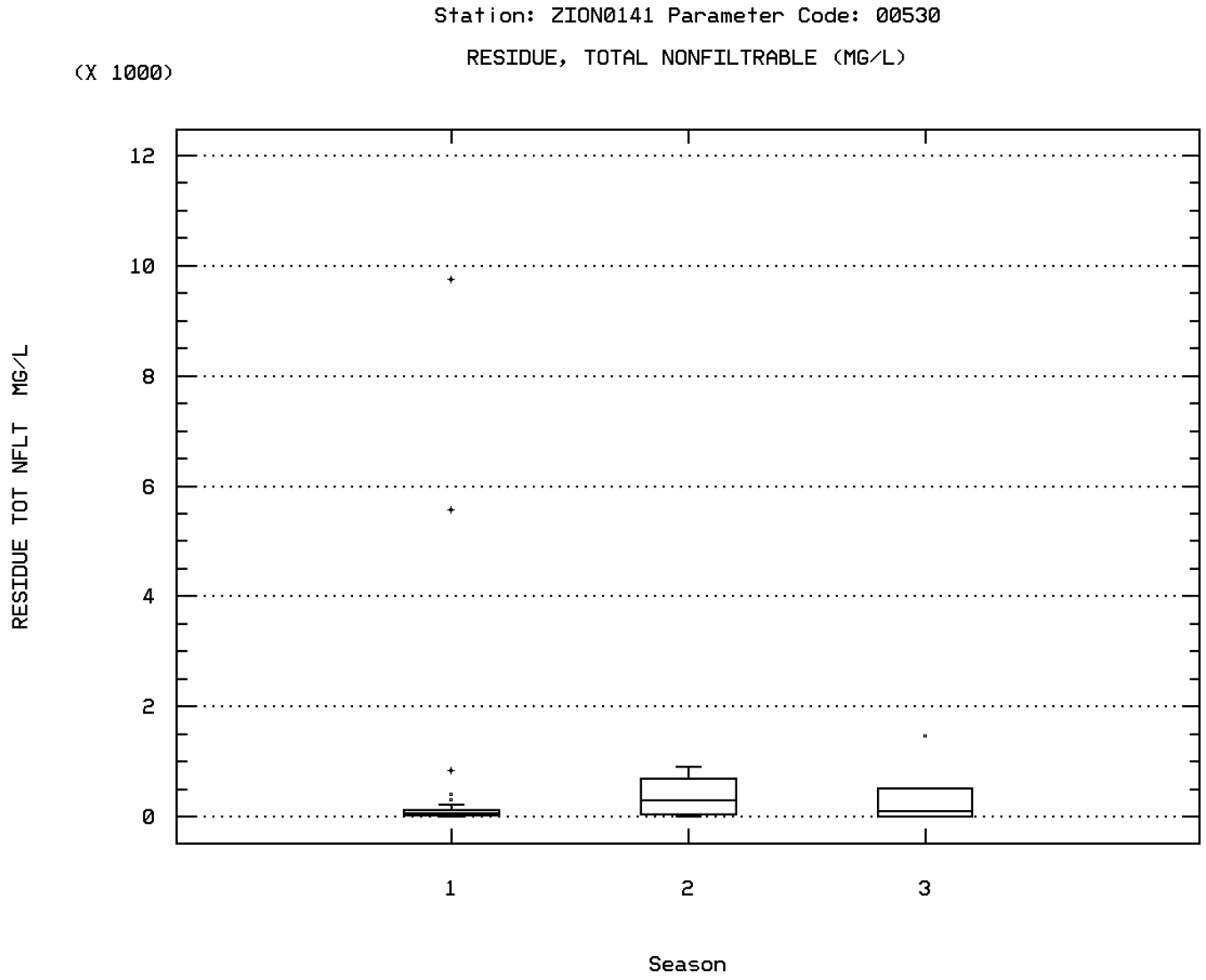
** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: ZION0141 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH



N FK VIRGIN R. BELOW ZION NP WTP



N FK VIRGIN R. BELOW ZION NP WTP

Station Inventory for Station: ZION0142

NPS Station ID: ZION0142
LAT/LON: 37.297309/-112.931198
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB508R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_33 /5075825
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0142

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/02/80-07/02/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/02/80-07/02/80	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/02/80-07/02/80	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/02/80-07/02/80	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/02/80-07/02/80	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/02/80-07/02/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/02/80-07/02/80	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/02/80-07/02/80	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/02/80-07/02/80	1	54.	54.	54.	54.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/02/80-07/02/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/02/80-07/02/80	1	188.	188.	188.	188.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/02/80-07/02/80	1	4.193	4.193	4.193	4.193	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/02/80-07/02/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/02/80-07/02/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/02/80-07/02/80	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: ZION0142

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0143

NPS Station ID: ZION0143
LAT/LON: 37.271392/-112.932393
Agency: 11NPSWRD
Date Created: 08/02/97
Location: ECHO CANYON SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_USGS_ECS
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 6500
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT ECHO CANYON SPRING LOCATED IN A SIDE CANYON TO ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL - USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/28/88-05/04/89	4	196.5	208.25	281.	159.	3098.25	55.662	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/28/88-05/04/89	4	7.25	7.3	7.7	7.	0.087	0.294	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/28/88-05/04/89	4	7.247	7.234	7.7	7.	0.092	0.304	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/88-05/04/89	4	0.057	0.058	0.1	0.02	0.001	0.033	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/28/88-05/04/89	4	93.	98.75	131.	78.	514.917	22.692	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/88-05/04/89	4	35.7	36.775	49.7	26.	100.016	10.001	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/88-05/04/89	4	3.	3.15	3.7	2.9	0.137	0.37	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/88-05/04/89	4	1.25	1.3	1.7	1.	0.1	0.316	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/88-05/04/89	4	0.8	1.075	2.	0.7	0.389	0.624	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/88-05/04/89	4	2.5	2.25	3.	1.	0.917	0.957	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/88-05/04/89	4	1.75	1.575	2.	0.8	0.296	0.544	**	**	**	**
07005	TRITIUM, DISSOLVED (PC/L)	08/28/88-11/03/88	3	34.	37.667	46.	33.	52.333	7.234	**	**	**	**
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/28/88-05/04/89	4	-73.	-69.5	-35.	-97.	663.	25.749	**	**	**	**
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/28/88-05/04/89	4	-9.55	-9.35	-5.7	-12.6	8.59	2.931	**	**	**	**

** - Less than 9 observations ## - 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: ZION0143

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0144

NPS Station ID: ZION0144
LAT/LON: 37.329115/-112.933503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCB509R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_31 /5075826
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0144

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/02/80-07/02/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/02/80-07/02/80	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/02/80-07/02/80	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/02/80-07/02/80	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/02/80-07/02/80	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/02/80-07/02/80	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/02/80-07/02/80	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/02/80-07/02/80	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/02/80-07/02/80	1	57.	57.	57.	57.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/02/80-07/02/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/02/80-07/02/80	1	158.	158.	158.	158.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/02/80-07/02/80	1	0.741	0.741	0.741	0.741	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/02/80-07/02/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/02/80-07/02/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/02/80-07/02/80	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: ZION0144

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0145

NPS Station ID: ZION0145
LAT/LON: 37.271948/-112.936115
Agency: 112WRD
Date Created: 12/02/81
Location: WEEPING ROCK AT TRAIL, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371619112561001
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.50
On/Off RF1:
RF3 Index: 15010008082300.00
RF3 Mile Point: 0.00
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0145

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	2	17.5	17.5	19.	16.	4.5	2.121	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/04/82	2	22.5	22.5	32.	13.	180.5	13.435	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/04/82	2	649.	649.	651.	647.	8.	2.828	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-05/04/82	2	0.55	0.55	0.7	0.4	0.045	0.212	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	2	1215.	1215.	1250.	1180.	2450.	49.497	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/04/82	2	7.95	7.95	8.2	7.7	0.125	0.354	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-05/04/82	2	7.9	7.9	8.	7.8	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-05/04/82	2	7.889	7.889	8.	7.8	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/04/82	2	0.013	0.013	0.016	0.01	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/04/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/04/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	2	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/04/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	2	275.	275.	280.	270.	50.	7.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	2	62.5	62.5	63.	62.	0.5	0.707	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	2	29.5	29.5	30.	29.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	2	150.	150.	150.	150.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	2	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-05/04/82	2	53.5	53.5	54.	53.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	2	5.95	5.95	6.3	5.6	0.245	0.495	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/04/82	2	190.	190.	200.	180.	200.	14.142	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/04/82	2	165.	165.	170.	160.	50.	7.071	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	2	90.	90.	90.	90.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	2	721.	721.	733.	709.	288.	16.971	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/04/82	2	1.08	1.08	1.39	0.77	0.192	0.438	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/04/82	2	0.98	0.98	1.	0.96	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - 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: ZION0145

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0146

NPS Station ID: ZION0146
LAT/LON: 37.272226/-112.936810
Agency: 11NPSWRD
Date Created: 08/02/97
Location: WEEPING ROCK SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_USGS_WR
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 4600
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT WEEPING ROCK SPRING LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/16/88-05/04/89	4	1235.	1199.75	1250.	1079.	6532.917	80.826	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/16/88-05/04/89	4	7.7	7.725	7.9	7.6	0.023	0.15	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/16/88-05/04/89	4	7.689	7.706	7.9	7.6	0.023	0.152	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/16/88-05/04/89	4	0.02	0.02	0.025	0.013	0.	0.006	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/16/88-05/04/89	4	166.5	166.25	193.	139.	523.583	22.882	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/88-05/04/89	4	61.85	61.225	63.	58.2	4.842	2.201	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/88-05/04/89	4	28.9	28.95	30.	28.	0.777	0.881	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/88-05/04/89	4	157.	154.75	161.	144.	57.583	7.588	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/88-05/04/89	4	5.55	5.525	7.	4.	1.703	1.305	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/88-05/04/89	4	192.5	192.25	204.	180.	96.25	9.811	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/88-05/04/89	4	168.	176.25	209.	160.	493.583	22.217	**	**	**	**
07005	TRITIUM, DISSOLVED (PC/L)	08/16/88-02/16/89	3	8.	7.9	9.3	6.4	2.11	1.453	**	**	**	**
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/16/88-05/04/89	4	-99.5	-99.5	-98.	-101.	1.667	1.291	**	**	**	**
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/16/88-05/04/89	4	-14.05	-14.025	-13.9	-14.1	0.009	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: ZION0146

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0147

NPS Station ID: ZION0147
LAT/LON: 37.271948/-112.936920
Agency: 11NPSWRD
Date Created: 08/02/97
Location: WEEPING ROCK SPRING NEAR TRAIL
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_UTDNR_43.1
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 4400
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT WEEPING ROCK SPRING NEAR THE FOOT TRAIL WITHIN ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0147

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	2	17.5	17.5	19.	16.	4.5	2.121	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	2	1215.	1215.	1250.	1180.	2450.	49.497	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/19/81-05/04/82	2	7.95	7.95	8.2	7.7	0.125	0.354	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	2	7.9	7.9	8.	7.8	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/04/82	2	7.889	7.889	8.	7.8	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/04/82	2	0.013	0.013	0.016	0.01	0.	0.004	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	2	175.	175.	180.	170.	50.	7.071	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	2	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	2	275.	275.	280.	270.	50.	7.071	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	2	100.	100.	100.	100.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	2	62.5	62.5	63.	62.	0.5	0.707	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	2	29.5	29.5	30.	29.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	2	150.	150.	150.	150.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	2	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	2	5.95	5.95	6.3	5.6	0.245	0.495	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/19/81-05/04/82	2	190.	190.	200.	180.	200.	14.142	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/81-05/04/82	2	165.	165.	170.	160.	50.	7.071	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	2	90.	90.	90.	90.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	2	721.	721.	733.	709.	288.	16.971	**	**	**	**

** - Less than 9 observations ## - 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: ZION0147

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (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						

& - 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: ZION0148

NPS Station ID: ZION0148 LAT/LON: 37.271115/-112.940281 Agency: 11NPSWRD Date Created: 09/13/97
Location: NORTH FORK VIRGIN RIVER NEAR ANGELS LANDING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_NPSWRD_12
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 4380 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA WASHINGTON CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK OF THE VIRGIN RIVER NEAR ANGELS LANDING IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND ADDITIONAL STATIONS NOT UPLOADED TO STORET. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA WERE PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 TEL. (970) 225-3516.

Parameter Inventory for Station: ZION0148

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/92-10/06/92	11	15.	15.273	21.	11.	11.818	3.438	11.	12.	18.	20.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/02/92-10/06/92	10	8.75	8.56	9.2	7.3	0.369	0.608	7.38	8.1	9.125	9.2
00406	PH, FIELD, STANDARD UNITS SU	05/21/92-10/06/92	11	8.16	8.034	8.35	6.75	0.193	0.439	6.99	8.06	8.25	8.33
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/21/92-10/06/92	11	8.16	7.645	8.35	6.75	0.358	0.599	6.99	8.06	8.25	8.33
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/92-10/06/92	11	0.007	0.023	0.178	0.004	0.003	0.052	0.005	0.006	0.009	0.145
00600	NITROGEN, TOTAL (MG/L AS N)	05/21/92-10/06/92	11 ##	0.	0.127	0.8	0.	0.06	0.245	0.	0.	0.2	0.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/21/92-10/06/92	11 ##	0.	0.127	0.8	0.	0.06	0.245	0.	0.	0.2	0.7
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/21/92-10/06/92	11 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/21/92-10/06/92	11 ##	0.	0.022	0.08	0.	0.001	0.031	0.	0.	0.04	0.078
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/21/92-10/06/92	11	1.43	1.774	4.16	1.07	0.775	0.88	1.088	1.27	1.84	3.816
50793	INVALID PARAMETER	05/21/92-10/06/92	11	0.048	1.142	6.789	0.	5.244	2.29	0.	0.	0.615	6.328
50794	INVALID PARAMETER	05/21/92-10/06/92	11	0.139	0.784	3.719	0.019	1.491	1.221	0.022	0.042	1.591	3.42
50795	INVALID PARAMETER	05/21/92-10/06/92	11	19.	24.273	75.	1.	528.818	22.996	1.2	4.	40.	69.6

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

EPA Water Quality Criteria Analysis for Station: ZION0148

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	10	0	0.00	7	0	0.00				3	0	0.00			
00406	PH, FIELD	Other-Hi Lim.	9.	11	0	0.00	7	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	7	0	0.00				4	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	11	0	0.00	7	0	0.00				4	0	0.00			

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

Station Inventory for Station: ZION0149

NPS Station ID: ZION0149
LAT/LON: 37.453059/-112.941116
Agency: 112WRD
Date Created: 12/02/81
Location: (C-39-10) 3ACA-
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372711112562801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.00
On/Off RF1:
RF3 Index: 15010008001700.14
RF3 Mile Point: 0.54
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0149

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	3	16.5	15.	18.5	10.	19.75	4.444	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	3	7.	29.	76.	4.	1659.	40.731	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	3	350.	330.	350.	290.	1200.	34.641	**	**	**	**
00400	PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.3	7.967	8.4	7.2	0.443	0.666	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.3	7.619	8.4	7.2	0.624	0.79	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.005	0.024	0.063	0.004	0.001	0.034	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	3	8.2	8.167	8.2	8.1	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/23/81-08/16/82	3	8.2	8.164	8.2	8.1	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.006	0.007	0.008	0.006	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	3	180.	173.333	180.	160.	133.333	11.547	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	3	46.	47.333	50.	46.	5.333	2.309	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	3	16.	13.433	16.	8.3	19.763	4.446	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	3	3.5	3.6	4.6	2.7	0.91	0.954	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	04/23/81-08/16/82	3	4.	4.333	5.	4.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	3	1.5	1.467	1.5	1.4	0.003	0.058	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	3	2.	1.667	2.	1.	0.333	0.577	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	3	28.	26.667	29.	23.	10.333	3.215	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	3	7.1	7.133	8.3	6.	1.323	1.15	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	3	10.	13.333	20.	10.	33.333	5.774	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	2	2130.	2130.	3900.	360.	6265800.	2503.158	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	3	370.	1500.	3900.	230.	4324900.	2079.639	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	3	10.	16.333	30.	9.	140.333	11.846	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	3	20.	45.333	110.	6.	3185.333	56.439	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	3	20.	50.	120.	10.	3700.	60.828	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	3	4.	5.	8.	3.	7.	2.646	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	3	191.	182.	199.	156.	523.	22.869	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/27/81-08/16/82	2	211.	211.	224.	198.	338.	18.385	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	3	2.91	14.837	39.3	2.3	448.934	21.188	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	3	0.26	0.247	0.27	0.21	0.001	0.032	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	08/27/81-08/27/81	1	14.	14.	14.	14.	0.	0.	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	08/27/81-08/27/81	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0149

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0150

NPS Station ID: ZION0150 | LAT/LON: 37.279976/-112.942754 | Agency: 11NPSWRD | Date Created: 08/02/97
Location: LARRY'S GROTTO | FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING | STORET Station ID(s): ZION_USGS_LG
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 | Depth of Water: 0 | Aquifer:
Major Basin: COLORADO RIVER | Elevation: 4700 | Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER | ECO Region:
RF1 Index: 15010008 | RF1 Mile Point: 0.000 | Distance from RF1: 3.60 | On/Off RF1:
RF3 Index: 15010008039000.00 | RF3 Mile Point: 0.00 | Distance from RF3: 0.01 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT LARRY'S GROTTO LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0150

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/16/88-05/03/89	4	1591.5	1591.25	1671.	1511.	7770.917	88.153	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/16/88-05/03/89	4	7.7	7.675	7.8	7.5	0.016	0.126	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/16/88-05/03/89	4	7.7	7.661	7.8	7.5	0.016	0.127	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/16/88-05/03/89	4	0.02	0.022	0.032	0.016	0.	0.007	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/16/88-05/03/89	4	164.	172.25	206.	155.	530.25	23.027	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/88-05/03/89	4	80.	79.775	82.5	76.6	8.536	2.922	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/88-05/03/89	4	37.1	36.55	38.	34.	3.31	1.819	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/88-05/03/89	4	220.	214.25	228.	189.	308.25	17.557	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/88-05/03/89	4	8.	7.75	9.	6.	1.59	1.261	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/88-05/03/89	4	270.	272.5	293.	257.	225.	15.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/88-05/03/89	4	254.	251.75	260.	239.	82.917	9.106	**	**	**	**
07005	TRITIUM, DISSOLVED (PC/L)	08/16/88-02/16/89	3	2.2	1.7	2.6	0.3	1.51	1.229	**	**	**	**
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/16/88-05/03/89	4	-105.5	-105.25	-104.	-106.	0.917	0.957	**	**	**	**
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/16/88-05/03/89	4	-14.55	-14.55	-14.5	-14.6	0.003	0.058	**	**	**	**

** - Less than 9 observations ## - 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: ZION0150

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	4	1.00	3	3	1.00	1	1	1.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	3	0.75	3	2	0.67	1	1	1.00						
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0151

NPS Station ID: ZION0151 LAT/LON: 37.167642/-112.945142 Agency: 11NPSWRD Date Created: 09/13/97
Location: EAST FORK VIRGIN RIVER BELOW PARUNUWEAP CANYON FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_NPSWRD_157
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3960 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE EAST WASHINGTON CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE EAST FORK VIRGIN RIVER BELOW PARUNUWEAP CANYON. DATA ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND ADDITIONAL STATIONS NOT UPLOADED TO STORET. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA WERE PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. TEL. (970)225-3516.

Parameter Inventory for Station: ZION0151

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/92-10/02/92	11	15.	16.273	25.	12.	19.418	4.407	12.	13.	20.	24.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/12/92-10/02/92	9	8.6	8.589	9.2	7.4	0.499	0.706	7.4	8.	9.2	9.2
00406	PH, FIELD, STANDARD UNITS SU	05/21/92-10/02/92	9	8.11	8.106	8.32	7.5	0.059	0.243	7.5	8.095	8.265	8.32
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/21/92-10/02/92	9	8.11	8.023	8.32	7.5	0.067	0.258	7.5	8.095	8.265	8.32
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/92-10/02/92	9	0.008	0.009	0.032	0.005	0.	0.008	0.005	0.005	0.008	0.032
00600	NITROGEN, TOTAL (MG/L AS N)	05/21/92-10/02/92	11	0.9	0.836	1.1	0.5	0.043	0.206	0.5	0.6	1.	1.08
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/21/92-10/02/92	11 ##	0.	0.091	0.5	0.	0.023	0.151	0.	0.	0.1	0.44
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/21/92-10/02/92	11	0.9	0.745	1.	0.4	0.059	0.242	0.4	0.5	0.9	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/21/92-10/02/92	11	0.01	0.01	0.03	0.	0.	0.012	0.	0.	0.02	0.03
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	05/21/92-10/02/92	10	1.145	1.208	1.56	1.05	0.035	0.186	1.05	1.065	1.308	1.555
50793	INVALID PARAMETER	05/21/92-10/02/92	11	0.206	0.855	3.196	0.	1.56	1.249	0.003	0.029	1.925	3.166
50794	INVALID PARAMETER	05/21/92-10/02/92	11	0.383	0.59	2.521	0.09	0.469	0.685	0.112	0.213	0.599	2.212
50795	INVALID PARAMETER	05/21/92-10/02/92	11	10.	33.091	228.	2.	4299.691	65.572	2.4	6.	24.	190.6

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

EPA Water Quality Criteria Analysis for Station: ZION0151

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	9	0	0.00	7	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: ZION0151

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	9	0	0.00	5	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	5	0	0.00				4	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	11	0	0.00	7	0	0.00				4	0	0.00			

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

Station Inventory for Station: ZION0152

NPS Station ID: ZION0152 LAT/LON: 37.256392/-112.945281 Agency: 21UTDHDW Date Created: 05/26/90
Location: ZION CANYON WATER SYSTEM - UPPER GROTTO SP FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2705104 /UT4900531004
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 4.20 On/Off RF1:
RF3 Index: 15010008040100.00 RF3 Mile Point: 0.00 Distance from RF3: 0.02 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0152

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: ZION0153

NPS Station ID: ZION0153 LAT/LON: 37.258059/-112.945976 Agency: 21UTDHDW Date Created: 05/26/90
Location: ZION CANYON WATER SYSTEM - LOWER GROTTO SP FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2705103 /UT4900531003
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 2.10 On/Off RF1:
RF3 Index: 15010008066500.00 RF3 Mile Point: 0.15 Distance from RF3: 0.01 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0153

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	01/25/88-01/25/88	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/25/88-01/25/88	1	291.	291.	291.	291.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/25/88-01/25/88	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/25/88-01/25/88	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/25/88-01/25/88	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	01/25/88-01/25/88	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/25/88-01/25/88	1	118.	118.	118.	118.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	01/25/88-01/25/88	1	144.	144.	144.	144.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/25/88-01/25/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/25/88-01/25/88	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/25/88-01/25/88	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/25/88-01/25/88	1	131.	131.	131.	131.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/25/88-01/25/88	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/25/88-01/25/88	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/25/88-01/25/88	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/25/88-01/25/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	01/25/88-01/25/88	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	01/25/88-01/25/88	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/25/88-01/25/88	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	01/25/88-01/25/88	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	01/25/88-01/25/88	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	01/25/88-01/25/88	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	01/25/88-01/25/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	01/25/88-01/25/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	01/25/88-01/25/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	01/25/88-01/25/88	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	01/25/88-01/25/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	01/25/88-01/25/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	01/25/88-01/25/88	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	01/25/88-01/25/88	1	94.	94.	94.	94.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	01/25/88-01/25/88	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	01/25/88-01/25/88	1	3.	3.	3.	3.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/25/88-01/25/88	1	168.	168.	168.	168.	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: ZION0153

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900	MERCURY, TOTAL (UG/L AS HG)	01/25/88-01/25/88	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	01/25/88-01/25/88	1	0.07	0.07	0.07	0.07	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: ZION0153

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
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									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0154

NPS Station ID: ZION0154
LAT/LON: 37.258142/-112.946781
Agency: 11NPSWRD
Date Created: 08/02/97
Location: THE GROTTO
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_USGS_GR
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 4440
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT THE GROTTO LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL - USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0154

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/88-05/04/89	4	168.	168.5	173.	165.	13.667	3.697	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/17/88-05/04/89	4	7.95	7.95	8.	7.9	0.003	0.058	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/17/88-05/04/89	4	7.947	7.947	8.	7.9	0.003	0.058	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/88-05/04/89	4	0.011	0.011	0.013	0.01	0.	0.001	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/17/88-05/04/89	4	79.	81.25	89.	78.	27.583	5.252	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/88-05/04/89	4	16.1	16.425	18.	15.5	1.349	1.162	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/88-05/04/89	4	9.6	9.9	11.	9.4	0.553	0.744	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/88-05/04/89	4	2.5	2.55	3.	2.2	0.11	0.332	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/88-05/04/89	4 ##	0.575	0.85	2.	0.25	0.682	0.826	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/17/88-05/04/89	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/17/88-05/04/89	4	2.95	3.	3.3	2.8	0.047	0.216	**	**	**	**
07005	TRITIUM, DISSOLVED (PC/L)	08/17/88-02/17/89	3	5.8	5.467	6.1	4.5	0.723	0.85	**	**	**	**
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/17/88-05/04/89	4	-94.5	-94.5	-94.	-95.	0.333	0.577	**	**	**	**
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/17/88-05/04/89	4	-13.1	-13.05	-12.9	-13.1	0.01	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: ZION0154

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0155

NPS Station ID: ZION0155
LAT/LON: 37.287282/-112.947254
Agency: 11NPSWRD
Date Created: 08/02/97
Location: TEMPLE OF SINAWAVA SEEP
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_USGS_TS
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 4520
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT THE TEMPLE OF SINAWAVA LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0155

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/28/88-05/04/89	3	246.	248.667	260.	240.	105.333	10.263	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	09/28/88-05/04/89	3	8.2	8.133	8.2	8.	0.013	0.115	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	09/28/88-05/04/89	3	8.2	8.123	8.2	8.	0.014	0.116	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/28/88-05/04/89	3	0.006	0.008	0.01	0.006	0.	0.002	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	09/28/88-05/04/89	3	125.	126.667	133.	122.	32.333	5.686	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/28/88-05/04/89	3	25.8	25.567	25.9	25.	0.243	0.493	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/28/88-05/04/89	3	15.3	15.333	16.	14.7	0.423	0.651	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/28/88-05/04/89	3	1.9	1.967	2.2	1.8	0.043	0.208	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/28/88-05/04/89	3	0.8	1.033	1.6	0.7	0.243	0.493	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/28/88-05/04/89	3	4.	3.333	4.	2.	1.333	1.155	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/28/88-05/04/89	3	3.6	3.3	4.1	2.2	0.97	0.985	**	**	**	**

** - Less than 9 observations ## - 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: ZION0155

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0156

NPS Station ID: ZION0156
LAT/LON: 37.284726/-112.947226
Agency: 112WRD
Date Created: 12/19/81
Location: N.F.VIRGIN R. AT MOUTH OF NARROWS, UT.
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371705112565001
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008014
RF1 Mile Point: 5.700
Distance from RF1: 3.10
On/Off RF1: ON
RF3 Index: 15010008028200.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0156

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-09/19/86	5	8.6	10.82	20.5	6.	37.462	6.121	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-05/04/82	4	9.5	12.875	30.5	2.	158.729	12.599	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-05/04/82	4	648.	647.5	654.	640.	35.667	5.972	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-09/19/86	5	45.	175.8	700.	36.	85911.2	293.106	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-09/19/86	5	550.	524.	625.	325.	13467.5	116.05	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-05/04/82	4	10.	9.675	11.1	7.6	2.423	1.556	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-09/19/86	5	8.5	8.2	8.6	7.	0.465	0.682	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-09/19/86	5	8.5	7.645	8.6	7.	0.85	0.922	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-09/19/86	5	0.003	0.023	0.1	0.003	0.002	0.043	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	4	8.25	8.275	8.5	8.1	0.029	0.171	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/04/82	4	8.247	8.251	8.5	8.1	0.03	0.173	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/04/82	4	0.006	0.006	0.008	0.003	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	4 ##	0.125	0.124	0.2	0.045	0.008	0.088	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/19/81-05/04/82	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	4 ##	0.013	0.013	0.02	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	4	240.	220.	250.	150.	2266.667	47.61	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	4	56.5	54.75	60.	46.	40.917	6.397	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	4	24.	20.3	24.	9.2	54.76	7.4	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	4	27.	22.125	30.	4.5	140.063	11.835	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	4	0.8	0.675	0.9	0.2	0.103	0.32	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-05/04/82	4	19.	16.5	22.	6.	51.	7.141	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	4	2.7	2.4	2.8	1.4	0.447	0.668	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-05/04/82	4	32.	26.25	35.	6.	184.917	13.598	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-05/04/82	4	83.	65.5	85.	11.	1321.	36.346	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	4	10.45	9.65	11.	6.7	4.137	2.034	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	4	25.	25.	30.	20.	33.333	5.774	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	4	334.5	293.25	340.	164.	7432.917	86.214	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-05/04/82	4	44.75	109.65	310.	39.1	17856.523	133.628	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-05/04/82	4	0.455	0.398	0.46	0.22	0.014	0.118	**	**	**	**

** - Less than 9 observations ## - 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: ZION0156

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0157

NPS Station ID: ZION0157 LAT/LON: 37.293559/-112.947753 Agency: 11NPSWRD Date Created: 09/13/97
Location: NORTH FORK VIRGIN RIVER AT LOWER ZION NARROWS FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_NPSWRD_14 /UTDNR_43.2
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 4460 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA KANE CO. UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK OF THE VIRGIN RIVER AT THE LOWER END OF THE ZION NARROWS IN ZION NATIONAL PARK. DATA FOR THIS SITE ARE FROM THE 1993 NPS-WRD REPORT "INVENTORY OF THE AQUATIC RESOURCES OF THE VIRGIN RIVER ECOSYSTEM ZION NATIONAL PARK UTAH" BY TERENCE P. BOYLE; NANCY J. HOEFS; AND DAVID R. BEESON. THE REPORT CONTAINS BIOLOGICAL DATA AND ADDITIONAL STATIONS NOT UPLOADED TO STORET. ADDITIONAL DATA FOR THIS LOCATION MAY BE FOUND AT THE SECONDARY STATION ID ZION_UTDNR_43.2. BASED ON THE STATION DESCRIPTION IN THE REPORT; THE LATITUDE AND LONGITUDE COORDINATE VALUES WERE DIGITIZED FROM THE QUADRANGLE MAP. FOR MORE INFORMATION CONTACT RESOURCE MANAGEMENT AT ZION NATIONAL PARK SPRINGDALE UT 84767. TEL. (801)772-3256. DATA WERE PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. TEL. (970)225-3516.

Parameter Inventory for Station: ZION0157

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/16/92-10/06/92	5	16.	14.8	17.	12.	4.7	2.168	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/16/92-10/06/92	5	8.9	8.74	9.2	8.1	0.223	0.472	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/16/92-10/06/92	5	8.15	8.138	8.21	8.05	0.005	0.067	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/16/92-10/06/92	5	8.15	8.134	8.21	8.05	0.005	0.067	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/16/92-10/06/92	5	0.007	0.007	0.009	0.006	0.	0.001	**	**	**	**
00600	NITROGEN, TOTAL (MG/L AS N)	06/16/92-10/06/92	5 ##	0.	0.06	0.3	0.	0.018	0.134	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/16/92-10/06/92	5 ##	0.	0.06	0.3	0.	0.018	0.134	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/16/92-10/06/92	5 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/16/92-10/06/92	5	0.03	0.022	0.04	0.	0.	0.02	**	**	**	**
30209	FLOW, INSTANTANEOUS, (CUBIC METERS / SEC) CMS	06/16/92-10/06/92	5	1.09	1.112	1.67	0.61	0.145	0.38	**	**	**	**
50793	INVALID PARAMETER	06/16/92-10/06/92	5	0.021	0.319	1.444	0.	0.398	0.631	**	**	**	**
50794	INVALID PARAMETER	06/16/92-10/06/92	5	0.128	0.475	1.656	0.009	0.473	0.688	**	**	**	**
50795	INVALID PARAMETER	06/16/92-10/06/92	5	32.	31.6	57.	7.	344.8	18.569	**	**	**	**

** - Less than 9 observations ## - 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: ZION0157

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00				1	0	0.00			
00406	PH, FIELD	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00				1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	5	0	0.00	4	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: ZION0158

NPS Station ID: ZION0158 LAT/LON: 37.293559/-112.947753 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK VIRGIN RIVER AT LOWER ZION NARROWS FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_43.2
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 4460 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK OF THE VIRGIN RIVER AT THE LOWER END OF THE ZION NARROWS IN ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0158

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-05/04/82	4	7.3	10.275	20.5	6.	47.969	6.926	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-05/04/82	4	545.	498.75	580.	325.	13706.25	117.074	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/19/81-05/04/82	4	10.	9.675	11.1	7.6	2.423	1.556	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-05/04/82	4	8.4	8.4	8.6	8.2	0.033	0.183	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-05/04/82	4	8.389	8.372	8.6	8.2	0.034	0.185	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-05/04/82	4	0.004	0.004	0.006	0.003	0.	0.002	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	4	155.	152.5	170.	130.	291.667	17.078	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-05/04/82	4 ##	0.125	0.124	0.2	0.045	0.008	0.088	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-05/04/82	4 ##	0.02	0.024	0.05	0.005	0.	0.019	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-05/04/82	4	240.	220.	250.	150.	2266.667	47.61	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/19/81-05/04/82	4	77.5	65.75	85.	23.	852.917	29.205	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-05/04/82	4	56.5	54.75	60.	46.	40.917	6.397	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-05/04/82	4	24.	20.3	24.	9.2	54.76	7.4	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-05/04/82	4	27.	22.25	30.	5.	134.25	11.587	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-05/04/82	4	0.8	0.675	0.9	0.2	0.103	0.32	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-05/04/82	4	2.7	2.4	2.8	1.4	0.447	0.668	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/19/81-05/04/82	4	32.	26.25	35.	6.	184.917	13.598	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/81-05/04/82	4	83.	65.5	85.	11.	1321.	36.346	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-05/04/82	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-05/04/82	4	10.45	9.65	11.	6.7	4.137	2.034	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-05/04/82	4	25.	25.	30.	20.	33.333	5.774	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-05/04/82	4	334.5	293.25	340.	164.	7432.917	86.214	**	**	**	**

** - Less than 9 observations ## - 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: ZION0158

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0159

NPS Station ID: ZION0159
LAT/LON: 37.285003/-112.950005
Agency: 112WRD
Date Created: 01/09/88
Location: (C-40-10)
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371706112570001
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 3.50
On/Off RF1:
RF3 Index: 15010008002222.00
RF3 Mile Point: 22.65
Distance from RF3: 0.16
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0159

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/30/87-06/30/87	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	06/30/87-06/30/87	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/30/87-06/30/87	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/30/87-06/30/87	1	265.	265.	265.	265.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/30/87-06/30/87	1	8.11	8.11	8.11	8.11	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/30/87-06/30/87	1	8.11	8.11	8.11	8.11	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/30/87-06/30/87	1	0.008	0.008	0.008	0.008	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: ZION0159

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	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

Station Inventory for Station: ZION0160

NPS Station ID: ZION0160
LAT/LON: 37.246255/-112.950838
Agency: 21UTDHDW
Date Created: 05/26/90
Location: ZION CANYON WATER SYSTEM - WYLIE SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 2705105 /UT4900531005
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 4.90
On/Off RF1:
RF3 Index: 15010008040000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * *
NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV
SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 27-058

Parameter Inventory for Station: ZION0160

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: ZION0161

NPS Station ID: ZION0161
LAT/LON: 37.279781/-112.954560
Agency: 11NPSWRD
Date Created: 08/02/97
Location: REFRIGERATOR SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_USGS_RS
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 5835
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT REFRIGERATOR SPRING LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0161

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/26/88-05/03/89	4	138.5	137.75	145.	129.	71.583	8.461	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/26/88-05/03/89	4	7.65	7.675	8.	7.4	0.062	0.25	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/26/88-05/03/89	4	7.647	7.625	8.	7.4	0.066	0.257	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/26/88-05/03/89	4	0.023	0.024	0.04	0.01	0.	0.012	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	08/26/88-05/03/89	4	68.5	67.	73.	58.	40.667	6.377	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/26/88-05/03/89	4	12.8	12.875	14.	11.9	0.769	0.877	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/26/88-05/03/89	4	8.4	8.7	10.	8.	0.813	0.902	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/26/88-05/03/89	4	1.7	1.75	2.	1.6	0.037	0.191	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/26/88-05/03/89	4 ##	0.25	0.688	2.	0.25	0.766	0.875	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/26/88-05/03/89	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/26/88-05/03/89	4	1.85	2.025	2.7	1.7	0.223	0.472	**	**	**	**
07005	TRITIUM, DISSOLVED (PC/L)	08/26/88-02/15/89	3	4.5	3.733	5.1	1.6	3.503	1.872	**	**	**	**
82082	DEUTERIUM/PROTIUM (H-2/H-1) STABLE ISOTOPE RATIO	08/26/88-05/03/89	4	-92.5	-92.75	-92.	-94.	0.917	0.957	**	**	**	**
82085	OXYGEN-18/OXYGEN-16 STABLE ISOTOPE RATIO PER MIL	08/26/88-05/03/89	4	-12.95	-12.95	-12.9	-13.	0.003	0.058	**	**	**	**

** - Less than 9 observations ## - 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: ZION0161

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0162

NPS Station ID: ZION0162
LAT/LON: 37.329726/-112.956392
Agency: 112WRD
Date Created: 08/01/87
Location: (C-40-10)16c -S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371947112572301
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC:
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index:
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008000500.00
RF3 Mile Point: 1.38
Distance from RF3: 0.56
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0162

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/18/86-09/18/86	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/18/86-09/18/86	1	940.	940.	940.	940.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/18/86-09/18/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/18/86-09/18/86	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/86-09/18/86	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/18/86-09/18/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/18/86-09/18/86	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/18/86-09/18/86	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/18/86-09/18/86	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/18/86-09/18/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/18/86-09/18/86	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/18/86-09/18/86	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/18/86-09/18/86	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/18/86-09/18/86	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/18/86-09/18/86	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/18/86-09/18/86	1	290.	290.	290.	290.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/18/86-09/18/86	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/18/86-09/18/86	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	09/18/86-09/18/86	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	09/18/86-09/18/86	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/18/86-09/18/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	09/18/86-09/18/86	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/18/86-09/18/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/18/86-09/18/86	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	09/18/86-09/18/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/18/86-09/18/86	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	09/18/86-09/18/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	09/18/86-09/18/86	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	09/18/86-09/18/86	1 ##	3.	3.	3.	3.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/18/86-09/18/86	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	09/18/86-09/18/86	1	31.	31.	31.	31.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/18/86-09/18/86	1	760.	760.	760.	760.	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: ZION0162

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0163

NPS Station ID: ZION0163
LAT/LON: 37.505310/-112.960892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBE516R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_44 /5075755
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Webster Flat UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0163

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/80-07/26/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/80-07/26/80	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/80-07/26/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/26/80-07/26/80	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/80-07/26/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/80-07/26/80	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/80-07/26/80	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/80-07/26/80	1	9.02	9.02	9.02	9.02	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/26/80-07/26/80	1	77.	77.	77.	77.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/26/80-07/26/80	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/26/80-07/26/80	1	0.547	0.547	0.547	0.547	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/26/80-07/26/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/26/80-07/26/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/26/80-07/26/80	1	6000.	6000.	6000.	6000.	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: ZION0163

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0164

NPS Station ID: ZION0164
LAT/LON: 37.322309/-112.960892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC508R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_34 /5075838
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0164

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/80-07/22/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/22/80-07/22/80	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	1	10.46	10.46	10.46	10.46	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	1	95.	95.	95.	95.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	1	1.739	1.739	1.739	1.739	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/22/80-07/22/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/22/80-07/22/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/22/80-07/22/80	1	12.6	12.6	12.6	12.6	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	1	6300.	6300.	6300.	6300.	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: ZION0164

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0165

NPS Station ID: ZION0165 | LAT/LON: 37.258365/-112.961726 | Agency: 11NPSWRD | Date Created: 08/02/97
Location: MIDDLE EMERALD POOL | FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING | STORET Station ID(s): ZION_USGS_MEP
RMI-Indexes: | Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 | Depth of Water: 0 | Aquifer:
Major Basin: COLORADO RIVER | Elevation: 4400 | Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER | ECO Region:
RF1 Index: 15010008 | RF1 Mile Point: 0.000 | Distance from RF1: 3.60 | On/Off RF1:
RF3 Index: 15010008039000.00 | RF3 Mile Point: 0.00 | Distance from RF3: 0.01 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE TEMPLE OF SINAWAVA UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT MIDDLE EMERALD POOL LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE 1988 REPORT "SOURCE AND RESIDENCE TIME OF GROUND WATER ISSUING FROM SEEPS AND SPRINGS IN THE HANGING GARDENS AREA ZION NATIONAL PARK SOUTHWESTERN UTAH" BY BRIANT KIMBAL USGS WRD AND PAUL CHRISTENSEN - NPS WRD. THE DATA IS ALSO PART OF THESIS WORK PERFORMED BY LINDA R. SCHORR AT COLORADO STATE UNIVERSITY. THIS REPORT CONTAINS INFORMATION ON GROUND WATER MASS TRANSFER AND ISOTOPE BALANCE NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUADRANGLE MAP BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN RESOURCE - MANAGEMENT ZION NATIONAL PARK SPRINGDALE UT 84767. PH. (801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525 PH. (970) 225-3516.

Parameter Inventory for Station: ZION0165

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	09/28/88-05/01/89	3	185.	208.667	267.	174.	2582.333	50.817	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	09/28/88-05/01/89	3	7.7	7.633	7.7	7.5	0.013	0.115	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	09/28/88-05/01/89	3	7.7	7.623	7.7	7.5	0.014	0.116	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/28/88-05/01/89	3	0.02	0.024	0.032	0.02	0.	0.007	**	**	**	**
00431	ALKALINITY TOTAL FIELD, (MG/L AS CACO3)	09/28/88-05/01/89	3	84.	104.	146.	82.	1324.	36.387	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/28/88-05/01/89	3	17.7	21.6	30.2	16.9	55.63	7.459	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/28/88-05/01/89	3	10.4	11.967	15.4	10.1	8.863	2.977	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/28/88-05/01/89	3	2.1	2.067	2.3	1.8	0.063	0.252	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/28/88-05/01/89	3	0.9	1.1	1.8	0.6	0.39	0.624	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/28/88-05/01/89	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/28/88-05/01/89	3	2.	2.033	2.1	2.	0.003	0.058	**	**	**	**

** - Less than 9 observations ## - 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: ZION0165

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00406	PH, FIELD	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0166

NPS Station ID: ZION0166 LAT/LON: 37.238198/-112.965560 Agency: 21UTDHDW Date Created: 05/26/90
Location: ZION CANYON WATER SYSTEM - WATERCRESS SPR. FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2705102 /UT4900531002
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 7.60 On/Off RF1:
RF3 Index: 15010008066500.00 RF3 Mile Point: 0.51 Distance from RF3: 0.25 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 27-051

Parameter Inventory for Station: ZION0166

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/07/81-04/07/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/07/81-04/07/81	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/81-04/07/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/81-04/07/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/81-04/07/81	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/07/81-04/07/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	1	151.	151.	151.	151.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/07/81-04/07/81	1	184.	184.	184.	184.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/81-04/07/81	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/81-04/07/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/07/81-04/07/81	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/07/81-04/07/81	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/07/81-04/07/81	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/07/81-04/07/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/07/81-04/07/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/07/81-04/07/81	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/07/81-04/07/81	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/07/81-04/07/81	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/07/81-04/07/81	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/07/81-04/07/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/07/81-04/07/81	1	225.	225.	225.	225.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/07/81-04/07/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/07/81-04/07/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/81-04/07/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	04/07/81-04/07/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/07/81-04/07/81	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/81-04/07/81	1	70.	70.	70.	70.	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: ZION0166

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	04/07/81-04/07/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/07/81-04/07/81	1	186.	186.	186.	186.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/07/81-04/07/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/07/81-04/07/81	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

EPA Water Quality Criteria Analysis for Station: ZION0166

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00				1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00				1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00				1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00				1	0	0.00						
		Drinking Water	1300.	1	0	0.00				1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00				1	0	0.00						
		Drinking Water	15.	1	0	0.00				1	0	0.00						
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00				1	0	0.00						
		Drinking Water	5000.	1	0	0.00				1	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						
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: ZION0167

NPS Station ID: ZION0167 LAT/LON: 37.159115/-112.970559 Agency: 11NPSWRD Date Created: 08/02/97
Location: EAST FORK VIRGIN RIVER NEAR SOUTH BNDY ZION NP FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_USU_EFVR
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3920 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE EAST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE EAST FORK VIRGIN RIVER NEAR THE ZION NP SOUTHERN BOUNDARY. DATA FOR THIS SITE ARE FROM THE 1977 REPORT "THE BIOLOGICAL AND CHEMICAL INPUTS TO ZION NATIONALPARK" BY J. DAIN MADDOX AND GEORGE E. HART OF THE DEPARTMENT OF FORESTRY AND OUTDOOR RECREATION UTAH STATE UNIV. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0167

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/13/77-08/05/77	2	2.05	2.05	2.5	1.6	0.405	0.636	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/13/77-08/05/77	2	545.	545.	600.	490.	6050.	77.782	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/13/77-08/05/77	2	7.9	7.9	8.1	7.7	0.08	0.283	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/13/77-08/05/77	2	7.855	7.855	8.1	7.7	0.084	0.29	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/13/77-08/05/77	2	0.014	0.014	0.02	0.008	0.	0.008	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/13/77-08/05/77	2	149.	149.	150.	148.	2.	1.414	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/13/77-08/05/77	2	182.	182.	183.	181.	2.	1.414	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/13/77-08/05/77	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/13/77-08/05/77	2	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	05/13/77-08/05/77	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/13/77-08/05/77	2	225.	225.	230.	220.	50.	7.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/13/77-08/05/77	2	41.6	41.6	55.2	28.	369.92	19.233	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/13/77-08/05/77	2	29.05	29.05	36.	22.1	96.605	9.829	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/13/77-08/05/77	2	27.34	27.34	30.3	24.38	17.523	4.186	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/13/77-08/05/77	2	3.27	3.27	3.57	2.97	0.18	0.424	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/13/77-08/05/77	2	24.	24.	24.	24.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/13/77-08/05/77	2	97.5	97.5	98.	97.	0.5	0.707	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/13/77-08/05/77	2	0.26	0.26	0.35	0.17	0.016	0.127	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/13/77-08/05/77	2	15.	15.	22.	8.	98.	9.899	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/13/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/13/77-08/05/77	2	39.	39.	40.	38.	2.	1.414	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/13/77-08/05/77	2	155.	155.	170.	140.	450.	21.213	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/13/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/13/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/13/77-08/05/77	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/13/77-08/05/77	2	75.	75.	100.	50.	1250.	35.355	**	**	**	**

** - Less than 9 observations ## - 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: ZION0167

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	05/13/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/13/77-08/05/77	2	8.	8.	9.	7.	2.	1.414	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/13/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/13/77-08/05/77	2	14.	14.	20.	8.	72.	8.485	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/13/77-08/05/77	2	69.	69.	113.	25.	3872.	62.225	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/13/77-08/05/77	2 ##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/26/77-09/02/77	3	2500.	2500.	2700.	2300.	40000.	200.	**	**	**	**
31503	LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	07/26/77-09/02/77	3	3.398	3.397	3.431	3.362	0.001	0.035	**	**	**	**
31503	GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35	GEOMETRIC MEAN =			2494.655								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/02/77	3	620.	613.333	640.	580.	933.333	30.551	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/02/77	3	2.792	2.787	2.806	2.763	0.	0.022	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			612.82								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/26/77-09/02/77	3	360.	343.333	400.	270.	4433.333	66.583	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	07/26/77-09/02/77	3	2.556	2.53	2.602	2.431	0.008	0.088	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			338.773								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/13/77-08/05/77	2	358.	358.	400.	316.	3528.	59.397	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/13/77-08/05/77	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/13/77-08/05/77	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/13/77-08/05/77	2	0.12	0.12	0.13	0.11	0.	0.014	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0167

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00723	CYANIDE, DISSOLVED STD METHOD	Fresh Acute	22.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	200.	2	0	0.00	1	0	0.00				1	0	0.00			
00941	CHLORIDE, DISSOLVED 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			
00946	SULFATE, DISSOLVED (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			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	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			
01025	CADMIUM, DISSOLVED	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			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	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			
01049	LEAD, DISSOLVED	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			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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			
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			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	3	3	1.00	3	3	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	3	3	1.00	3	3	1.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00	1	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	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

Station Inventory for Station: ZION0168

NPS Station ID: ZION0168
LAT/LON: 37.566115/-112.971115
Agency: 112WRD
Date Created: 12/02/81
Location: (C-37-10)22CAB-
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 373358112581601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008005800.00
RF3 Mile Point: 0.00
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0168

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/23/81-08/16/82	3	14.	13.333	17.	9.	16.333	4.041	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/23/81-08/16/82	3	0.2	5.747	17.	0.04	94.985	9.746	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/81-08/16/82	3	520.	450.	560.	270.	24700.	157.162	**	**	**	**
00400	PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.	8.033	8.2	7.9	0.023	0.153	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/23/81-08/16/82	3	8.	8.016	8.2	7.9	0.024	0.154	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.01	0.01	0.013	0.006	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/23/81-08/16/82	3	8.	7.967	8.	7.9	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/23/81-08/16/82	3	8.	7.964	8.	7.9	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/23/81-08/16/82	3	0.01	0.011	0.013	0.01	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/16/82-08/16/82	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/23/81-08/16/82	3	240.	230.	290.	160.	4300.	65.574	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/16/82-08/16/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/23/81-08/16/82	3	70.	68.333	84.	51.	274.333	16.563	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/23/81-08/16/82	3	17.	14.767	19.	8.3	32.363	5.689	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/23/81-08/16/82	3	4.7	4.567	6.4	2.6	3.623	1.904	**	**	**	**
00931	SODIUM ADSORPTION RATIO	04/23/81-08/16/82	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	04/23/81-08/16/82	3	4.	4.	5.	3.	1.	1.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/23/81-08/16/82	3	1.7	1.633	1.8	1.4	0.043	0.208	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/23/81-08/16/82	3	3.	3.	4.	2.	1.	1.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/23/81-08/16/82	3	19.	22.667	47.	2.	516.333	22.723	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/23/81-08/16/82	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/23/81-08/16/82	3	7.4	6.667	8.5	4.1	5.243	2.29	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/23/81-08/16/82	3	30.	80.	190.	20.	9100.	95.394	**	**	**	**
01044	IRON, SUSPENDED (UG/L AS FE)	04/23/81-08/16/82	2	5915.	5915.	11000.	830.	51714450.	7191.276	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/23/81-08/16/82	3	840.	3986.667	11000.	120.	37019733.333	6084.384	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/23/81-08/16/82	3	9.	8.	10.	5.	7.	2.646	**	**	**	**
01054	MANGANESE, SUSPENDED (UG/L AS MN)	04/23/81-08/16/82	3	50.	133.333	340.	10.	32433.333	180.093	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/23/81-08/16/82	3	60.	143.333	350.	20.	32433.333	180.093	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/23/81-08/16/82	3	8.	8.667	10.	8.	1.333	1.155	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/23/81-08/16/82	3	278.	264.	331.	183.	5623.	74.987	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/26/81-08/16/82	2	282.	282.	291.	273.	162.	12.728	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/23/81-08/16/82	3	0.14	2.857	8.4	0.03	23.049	4.801	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/23/81-08/16/82	3	0.38	0.36	0.45	0.25	0.01	0.101	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/23/81-08/26/81	2	403.	403.	802.	4.	318402.	564.271	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	04/23/81-08/26/81	2	18.5	18.5	37.	0.	684.5	26.163	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	04/23/81-04/23/81	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0168

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0169

NPS Station ID: ZION0169 LAT/LON: 37.243338/-112.974170 Agency: 21UTDHDW Date Created: 05/26/90
Location: ZION CANYON WATER SYSTEM - BIRCH SPRINGS FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2705101 /UT4900531001
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008087702.02 RF3 Mile Point: 3.15 Distance from RF3: 0.05 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 27-051

Parameter Inventory for Station: ZION0169

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/07/81-04/07/81	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/07/81-04/07/81	1	155.	155.	155.	155.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/81-04/07/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/81-04/07/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/81-04/07/81	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/07/81-04/07/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	1	75.	75.	75.	75.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/07/81-04/07/81	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/81-10/29/85	3 ##	0.01	0.013	0.025	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/81-10/29/85	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/07/81-04/07/81	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/07/81-04/07/81	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/07/81-04/07/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/07/81-04/07/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/07/81-04/07/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/07/81-04/07/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/07/81-10/29/85	3	6.	4.833	6.	2.5	4.083	2.021	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/07/81-04/07/81	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/07/81-04/07/81	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/07/81-04/07/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/07/81-04/07/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/07/81-04/07/81	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/07/81-04/07/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/07/81-04/07/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/07/81-04/07/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/81-04/07/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	04/07/81-04/07/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/07/81-04/07/81	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/81-04/07/81	1	35.	35.	35.	35.	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: ZION0169

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	04/07/81-04/07/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	10/21/86-10/21/86	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/07/81-04/07/81	1	94.	94.	94.	94.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/07/81-04/07/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/07/81-04/07/81	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

EPA Water Quality Criteria Analysis for Station: ZION0169

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	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.	3	0	0.00	2	0	0.00	1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3	0	0.00	2	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00				1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00				1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00				1	0	0.00						
		Drinking Water	1300.	1	0	0.00				1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00				1	0	0.00						
		Drinking Water	15.	1	0	0.00				1	0	0.00						
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00				1	0	0.00						
		Drinking Water	5000.	1	0	0.00				1	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						
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: ZION0170

NPS Station ID: ZION0170
LAT/LON: 37.211670/-112.975837
Agency: 112WRD
Date Created: 02/20/76
Location: SPRINGDALE CANAL NR. SPRINGDALE, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405499
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 4.190
Distance from RF1: 1.10
On/Off RF1: OFF
RF3 Index: 15010008000400.00
RF3 Mile Point: 1.03
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0170

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/75-07/13/76	3	18.	15.833	19.	10.5	21.583	4.646	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/07/75-07/13/76	3	7.	8.	11.	6.	7.	2.646	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/07/75-07/13/76	3	675.	675.	750.	600.	5625.	75.	**	**	**	**

** - Less than 9 observations ## - 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: ZION0171

NPS Station ID: ZION0171
LAT/LON: 37.212503/-112.976392
Agency: 112WRD
Date Created: 07/18/81
Location: SPRINGDALE CANAL NR SPRINGDALE, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371245112583500
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 4.190
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.69
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0171

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/75-07/13/76	4	14.25	12.25	19.	1.5	65.75	8.109	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/17/75-07/13/76	4	6.5	7.5	11.	6.	5.667	2.38	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/75-07/13/76	4	712.5	750.	975.	600.	26250.	162.019	**	**	**	**

** - Less than 9 observations ## - 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: ZION0172

NPS Station ID: ZION0172
LAT/LON: 37.209726/-112.977782
Agency: 112WRD
Date Created: 07/18/81
Location: NORTH FORK VIRGIN RIVER NR SPRINGDALE, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371235112584002
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 4.040
Distance from RF1: 32.40
On/Off RF1: ON
RF3 Index: 15010008005000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0172

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-08/22/80	23	10.	11.348	22.	1.5	34.124	5.842	2.5	7.	17.	19.6
00060	FLOW, STREAM, MEAN DAILY CFS	10/26/73-08/19/74	8	43.5	52.875	90.	34.	426.982	20.664	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/15/74-08/22/80	16	55.	67.063	178.	26.	1616.196	40.202	33.	39.75	89.25	144.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/26/73-08/22/80	24	745.	743.75	975.	460.	14565.761	120.689	585.	672.5	836.25	920.

** - Less than 9 observations ## - 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. **********

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0172

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-08/22/80	17	10.	10.971	22.	1.5	38.827	6.231	1.5	6.5	17.	19.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/26/73-08/22/80	18	750.	776.111	975.	580.	11392.81	106.737	589.	730.	850.	952.5

** - 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 #2: 3/20 to 5/09 - Station ZION0172

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-08/22/80	4	10.	9.75	13.	6.	8.25	2.872	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/26/73-08/22/80	4	665.	685.	810.	600.	8033.333	89.629	**	**	**	**

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0172

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/26/73-08/22/80	2	17.75	17.75	20.	15.5	10.125	3.182	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/26/73-08/22/80	2	570.	570.	680.	460.	24200.	155.563	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0173

NPS Station ID: ZION0173 LAT/LON: 37.209726/-112.977782 Agency: 112WRD Date Created: / /
Location: NORTH FORK VIRGIN RIVER NR SPRINGDALE, UTAH FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 09405501
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008012 RF1 Mile Point: 4.040 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 15010008000100.00 RF3 Mile Point: 0.00 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0173

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/73-08/13/91	55	12.	12.078	23.1	2.5	36.322	6.027	4.	7.	16.5	21.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/04/82-08/13/91	30	24.25	21.617	37.5	5.	79.495	8.916	11.	13.375	27.625	34.85
00025	BAROMETRIC PRESSURE (MM OF HG)	08/23/82-08/23/82	1	659.	659.	659.	659.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	12/04/73-04/23/74	4	60.	62.75	90.	41.	626.25	25.025	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/82-08/13/91	51	54.	127.729	1560.	0.5	67229.976	259.287	25.2	36.	113.	202.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/73-08/13/91	51	720.	696.863	1010.	315.	32297.961	179.716	450.	540.	820.	940.
00300	OXYGEN, DISSOLVED MG/L	05/04/82-08/23/82	2	9.45	9.45	10.5	8.4	2.205	1.485	**	**	**	**
00400	PH (STANDARD UNITS)	05/04/82-08/23/82	2	8.35	8.35	8.4	8.3	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/04/82-08/23/82	2	8.347	8.347	8.4	8.3	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/82-08/23/82	2	0.004	0.004	0.005	0.004	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/04/82-08/23/82	2	8.05	8.05	8.2	7.9	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/04/82-08/23/82	2	8.025	8.025	8.2	7.9	0.046	0.215	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/82-08/23/82	2	0.009	0.009	0.013	0.006	0.	0.004	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/04/82-08/23/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	2	0.06	0.06	0.09	0.03	0.002	0.042	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/04/82-08/23/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/82-08/23/82	2	185.	185.	220.	150.	2450.	49.497	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/04/82-08/23/82	2	53.	53.	60.	46.	98.	9.899	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/04/82-08/23/82	2	13.2	13.2	17.	9.4	28.88	5.374	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/04/82-08/23/82	2	20.3	20.3	33.	7.6	322.58	17.961	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/04/82-08/23/82	2	0.65	0.65	1.	0.3	0.245	0.495	**	**	**	**
00932	SODIUM, PERCENT	05/04/82-08/23/82	2	17.	17.	24.	10.	98.	9.899	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/04/82-08/23/82	2	2.6	2.6	3.7	1.5	2.42	1.556	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/04/82-08/23/82	2	26.	26.	42.	10.	512.	22.627	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/04/82-08/23/82	2	42.5	42.5	73.	12.	1860.5	43.134	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/04/82-08/23/82	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/04/82-08/23/82	2	8.95	8.95	11.	6.9	8.405	2.899	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/04/82-08/23/82	2 ##	22.5	22.5	40.	5.	612.5	24.749	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/04/82-08/23/82	2	257.	257.	341.	173.	14112.	118.794	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/04/82-08/23/82	2	197.9	197.9	336.	59.8	38143.22	195.303	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/04/82-08/23/82	2	0.35	0.35	0.46	0.24	0.024	0.156	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0173

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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 3/19 - Station ZION0173

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/73-08/13/91	34	11.25	11.915	23.1	2.5	44.363	6.661	4.	5.	19.	21.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/04/82-08/13/91	19	19.	20.368	37.	5.	97.107	9.854	6.5	11.5	28.	35.
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/82-08/13/91	31	47.	53.248	206.	0.7	1453.846	38.129	25.2	29.	58.	107.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/73-08/13/91	32	785.	747.031	1010.	315.	30077.193	173.428	484.5	650.	905.	947.

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0173

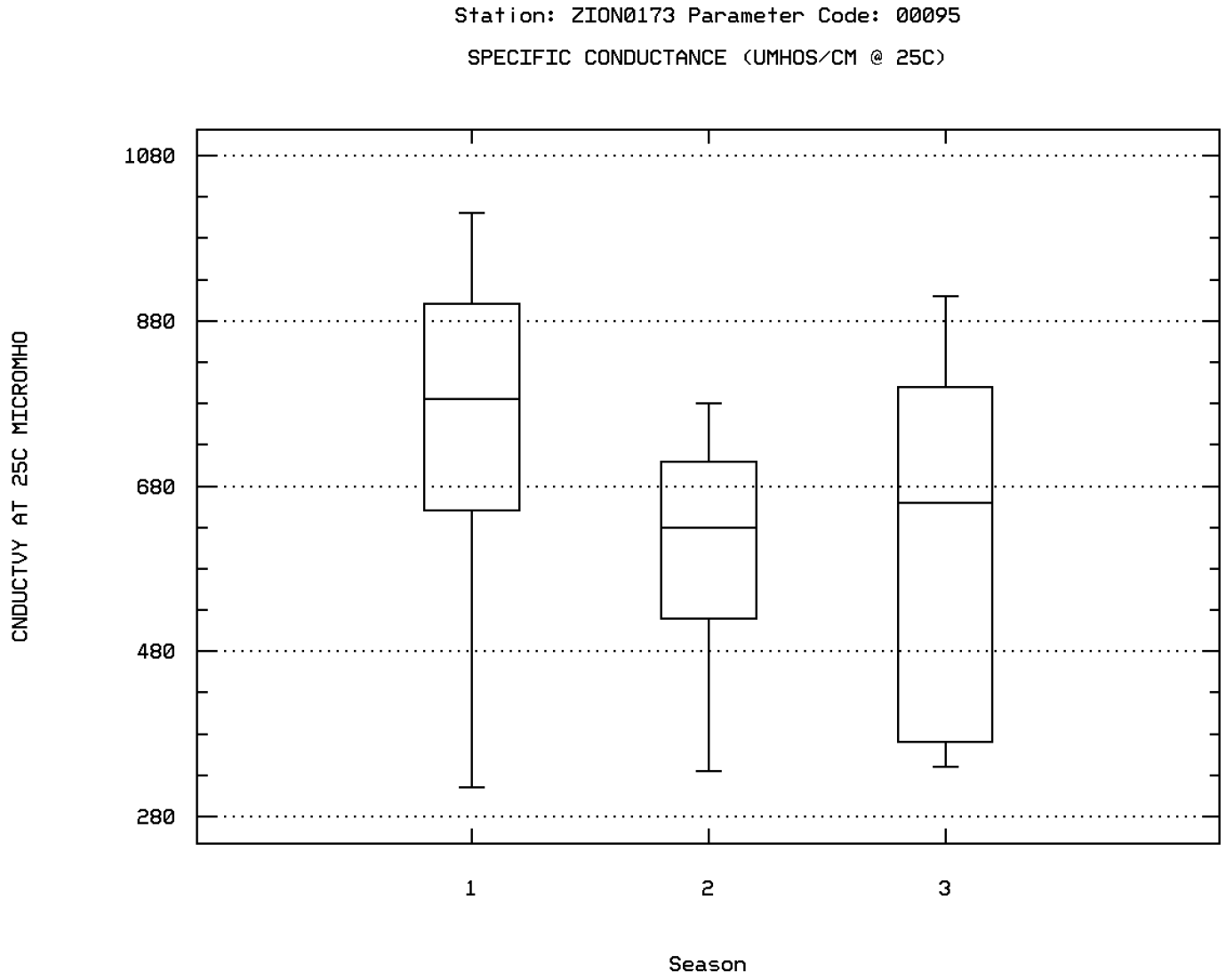
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/73-08/13/91	13	10.	10.285	14.7	6.5	8.211	2.866	6.7	7.25	12.75	14.22
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/04/82-08/13/91	7	21.	20.786	27.5	11.5	32.738	5.722	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/82-08/13/91	12	114.5	177.417	720.	2.	40626.629	201.56	16.1	63.25	179.75	631.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/73-08/13/91	12	630.	604.583	780.	335.	16324.811	127.769	375.5	510.	715.	765.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0173

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/04/73-08/13/91	8	16.25	15.688	23.	6.5	35.996	6.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/04/82-08/13/91	4	27.	29.	37.5	24.5	36.167	6.014	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/04/82-08/13/91	8	51.	341.813	1560.	0.5	328963.138	573.553	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/73-08/13/91	7	660.	625.714	910.	340.	47461.905	217.858	**	**	**	**

** - 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



NORTH FORK VIRGIN RIVER NR SPRINGDALE,

Station Inventory for Station: ZION0174

NPS Station ID: ZION0174
LAT/LON: 37.209726/-112.977782
Agency: 21USU
Date Created: / /
Location: N F VIRGIN RIV NE OF SPRINGDALE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000206 /09405500
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0038.65 0015.18 000.65
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 4.050
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001202.92
RF3 Mile Point: 3.14
Distance from RF3: 0.05
On/Off RF3:
Description:
N F VIRGIN RIVER 1.9 MI N E OF SPRINGDALE AT USGS STATION 09405500

Parameter Inventory for Station: ZION0174

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	5	8.	10.14	18.5	3.7	38.023	6.166	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/15/74	5	46.	45.2	62.	28.	216.7	14.721	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	5.1	5.575	10.	2.1	16.703	4.087	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	5	770.	772.4	820.	742.	938.8	30.64	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	5	9.8	9.54	11.6	7.5	2.533	1.592	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	5	0.8	0.88	1.9	0.2	0.417	0.646	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.3	8.256	8.4	8.1	0.014	0.117	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.3	8.243	8.4	8.1	0.014	0.118	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/15/74	5	0.005	0.006	0.008	0.004	0.	0.002	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	16.8	23.15	56.	3.	599.69	24.489	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	179.	172.8	182.	156.	122.7	11.077	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-07/15/74	5	107.	85.4	109.	3.	2134.3	46.198	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	219.	216.	222.	204.	66.667	8.165	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	5	15.	23.8	60.	5.	510.7	22.599	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.067	0.327	1.154	0.014	0.235	0.484	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.001	0.006	0.015	0.001	0.	0.007	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.07	20.468	102.	0.02	2077.337	45.578	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	5	0.02	0.032	0.08	0.002	0.001	0.033	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	5	0.025	0.041	0.082	0.016	0.001	0.029	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	4	4.	6.	14.	2.	32.	5.657	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	5	39.	31.48	46.	0.4	331.052	18.195	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	4	45.5	44.75	55.	33.	94.917	9.743	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	248.	244.4	260.	226.	166.8	12.915	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	5	60.	60.6	64.	58.	5.8	2.408	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	5	23.	22.6	25.	19.	5.3	2.302	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	5	60.	57.8	65.	48.	42.7	6.535	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	5	2.	2.2	4.	1.	1.2	1.095	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	5	88.	86.4	92.	81.	22.3	4.722	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	5	85.	82.4	97.	68.	120.3	10.968	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.11	0.108	0.14	0.07	0.001	0.033	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	10.	10.	11.	9.	1.333	1.155	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	5	0.	4.	10.	0.	30.	5.477	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	5	60.	90.	280.	0.	13400.	115.758	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0174

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	5	0.	1.2	4.	0.	3.2	1.789	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	90.	102.5	200.	30.	6691.667	81.803	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	5	0.	1.6	8.	0.	12.8	3.578	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	4	840.	1102.5	2300.	430.	680091.667	824.677	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/15/74	4	2.922	2.96	3.362	2.633	0.092	0.303	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			911.35								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	4	33.	77.75	230.	15.	10440.917	102.181	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	4	1.498	1.633	2.362	1.176	0.271	0.521	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			42.979								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	5 ##	3.65	4.221	10.3	0.	13.984	3.74	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	5	450.	442.4	456.	424.	186.8	13.667	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/15/74-07/15/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75012	SNAILS	07/15/74-07/15/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/15/74-07/15/74	1	2713.	2713.	2713.	2713.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0174

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	4	1	0.25	2	0	0.00	1	1	1.00	1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0174

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	4	1	0.25	2	0	0.00	1	1	1.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0175

NPS Station ID: ZION0175 LAT/LON: 37.209726/-112.977782 Agency: 112WRD Date Created: / /
Location: NORTH FORK VIRGIN RIVER NEAR SPRINGDALE,UTAH FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 09405500
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008012 RF1 Mile Point: 4.050 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 15010008000505.33 RF3 Mile Point: 5.33 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	99	11.	12.02	24.	1.5	32.387	5.691	4.5	7.	16.5	20.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/24/81	1	31.5	31.5	31.5	31.5	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-05/04/82	3	650.	651.333	655.	649.	10.333	3.215	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	12/12/66-09/13/73	22	60.	142.5	881.	28.	41372.929	203.403	29.2	44.	163.	460.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	81	52.	90.	770.	3.	14687.475	121.192	33.4	41.	74.5	205.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	100	700.	676.7	970.	265.	22781.424	150.935	440.	580.	787.5	873.5
00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/24/81	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-08/24/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-08/24/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/24/81	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/24/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/24/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/24/81	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/24/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/24/81	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/24/81	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/24/81	1	56.	56.	56.	56.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/24/81	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/24/81	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/24/81	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-08/24/81	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/24/81	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/24/81	1	88.	88.	88.	88.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/24/81	1	95.	95.	95.	95.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/24/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/24/81	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/24/81	1	40.	40.	40.	40.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	1	437.	437.	437.	437.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/24/81	1	50.7	50.7	50.7	50.7	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/24/81	1	0.59	0.59	0.59	0.59	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	12/12/66-12/12/66	1	809.	809.	809.	809.	0.	0.	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	12/12/66-12/12/66	1	349.	349.	349.	349.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0175

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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 1971 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	3	14.	14.	22.	6.	64.	8.	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	3	740.	775.	900.	685.	12475.	111.692	**	**	**	**

** - 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

Annual Analysis for 1972 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	10	13.5	11.8	19.	1.5	33.067	5.75	1.8	6.375	16.	18.85
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	8	705.	665.625	780.	500.	9953.125	99.765	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	7	9.5	11.143	20.	3.5	30.643	5.536	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	8	500.	518.125	690.	380.	13285.268	115.262	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	3	7.	6.667	7.	6.	0.333	0.577	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	3	41.	40.	46.	33.	43.	6.557	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	3	800.	816.667	850.	800.	833.333	28.868	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	10	9.75	10.2	17.5	4.	16.844	4.104	4.25	7.25	13.	17.35
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	10	42.	57.6	211.	3.	3232.489	56.855	5.9	35.	58.	197.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	10	775.	733.5	900.	370.	21066.944	145.145	400.5	690.	821.25	892.5

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

Annual Analysis for 1977 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	7	15.	14.357	22.	4.	33.893	5.822	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	8	30.5	30.375	38.	20.	38.554	6.209	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	8	855.	838.75	900.	695.	4233.929	65.069	**	**	**	**

** - 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 1978 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	18	13.75	13.028	21.5	3.5	33.955	5.827	6.65	7.5	18.	21.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	18	54.5	123.389	694.	35.	26238.134	161.982	35.9	45.5	154.	320.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	18	580.	648.056	900.	265.	38838.644	197.075	422.5	460.	830.	900.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	8	12.75	11.875	18.	4.5	33.411	5.78	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	8	55.	163.75	770.	46.	62225.071	249.45	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	8	670.	626.25	780.	375.	21633.929	147.085	**	**	**	**

** - 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

Annual Analysis for 1980 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	2	8.5	8.5	11.	6.	12.5	3.536	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	2	64.	64.	69.	59.	50.	7.071	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	2	655.	655.	710.	600.	6050.	77.782	**	**	**	**

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Annual Analysis for 1981 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	12	15.5	13.833	24.	4.5	41.379	6.433	4.65	7.25	18.125	23.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	13	52.	64.	160.	40.	1230.5	35.078	40.8	43.	69.5	140.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	13	740.	694.231	970.	475.	18341.026	135.429	481.	590.	760.	898.

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Annual Analysis for 1982 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	9	7.	10.278	23.	4.	48.007	6.929	4.	5.25	17.	23.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	9	69.	117.222	366.	46.	11954.694	109.338	46.	48.5	164.	366.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	9	700.	651.111	790.	440.	16086.111	126.831	440.	535.	730.	790.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0175

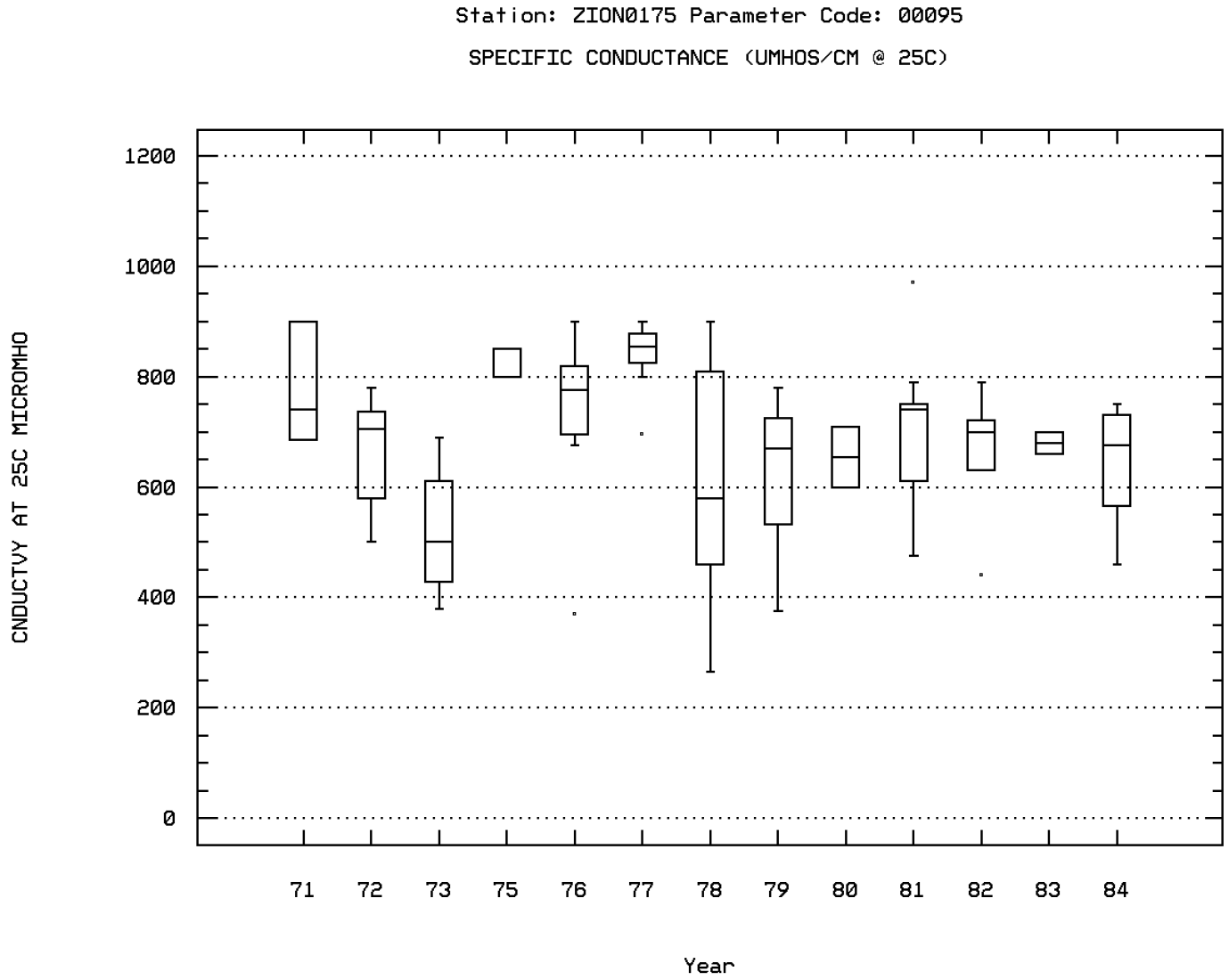
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	2	7.5	7.5	10.5	4.5	18.	4.243	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	2	68.5	68.5	70.	67.	4.5	2.121	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	2	680.	680.	700.	660.	800.	28.284	**	**	**	**

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Annual Analysis for 1984 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	8	15.	13.688	20.	4.5	25.71	5.07	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	8	62.5	83.5	216.	37.	3625.429	60.212	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	8	675.	643.75	750.	460.	13226.786	115.008	**	**	**	**

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NORTH FORK VIRGIN RIVER NEAR SPRINGDALE

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	70	11.5	11.807	24.	1.5	36.596	6.049	4.5	6.375	16.5	19.9
00060	FLOW, STREAM, MEAN DAILY CFS	12/12/66-09/13/73	16	55.	67.438	207.	28.	2288.929	47.843	28.	44.	66.5	174.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	57	47.	48.193	100.	3.	233.909	15.294	32.8	40.5	56.	70.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	70	740.	731.786	970.	440.	12705.098	112.717	571.	673.75	800.	889.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	17	9.	9.441	15.	5.5	7.465	2.732	6.3	7.5	10.75	14.6
00060	FLOW, STREAM, MEAN DAILY CFS	12/12/66-09/13/73	3	172.	246.	488.	78.	46132.	214.784	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	14	185.5	209.214	770.	31.	36346.027	190.646	33.	79.75	279.	568.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	17	560.	571.471	900.	370.	24983.64	158.062	374.	440.	697.5	820.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0175

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/71-09/13/84	12	17.	16.917	22.	10.	11.402	3.377	11.2	14.625	19.5	21.85
00060	FLOW, STREAM, MEAN DAILY CFS	12/12/66-09/13/73	3	396.	439.333	881.	41.	177808.333	421.673	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/75-09/13/84	10	117.	161.4	694.	30.	37758.489	194.315	31.2	51.	161.25	642.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/71-09/13/84	13	470.	517.692	710.	265.	20802.564	144.231	311.	425.	677.5	706.

** - Less than 9 observations ## - Computed 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: ZION0176

NPS Station ID: ZION0176
LAT/LON: 37.210337/-112.978338
Agency: 11NPSWRD
Date Created: 08/02/97
Location: NORTH FORK VIRGIN RIVER AT ZION NP HQ
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_USU_NFVRHQ
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3960
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE EAST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER NEAR THE ZION NP HEADQUARTERS. DATA FOR THIS SITE ARE FROM THE 1977 REPORT "THE BIOLOGICAL AND CHEMICAL INPUTS TO ZION NATIONAL PARK" BY J. DAIN MADDOX AND GEORGE E. HART OF THE DEPARTMENT OF FORESTRY AND OUTDOOR RECREATION UTAH STATE UNIV. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0176

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00070	TURBIDITY, (JACKSON CANDLE UNITS)	09/17/75-05/16/77	3	4.2	8.733	20.	2.	96.413	9.819	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/17/75-05/16/77	3	820.	837.667	900.	793.	3096.333	55.645	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/17/75-05/16/77	3	7.6	7.5	7.8	7.1	0.13	0.361	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/17/75-05/16/77	3	7.6	7.396	7.8	7.1	0.146	0.382	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/75-05/16/77	3	0.025	0.04	0.079	0.016	0.001	0.034	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	09/17/75-05/16/77	3	168.	186.667	234.	158.	1705.333	41.296	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/17/75-05/16/77	3	203.	200.	205.	192.	49.	7.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/17/75-05/16/77	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/17/75-05/16/77	3	0.07	0.07	0.1	0.04	0.001	0.03	**	**	**	**
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	09/17/75-05/16/77	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/17/75-05/16/77	3	234.	238.	250.	230.	112.	10.583	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/17/75-05/16/77	3	51.2	42.667	55.2	21.6	336.853	18.354	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/17/75-05/16/77	3	26.9	31.5	42.2	25.4	86.43	9.297	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/17/75-05/16/77	3	73.	84.167	122.5	57.	1166.083	34.148	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/17/75-05/16/77	3	3.32	3.383	3.69	3.14	0.079	0.28	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/17/75-05/16/77	3	90.	102.667	130.	88.	561.333	23.692	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/17/75-05/16/77	3	85.5	86.5	92.	82.	25.75	5.074	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/17/75-05/16/77	3	0.28	0.243	0.32	0.13	0.01	0.1	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/17/75-05/16/77	3	9.9	11.867	21.5	4.2	77.723	8.816	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/17/75-05/16/77	3 ##	0.5	3.	8.	0.5	18.75	4.33	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	09/17/75-05/16/77	3	91.	80.	144.	5.	4921.	70.15	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/17/75-05/16/77	3 ##	5.	75.167	220.	0.5	15737.583	125.45	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/17/75-05/16/77	3 ##	0.5	1.	2.	0.5	0.75	0.866	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/17/75-05/16/77	3 ##	0.5	2.	5.	0.5	6.75	2.598	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/17/75-05/16/77	3	7.	11.	20.	6.	61.	7.81	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/17/75-05/16/77	3	50.	56.667	100.	20.	1633.333	40.415	**	**	**	**

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Parameter Inventory for Station: ZION0176

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	09/17/75-05/16/77	3 ##	5.	3.5	5.	0.5	6.75	2.598	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/17/75-05/16/77	3	34.	26.333	35.	10.	200.333	14.154	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	09/17/75-05/16/77	3 ##	0.5	2.667	7.	0.5	14.083	3.753	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/17/75-05/16/77	3	10.	19.667	42.	7.	376.333	19.399	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	09/17/75-05/16/77	3	70.	48.667	71.	5.	1430.333	37.82	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/17/75-05/16/77	3 ##	5.	27.5	77.	0.5	1842.75	42.927	**	**	**	**
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/28/77-09/04/77	9	3600.	4266.667	10700.	1800.	6537500.	2556.854	1800.	3000.	4500.	10700.
31503	LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	07/28/77-09/04/77	9	3.556	3.58	4.029	3.255	0.043	0.208	3.255	3.476	3.652	4.029
31503	GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35	GEOMETRIC MEAN =			3803.459								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/77-09/04/77	9	63.	61.667	140.	0.	2416.	49.153	0.	10.	100.	140.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/77-09/04/77	9	1.799	1.429	2.146	0.	0.713	0.844	0.	0.651	1.991	2.146
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			26.876								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/28/77-09/04/77	9	160.	196.667	600.	40.	26275.	162.096	40.	100.	215.	600.
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	07/28/77-09/04/77	9	2.204	2.189	2.778	1.602	0.102	0.319	1.602	1.998	2.331	2.778
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			154.57								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/17/75-05/16/77	3	535.	550.333	600.	516.	1940.333	44.049	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/17/75-05/16/77	3	0.04	0.053	0.1	0.02	0.002	0.042	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/17/75-05/16/77	3 ##	0.1	0.233	0.5	0.1	0.053	0.231	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/17/75-05/16/77	3	0.12	0.12	0.15	0.09	0.001	0.03	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0176

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00	2	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00723	CYANIDE, DISSOLVED STD METHOD	Fresh Acute	22.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	200.	3	0	0.00	2	0	0.00				1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00				1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5.	3	0	0.00	2	0	0.00				1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	1	0.33	2	1	0.50				1	0	0.00			
		Drinking Water	1300.	3	0	0.00	2	0	0.00				1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	15.	3	0	0.00	2	0	0.00				1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	1	0.33	2	1	0.50				1	0	0.00			
		Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5000.	3	0	0.00	2	0	0.00				1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	1	0.33	2	1	0.50				1	0	0.00			
		Drinking Water	50.	3	1	0.33	2	1	0.50				1	0	0.00			
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	9	9	1.00	9	9	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	9	0	0.00	9	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	2	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	2.	3	0	0.00	2	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0177

NPS Station ID: ZION0177
LAT/LON: 37.148059/-112.983059
Agency: 21UTAH
Date Created: 09/28/91
Location: SOUTH CREEK BL SOUTH CREEK RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 595169
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.50
On/Off RF1:
RF3 Index: 15010008002414.73
RF3 Mile Point: 14.76
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0177

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/18/92-03/12/96	14	9.15	11.464	24.5	5.4	37.575	6.13	5.6	6.775	18.	22.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/18/92-03/12/96	14	1.	2.589	12.	0.05	11.509	3.393	0.075	0.1	4.25	9.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/18/92-03/12/96	14	7.75	7.907	32.	0.4	64.825	8.051	0.45	1.1	9.95	22.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/18/92-03/12/96	14	684.	3415.429	9340.	482.	15347257.956	3917.558	512.	600.25	7937.	9305.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/10/93-03/12/96	12	665.5	3975.167	9700.	497.	17699098.879	4207.03	513.5	596.25	8606.5	9613.9
00300	OXYGEN, DISSOLVED MG/L	11/18/92-03/12/96	14	9.05	8.714	11.3	5.1	2.647	1.627	5.95	7.6	9.55	11.1
00400	PH (STANDARD UNITS)	11/18/92-03/12/96	14	8.4	8.284	8.9	7.	0.208	0.456	7.5	8.	8.525	8.8
00400	CONVERTED PH (STANDARD UNITS)	11/18/92-03/12/96	14	8.4	7.929	8.9	7.	0.343	0.586	7.5	8.	8.525	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/18/92-03/12/96	14	0.004	0.012	0.1	0.001	0.001	0.026	0.002	0.003	0.01	0.055
00403	PH, LAB, STANDARD UNITS SU	11/10/93-03/12/96	12	8.35	8.325	8.5	8.	0.031	0.176	8.03	8.15	8.5	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/10/93-03/12/96	12	8.347	8.29	8.5	8.	0.032	0.18	8.03	8.15	8.5	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/10/93-03/12/96	12	0.004	0.005	0.01	0.003	0.	0.002	0.003	0.003	0.007	0.009
00405	CARBON DIOXIDE (MG/L AS CO2)	11/10/93-03/12/96	12	1.5	2.083	5.	1.	1.902	1.379	1.	1.	3.	4.7
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/18/92-03/12/96	14	129.5	175.571	316.	102.	6866.264	82.863	103.5	107.	256.75	310.5
00440	BICARBONATE ION (MG/L AS HCO3)	11/10/93-03/12/96	12	158.	225.75	386.	124.	11029.477	105.021	125.2	135.75	339.	381.8
00445	CARBONATE ION (MG/L AS CO3)	11/10/93-03/12/96	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/18/92-03/12/96	14	6.	20.929	87.	1.5	784.802	28.014	1.5	2.	29.5	78.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/18/92-03/17/93	2 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/18/92-03/17/93	2 ##	0.11	0.11	0.17	0.05	0.007	0.085	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	11/18/92-03/17/93	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/18/92-03/17/93	2	0.044	0.044	0.07	0.017	0.001	0.037	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	11/18/92-03/17/93	2	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/18/92-03/12/96	14	134.	493.143	1258.	80.	281322.44	530.398	87.5	104.75	1152.25	1241.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/18/92-03/12/96	14	31.75	112.679	290.	20.	13782.985	117.401	22.5	27.5	260.	275.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/18/92-03/12/96	14	12.1	51.243	140.	7.3	3386.392	58.193	7.55	8.625	122.5	135.
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/18/92-03/12/96	14	96.5	733.664	2200.	69.	837036.209	914.897	69.	84.25	1825.	2150.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/18/92-03/12/96	14	5.15	8.811	20.	4.1	35.813	5.984	4.1	4.475	14.	19.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/18/92-03/12/96	14	14.	98.357	290.	10.	14721.632	121.333	10.	11.75	251.5	282.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/18/92-03/12/96	14	204.95	1684.771	5412.	127.	4574351.83	2138.773	131.4	173.775	4357.75	4995.
01000	ARSENIC, DISSOLVED (UG/L AS AS)	11/10/93-03/12/96	12 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01005	BARIUM, DISSOLVED (UG/L AS BA)	11/10/93-03/12/96	12	48.	49.333	79.	16.	373.152	19.317	19.3	32.25	66.5	77.2
01025	CADMIUM, DISSOLVED (UG/L AS CD)	11/10/93-03/12/96	12 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	11/10/93-03/12/96	12 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	11/10/93-03/12/96	12 ##	8.	8.417	15.	6.	8.265	2.875	6.	6.	10.	13.5
01046	IRON, DISSOLVED (UG/L AS FE)	11/10/93-03/12/96	12 ##	10.	22.583	88.	10.	618.629	24.872	10.	10.	23.25	79.
01049	LEAD, DISSOLVED (UG/L AS PB)	11/10/93-03/12/96	12 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/10/93-03/12/96	12	10.	15.133	62.	2.5	280.03	16.734	2.5	6.	18.	52.7
01075	SILVER, DISSOLVED (UG/L AS AG)	11/10/93-03/12/96	12 ##	1.	1.083	2.	1.	0.083	0.289	1.	1.	1.	1.7

** - 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 time series plot

Parameter Inventory for Station: ZION0177

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01090	ZINC, DISSOLVED (UG/L AS ZN)	11/10/93-03/12/96	12 ##	15.	17.75	32.	15.	41.295	6.426	15.	15.	15.	31.7
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	09/07/94-03/12/96	9 ##	15.	35.667	120.	15.	1717.75	41.446	15.	15.	55.5	120.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	11/10/93-03/12/96	12	4.	12.667	50.	2.	321.515	17.931	2.	2.	14.5	50.
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	11/18/92-03/17/93	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/18/92-03/12/96	14	418.	2920.571	8510.	308.	12734458.11	3568.537	309.	368.	7172.	8314.
71830	HYDROXIDE ION (MG/L AS OH)	11/10/93-03/12/96	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	11/10/93-03/12/96	12 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
82702	AS DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	11/18/92-03/17/93	2	6000.	6000.	7300.	4700.	3380000.	1838.478	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	11/18/92-03/17/93	2 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	2.	2.	2.5	1.5	0.5	0.707	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	11/18/92-03/17/93	2 ##	33.5	33.5	57.	10.	1104.5	33.234	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0177

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	14	0	0.00	12	0	0.00	1	0	0.00	1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	14	0	0.00	12	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	14	0	0.00	12	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	14	0	0.00	12	0	0.00	1	0	0.00	1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	12	0	0.00	10	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	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	14	0	0.00	12	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	14	4	0.29	12	4	0.33	1	0	0.00	1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	14	6	0.43	12	6	0.50	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	12	2	0.17	10	2	0.20	1	0	0.00	1	0	0.00			
		Drinking Water	50.	12	2	0.17	10	2	0.20	1	0	0.00	1	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	12	0	0.00	10	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	12	0	0.00	10	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: ZION0178

NPS Station ID: ZION0178
LAT/LON: 37.146671/-112.984170
Agency: 21UTAH
Date Created: 09/28/91
Location: SOUTH CREEK RES AB DAM
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 595170
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 7.30
On/Off RF1:
RF3 Index: 15010008048700.00
RF3 Mile Point: 0.65
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/90-07/31/96	36	16.95	16.106	27.	3.7	48.747	6.982	7.07	9.225	22.8	25.45
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/07/91-08/07/91	4	32.	32.025	32.1	32.	0.003	0.05	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/11/90-07/31/96	19	2.7	3.726	9.3	0.5	8.165	2.858	1.1	1.3	6.4	8.7
00078	TRANSPARENCY, SECCHI DISC (METERS)	04/11/90-07/31/96	10	2.85	3.02	4.7	1.	1.471	1.213	1.1	2.075	4.325	4.67
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/11/90-07/31/96	36	671.5	645.861	761.	490.	6278.58	79.237	513.2	593.5	707.5	733.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/91-06/15/94	10	543.	586.1	736.	461.	11770.989	108.494	462.9	489.75	695.25	735.3
00300	OXYGEN, DISSOLVED MG/L	04/11/90-07/31/96	36	7.1	6.017	11.	0.2	8.631	2.938	1.08	3.525	8.075	8.92
00335	COD, .025N K2CR2O7 MG/L	04/11/90-04/11/90	2 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/11/90-07/31/96	33	8.4	8.222	8.9	7.4	0.213	0.461	7.44	7.8	8.6	8.8
00400	CONVERTED PH (STANDARD UNITS)	04/11/90-07/31/96	33	8.4	7.977	8.9	7.4	0.275	0.525	7.44	7.8	8.6	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	33	0.004	0.011	0.04	0.001	0.	0.012	0.002	0.003	0.016	0.037
00403	PH, LAB, STANDARD UNITS SU	04/11/90-07/31/96	19	8.2	8.111	8.6	7.1	0.148	0.384	7.2	8.	8.3	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/90-07/31/96	19	8.2	7.876	8.6	7.1	0.206	0.454	7.2	8.	8.3	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	19	0.006	0.013	0.079	0.003	0.	0.021	0.003	0.005	0.01	0.063
00405	CARBON DIOXIDE (MG/L AS CO2)	04/11/90-07/31/96	19	1.	3.105	20.	0.	28.433	5.332	1.	1.	2.	16.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	19	140.	137.737	172.	104.	355.871	18.865	107.	128.	147.	166.
00440	BICARBONATE ION (MG/L AS HCO3)	04/11/90-07/31/96	19	170.	168.211	209.	128.	520.953	22.824	131.	156.	180.	203.
00445	CARBONATE ION (MG/L AS CO3)	04/11/90-07/31/96	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/11/90-07/31/96	17 ##	2.	3.559	9.	1.5	6.278	2.506	1.5	1.5	6.	7.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/90-07/31/96	32 ##	0.025	0.029	0.1	0.	0.	0.021	0.025	0.025	0.025	0.056
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/02/90-08/02/90	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/02/90-08/02/90	4 ##	0.005	0.011	0.03	0.005	0.	0.013	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/11/90-06/15/94	23	0.2	0.208	0.5	0.05	0.024	0.155	0.05	0.05	0.37	0.452
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/07/91-07/31/96	26 ##	0.01	0.021	0.1	0.005	0.001	0.023	0.005	0.005	0.033	0.053
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/90-07/31/96	32 ##	0.005	0.012	0.076	0.005	0.	0.014	0.005	0.005	0.016	0.02
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/02/90-07/31/96	30 ##	0.005	0.007	0.039	0.003	0.	0.007	0.003	0.005	0.005	0.011
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/11/90-04/11/90	2	0.007	0.007	0.007	0.007	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/11/90-04/11/90	2	3.45	3.45	3.5	3.4	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	21	132.	129.19	161.	47.	816.462	28.574	89.4	111.5	151.	160.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/11/90-07/31/96	21	33.4	33.79	43.	13.4	62.502	7.906	23.4	28.4	41.5	42.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/11/90-07/31/96	21	12.	10.914	14.	3.4	5.65	2.377	7.5	9.85	12.	13.
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/90-07/31/96	20	100.	90.16	120.	59.	339.231	18.418	60.2	71.25	100.	110.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/11/90-07/31/96	20	5.6	5.435	7.	4.3	0.616	0.785	4.41	4.625	6.	6.39
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/11/90-07/31/96	19	15.	13.579	18.	10.	7.146	2.673	10.	10.	15.	17.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/11/90-07/31/96	20	190.	176.625	210.	126.6	994.658	31.538	128.92	135.6	200.	210.
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/23/91-05/23/91	2	6.75	6.75	7.4	6.1	0.845	0.919	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/15/94-06/15/94	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/90-08/07/91	7 ##	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: ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/15/94-07/31/96	3	71.	73.333	78.	71.	16.333	4.041	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/11/90-08/07/91	7	80.	77.143	90.	70.	57.143	7.559	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/15/94-07/31/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/90-08/07/91	7 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/15/94-06/15/94	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/90-08/07/91	7 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/15/94-07/31/96	3 ##	10.	8.667	10.	6.	5.333	2.309	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/11/90-08/07/91	7 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/15/94-06/15/94	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/15/94-07/31/96	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/11/90-08/07/91	7 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/11/90-08/07/91	7	38.	131.214	540.	2.5	36441.321	190.896	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/15/94-06/15/94	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/15/94-06/15/94	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/11/90-08/07/91	7 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/15/94-06/15/94	2 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/11/90-08/07/91	7 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/15/94-07/31/96	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	04/11/90-08/07/91	7 ##	2.5	1.929	2.5	0.5	0.952	0.976	**	**	**	**
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	01/08/92-09/23/93	6 ##	2.5	2.5	3.	2.	0.1	0.316	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/23/91-08/07/91	2 ##	11.	11.	20.	2.	162.	12.728	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/23/91-08/07/91	2 ##	0.801	0.801	1.301	0.301	0.5	0.707	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			6.325								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/23/91-08/07/91	2 ##	3.5	3.5	5.	2.	4.5	2.121	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/23/91-08/07/91	2 ##	0.5	0.5	0.699	0.301	0.079	0.281	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			3.162								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/23/91-08/07/91	2 ##	76.	76.	150.	2.	10952.	104.652	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/23/91-08/07/91	2 ##	1.239	1.239	2.176	0.301	1.758	1.326	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			17.321								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/02/90-07/31/96	8	1.1	1.775	6.6	0.7	3.931	1.983	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/02/90-07/31/96	16	384.	353.813	514.	3.	24496.029	156.512	3.7	306.5	475.5	490.2
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/23/91-07/31/96	4	0.5	1.75	6.	0.	8.25	2.872	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/11/90-07/31/96	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/15/94-07/31/96	3 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/11/90-08/07/91	7 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	04/11/90-07/31/96	33	7.	7.127	17.9	0.	36.376	6.031	0.	0.	12.	16.22
74010	IRON, TOTAL (MG/L AS FE)	04/11/90-08/07/91	7	0.04	0.037	0.07	0.01	0.	0.022	**	**	**	**
82702	AS DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	01/08/92-09/23/93	6	65.	2338.333	7300.	50.	12549336.667	3542.504	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	10.	11.667	15.	10.	6.667	2.582	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	01/08/92-09/23/93	6	0.039	0.055	0.12	0.015	0.002	0.044	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	2.5	2.167	2.5	1.5	0.267	0.516	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	5.	5.35	11.	2.5	9.795	3.13	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	1.	0.833	1.	0.	0.167	0.408	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	01/08/92-09/23/93	6 ##	12.5	14.167	25.	10.	34.167	5.845	**	**	**	**

** - Less than 9 observations ## - 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: ZION0178

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	19	0	0.00	10	0	0.00	4	0	0.00	5	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	36	9	0.25	22	8	0.36	4	0	0.00	10	1	0.10			
00400	PH	Other-Hi Lim.	9.	33	0	0.00	22	0	0.00	3	0	0.00	8	0	0.00			
		Other-Lo Lim.	6.5	33	0	0.00	22	0	0.00	3	0	0.00	8	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	19	0	0.00	10	0	0.00	4	0	0.00	5	0	0.00			
		Other-Lo Lim.	6.5	19	0	0.00	10	0	0.00	4	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

EPA Water Quality Criteria Analysis for Station: ZION0178

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	4	0	0.00	4	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	4	0	0.00	4	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	26	0	0.00	13	0	0.00	2	0	0.00	11	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	19	0	0.00	10	0	0.00	4	0	0.00	5	0	0.00			
		Drinking Water	250.	19	0	0.00	10	0	0.00	4	0	0.00	5	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	20	0	0.00	11	0	0.00	4	0	0.00	5	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00							2	0	0.00			
		Drinking Water	50.	2	0	0.00							2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	50.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00				2	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	5.	3	0	0.00	1	0	0.00				2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	5.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00							2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	1300.	3	0	0.00	1	0	0.00				2	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	1300.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00				2	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	15.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	2	0	0.00							2	0	0.00			
		Drinking Water	100.	2	0	0.00							2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	100.	7	0	0.00	4	0	0.00	2	0	0.00	1	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			
01092	ZINC, TOTAL	Fresh Acute	120.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	5000.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	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			
01147	SELENIUM, TOTAL	Fresh Acute	20.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	50.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	6	0	0.00	4	0	0.00	2	0	0.00						
		Drinking Water	50.	6	0	0.00	4	0	0.00	2	0	0.00						
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	1	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00				2	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	2.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			

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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/90-07/31/96	22	18.5	17.945	27.	3.7	53.517	7.316	4.79	14.3	24.775	25.94
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/11/90-07/31/96	10	2.85	3.54	9.3	0.5	7.183	2.68	0.56	1.4	5.275	9.01
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/11/90-07/31/96	22	678.5	663.682	761.	490.	5978.037	77.318	514.2	623.	714.5	753.8
00300	OXYGEN, DISSOLVED MG/L	04/11/90-07/31/96	22	7.05	5.605	11.	0.2	11.174	3.343	0.45	2.175	7.575	9.9
00400	PH (STANDARD UNITS)	04/11/90-07/31/96	22	8.35	8.225	8.9	7.4	0.235	0.485	7.43	7.785	8.6	8.8
00400	CONVERTED PH (STANDARD UNITS)	04/11/90-07/31/96	22	8.347	7.968	8.9	7.4	0.304	0.551	7.43	7.785	8.6	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	22	0.004	0.011	0.04	0.001	0.	0.012	0.002	0.003	0.016	0.037
00403	PH, LAB, STANDARD UNITS SU	04/11/90-07/31/96	10	8.2	8.22	8.6	8.	0.035	0.187	8.	8.075	8.325	8.58
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/90-07/31/96	10	8.2	8.187	8.6	8.	0.036	0.191	8.	8.075	8.325	8.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	10	0.006	0.007	0.01	0.003	0.	0.002	0.003	0.005	0.008	0.01
00405	CARBON DIOXIDE (MG/L AS CO2)	04/11/90-07/31/96	10	1.	1.3	2.	0.	0.456	0.675	0.1	1.	2.	2.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	10	136.5	135.2	166.	104.	353.956	18.814	104.4	123.75	147.75	164.4
00440	BICARBONATE ION (MG/L AS HCO3)	04/11/90-07/31/96	10	166.5	165.2	202.	128.	516.622	22.729	128.4	150.75	180.75	200.1
00445	CARBONATE ION (MG/L AS CO3)	04/11/90-07/31/96	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/11/90-07/31/96	10	3.5	3.75	7.	1.5	5.014	2.239	1.5	1.5	6.25	7.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/90-07/31/96	17 ##	0.025	0.028	0.07	0.025	0.	0.011	0.025	0.025	0.025	0.034
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/90-07/31/96	17	0.013	0.017	0.076	0.005	0.	0.017	0.005	0.005	0.019	0.044
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	12	135.	128.833	161.	47.	1001.97	31.654	63.5	111.75	148.5	161.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/11/90-07/31/96	12	33.7	33.233	43.	13.4	72.697	8.526	16.88	27.5	39.75	43.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/11/90-07/31/96	12	12.	11.15	14.	3.4	7.497	2.738	5.26	10.175	12.75	13.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/90-07/31/96	11	100.	95.391	120.	59.	354.741	18.835	59.2	100.	100.3	118.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/11/90-07/31/96	11	5.9	5.773	7.	4.6	0.542	0.736	4.62	5.	6.3	6.88
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/11/90-07/31/96	10	15.	14.	18.	10.	8.889	2.981	10.	10.	16.25	17.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/11/90-07/31/96	11	200.	187.236	210.	128.8	871.375	29.519	129.12	190.	210.	210.
71830	HYDROXIDE ION (MG/L AS OH)	04/11/90-07/31/96	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	04/11/90-07/31/96	19	7.	6.774	17.9	0.	36.251	6.021	0.	0.	10.7	17.1

** - 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: 3/20 to 5/09 - Station ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/90-07/31/96	4	12.8	12.45	17.2	7.	30.41	5.515	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/11/90-07/31/96	4	5.3	5.125	8.2	1.7	9.749	3.122	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/11/90-07/31/96	4	619.5	615.5	729.	494.	15433.667	124.232	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/11/90-07/31/96	4	7.45	7.05	8.8	4.5	4.03	2.007	**	**	**	**
00400	PH (STANDARD UNITS)	04/11/90-07/31/96	3	8.4	8.367	8.6	8.1	0.063	0.252	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/11/90-07/31/96	3	8.4	8.318	8.6	8.1	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	3	0.004	0.005	0.008	0.003	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/11/90-07/31/96	4	8.2	8.175	8.3	8.	0.023	0.15	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/90-07/31/96	4	8.189	8.155	8.3	8.	0.023	0.152	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	4	0.006	0.007	0.01	0.005	0.	0.002	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/11/90-07/31/96	4	1.	1.5	3.	1.	1.	1.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	4	153.	146.25	172.	107.	877.583	29.624	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/11/90-07/31/96	4	187.	178.5	209.	131.	1281.	35.791	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/11/90-07/31/96	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/11/90-07/31/96	4 ##	3.75	4.5	9.	1.5	13.5	3.674	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/90-07/31/96	4 ##	0.013	0.013	0.025	0.	0.	0.014	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/90-07/31/96	4 ##	0.01	0.011	0.017	0.005	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	4	124.5	122.5	154.	87.	1187.	34.453	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/11/90-07/31/96	4	34.	33.25	42.	23.	103.583	10.178	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/11/90-07/31/96	4	9.65	9.65	12.	7.3	4.897	2.213	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/90-07/31/96	4	89.	89.25	110.	69.	360.917	18.998	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/11/90-07/31/96	4	5.2	5.175	6.	4.3	0.909	0.954	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/11/90-07/31/96	4	12.5	12.5	15.	10.	8.333	2.887	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/11/90-07/31/96	4	162.15	162.725	200.	126.6	1415.449	37.622	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/11/90-07/31/96	4	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 box-and-whisker plot

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	04/11/90-07/31/96	4	7.	7.95	17.8	0.	86.677	9.31	**	**	**	**

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0178

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/90-07/31/96	10	10.15	13.52	23.9	8.7	32.922	5.738	8.73	9.15	18.15	23.67
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/11/90-07/31/96	5	1.3	2.98	8.7	1.1	10.532	3.245	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/11/90-07/31/96	10	637.	618.8	672.	521.	3323.733	57.652	521.6	578.	667.25	671.9
00300	OXYGEN, DISSOLVED MG/L	04/11/90-07/31/96	10	7.55	6.51	8.6	2.4	4.99	2.234	2.58	4.35	8.425	8.59
00400	PH (STANDARD UNITS)	04/11/90-07/31/96	8	8.4	8.163	8.6	7.4	0.237	0.487	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/11/90-07/31/96	8	8.389	7.916	8.6	7.4	0.307	0.554	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	8	0.004	0.012	0.04	0.003	0.	0.014	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/11/90-07/31/96	5	8.	7.84	8.6	7.1	0.443	0.666	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/11/90-07/31/96	5	8.	7.495	8.6	7.1	0.592	0.769	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/90-07/31/96	5	0.01	0.032	0.079	0.003	0.001	0.036	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/11/90-07/31/96	5	2.	8.	20.	1.	85.5	9.247	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	5	140.	136.	143.	128.	54.5	7.382	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/11/90-07/31/96	5	170.	166.	175.	156.	86.5	9.301	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/11/90-07/31/96	5	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/11/90-07/31/96	3 ##	1.5	1.667	2.	1.5	0.083	0.289	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/90-07/31/96	11 ##	0.025	0.038	0.1	0.025	0.001	0.03	0.025	0.025	0.025	0.099
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/90-07/31/96	11 ##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/11/90-07/31/96	5	129.	135.4	158.	117.	343.3	18.528	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/11/90-07/31/96	5	32.	35.56	42.	30.8	29.768	5.456	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/11/90-07/31/96	5	12.	11.36	13.	9.8	1.948	1.396	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/90-07/31/96	5	85.9	79.38	94.	62.	232.472	15.247	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/11/90-07/31/96	5	4.8	4.9	5.4	4.5	0.15	0.387	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/11/90-07/31/96	5	14.	13.6	16.	11.	4.3	2.074	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/11/90-07/31/96	5	172.5	164.4	190.	130.	794.925	28.194	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/11/90-07/31/96	5	0.	0.	0.	0.	0.	0.	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	04/11/90-07/31/96	10	7.5	7.47	14.9	0.	27.249	5.22	0.	3.	12.	14.61

** - Less than 9 observations ## - Computed 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: ZION0179

NPS Station ID: ZION0179 LAT/LON: 37.140281/-112.987504 Agency: 21UTAH Date Created: 09/28/91
Location: SOUTH CREEK AB SOUTH CREEK RESERVOIR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 595171
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 8.50 On/Off RF1:
RF3 Index: 15010008048700.00 RF3 Mile Point: 0.72 Distance from RF3: 0.06 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0179

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/07/91-08/07/91	1	27.3	27.3	27.3	27.3	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/07/91-08/07/91	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/07/91-08/07/91	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/07/91-08/07/91	1	731.	731.	731.	731.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/07/91-08/07/91	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/07/91-08/07/91	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/07/91-08/07/91	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/07/91-08/07/91	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/07/91-08/07/91	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/07/91-08/07/91	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/07/91-08/07/91	1	0.58	0.58	0.58	0.58	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/07/91-08/07/91	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/07/91-08/07/91	1	0.042	0.042	0.042	0.042	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/07/91-08/07/91	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	08/07/91-08/07/91	1	20.	20.	20.	20.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	08/07/91-08/07/91	1	1.301	1.301	1.301	1.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			20.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	08/07/91-08/07/91	1	364.	364.	364.	364.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	08/07/91-08/07/91	1	2.561	2.561	2.561	2.561	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			364.								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/07/91-08/07/91	1	522.	522.	522.	522.	0.	0.	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/07/91-08/07/91	1	14.	14.	14.	14.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0179

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0180

NPS Station ID: ZION0180
LAT/LON: 37.196670/-112.988893
Agency: 21USU
Date Created: / /
Location: ZION PARK WWTP EFF OUTFALL
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000205 /491010
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0038.65 0015.18 000.37
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 2.880
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001202.92
RF3 Mile Point: 2.93
Distance from RF3: 0.02
On/Off RF3:
Description:
ZION PARK WWTP EFFLUENT AT OUTFALL OF N F VIRGIN RIVER

Parameter Inventory for Station: ZION0180

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	4	17.75	16.75	23.	8.5	43.417	6.589	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-10/31/73	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	3	10.	10.967	16.	6.9	21.403	4.626	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	4	631.5	583.25	740.	330.	31428.917	177.282	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	4	7.55	7.45	8.4	6.3	0.75	0.866	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	4	7.7	7.2	10.5	2.9	11.667	3.416	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/15/74	4	7.05	7.288	8.2	6.85	0.394	0.628	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/15/74	4	7.025	7.075	8.2	6.85	0.454	0.674	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/15/74	4	0.094	0.084	0.141	0.006	0.004	0.062	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	3	15.	11.2	15.6	3.	50.52	7.108	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	4	111.5	116.	184.	57.	2896.667	53.821	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	3	57.	67.	110.	34.	1519.	38.974	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	3	116.	136.667	224.	70.	6249.333	79.053	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	4	32.5	34.75	52.	22.	160.917	12.685	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	3	18.408	13.865	22.99	0.198	145.346	12.056	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	4	0.381	0.774	2.334	0.001	1.208	1.099	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	4	12.17	3218.603	12850.	0.07	41228396.004	6420.934	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	4	2.72	3.685	9.29	0.008	18.187	4.265	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	4	3.775	4.517	10.469	0.048	19.498	4.416	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	4	21.	19.75	36.	1.	248.917	15.777	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	4	22.5	26.	43.	16.	139.333	11.804	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	4	46.5	45.5	60.	29.	169.667	13.026	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	4	119.	149.	252.	106.	4833.333	69.522	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	4	37.5	39.5	61.	22.	363.	19.053	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	4	12.	12.25	24.	1.	88.917	9.43	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	4	29.	31.25	51.	16.	211.583	14.546	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	4	11.	10.75	19.	2.	64.917	8.057	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	4	47.	47.5	74.	22.	457.	21.378	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	4	26.5	35.25	75.	13.	742.917	27.256	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	3	0.07	0.073	0.09	0.06	0.	0.015	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	3	11.	11.	12.	10.	1.	1.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	4	15.	15.	20.	10.	33.333	5.774	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	4	115.	125.	270.	0.	12300.	110.905	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	4	1.	1.25	3.	0.	2.25	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 time series plot

Parameter Inventory for Station: ZION0180

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	4	3.5	4.25	10.	0.	17.583	4.193	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	4	0.	5.	20.	0.	100.	10.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	3	180.	320.	600.	180.	58800.	242.487	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	4	10.	15.	40.	0.	366.667	19.149	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	4	30.	47.5	130.	0.	3291.667	57.373	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	4	2.	3.	8.	0.	14.667	3.83	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	4	0.	0.5	2.	0.	1.	1.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	4	25.	35.	90.	0.	1900.	43.589	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	4	386.5	5449.	21000.	23.	107599051.333	10372.996	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/15/74	4	2.118	2.48	4.322	1.362	2.017	1.42	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			302.123								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	4 ##	19.	20.625	43.	1.5	301.229	17.356	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	4 ##	1.269	1.087	1.633	0.176	0.404	0.636	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			12.214								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	4 ##	4.9	4.325	7.5	0.	10.858	3.295	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	4	330.	322.	436.	192.	11298.667	106.295	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0180

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	4	1	0.25	2	1	0.50	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	4	3	0.75	2	2	1.00	1	0	0.00	1	1	1.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	4	1	0.25	2	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	1300.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	4	1	0.25	2	0	0.00	1	1	1.00	1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	4	0	0.00	2	0	0.00	1	0	0.00	1	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: ZION0181

NPS Station ID: ZION0181
LAT/LON: 37.194726/-112.989449
Agency: 21USU
Date Created: / /
Location: N F VIRGIN RIVER BLW ZION P EFF
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000204 /491008
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0038.65 0015.18 000.35
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 2.620
Distance from RF1: 0.20
On/Off RF1: ON
RF3 Index: 15010008002204.46
RF3 Mile Point: 4.76
Distance from RF3: 0.03
On/Off RF3:
Description:
N F OF VIRGIN RIVER APPROX 1000 FT BELOW ZION PARK WWTP OUTFALL

Parameter Inventory for Station: ZION0181

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/15/74	5	8.	10.34	19.	3.7	41.278	6.425	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	2	51.5	51.5	57.	46.	60.5	7.778	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	5.6	5.75	10.	1.8	16.843	4.104	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/15/74	5	770.	770.	825.	710.	2787.5	52.797	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/15/74	5	9.9	9.58	11.7	7.4	2.797	1.672	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/15/74	5	1.4	1.4	2.1	0.6	0.435	0.66	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.3	8.27	8.4	8.1	0.012	0.11	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/15/74	5	8.3	8.259	8.4	8.1	0.012	0.11	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/15/74	5	0.005	0.006	0.008	0.004	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-07/15/74	5	8.	12.446	36.	0.03	212.982	14.594	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	167.	170.8	187.	153.	173.2	13.161	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-07/15/74	5	100.	84.8	112.	4.	2067.2	45.466	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	212.	214.	228.	204.	144.	12.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/15/74	5	9.	8.6	14.	4.	17.3	4.159	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.068	0.077	0.162	0.005	0.003	0.058	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.002	0.002	0.004	0.001	0.	0.001	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/15/74	5	0.06	1.044	5.	0.03	4.891	2.212	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/15/74	5	0.007	0.011	0.02	0.004	0.	0.008	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/15/74	5	0.026	0.026	0.039	0.016	0.	0.01	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/15/74	4	3.5	6.5	16.	3.	40.333	6.351	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/15/74	5	39.	39.9	46.5	32.	35.3	5.941	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/15/74	4	44.	44.75	55.	36.	71.583	8.461	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/15/74	5	244.	243.	258.	223.	171.	13.077	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/15/74	5	60.	59.8	64.	56.	9.2	3.033	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/15/74	5	24.	22.8	24.	18.	7.2	2.683	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/15/74	5	58.	59.2	68.	50.	53.7	7.328	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/15/74	5	2.	2.4	4.	1.	1.3	1.14	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/15/74	5	90.	85.8	96.	69.	114.2	10.686	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/15/74	5	85.	85.8	98.	75.	111.7	10.569	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.14	0.145	0.21	0.09	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	10.	10.	11.	9.	1.333	1.155	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/15/74	5	10.	8.	20.	0.	70.	8.367	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/15/74	5	190.	194.	390.	0.	20530.	143.283	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/15/74	5	0.	1.	3.	0.	2.	1.414	**	**	**	**

** - Less than 9 observations ## - 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: ZION0181

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/15/74	5	0.	1.8	9.	0.	16.2	4.025	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	80.	80.	160.	0.	4533.333	67.33	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/15/74	5	0.	6.	20.	0.	80.	8.944	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/15/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/15/74	5	4.	3.8	8.	0.	14.2	3.768	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/15/74	5	0.	2.	10.	0.	20.	4.472	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/15/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/15/74	5	430.	624.	1100.	230.	137680.	371.053	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/15/74	5	2.633	2.728	3.041	2.362	0.077	0.278	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			534.205								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	15.	18.3	43.	1.5	252.95	15.904	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/15/74	5	1.176	1.06	1.633	0.176	0.306	0.554	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			11.49								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/15/74	5 ##	3.65	4.381	11.1	0.	16.544	4.067	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/15/74	5	444.	448.8	476.	412.	755.2	27.481	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/15/74-07/15/74	1	388.	388.	388.	388.	0.	0.	**	**	**	**
75012	SNAILS	07/15/74-07/15/74	1	29.	29.	29.	29.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/15/74-07/15/74	1	617.	617.	617.	617.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0181

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	1	0.20	3	0	0.00	1	0	0.00	1	1	1.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0181

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0182

NPS Station ID: ZION0182
LAT/LON: 37.196115/-112.993338
Agency: 112WRD
Date Created: 04/14/78
Location: (C-41-10)28BCA- 1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371146112593601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 19.60
On/Off RF1:
RF3 Index: 15010008047800.59
RF3 Mile Point: 4.03
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0182

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/07/77-12/07/77	1	1800.	1800.	1800.	1800.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/07/77-12/07/77	1	430.	430.	430.	430.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/07/77-12/07/77	1	530.	530.	530.	530.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/07/77-12/07/77	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/07/77-12/07/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/07/77-12/07/77	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/07/77-12/07/77	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/07/77-12/07/77	1	430.	430.	430.	430.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/07/77-12/07/77	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	12/07/77-12/07/77	1	98.	98.	98.	98.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/07/77-12/07/77	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/07/77-12/07/77	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/07/77-12/07/77	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/07/77-12/07/77	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/07/77-12/07/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/07/77-12/07/77	1	790.	790.	790.	790.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/07/77-12/07/77	1	1100.	1100.	1100.	1100.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/07/77-12/07/77	1	1.5	1.5	1.5	1.5	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: ZION0182

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0183

NPS Station ID: ZION0183 LAT/LON: 37.189198/-112.995253 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK OF THE VIRGIN RIVER NEAR SPRINGDALE FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_40
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3820 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE EAST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK OF THE VIRGIN RIVER NEAR SPRINGDALE DOWNSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS. SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0183

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	4	12.75	12.25	19.	4.5	57.417	7.577	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	4	642.5	605.	800.	335.	52416.667	228.947	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	4	9.45	9.6	11.6	7.9	3.047	1.745	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	4	8.25	8.275	8.4	8.2	0.009	0.096	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	4	8.247	8.267	8.4	8.2	0.009	0.096	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	4	0.006	0.005	0.006	0.004	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	4	164.	157.	170.	130.	342.667	18.511	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	4 ##	0.075	0.1	0.2	0.05	0.005	0.071	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	4 ##	0.01	0.014	0.03	0.005	0.	0.011	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	4	230.	215.	250.	150.	2033.333	45.092	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	4	66.5	60.	83.	24.	776.667	27.869	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	4	58.	55.75	61.	46.	46.917	6.85	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	4	20.5	18.85	25.	9.4	52.357	7.236	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	4	47.5	42.	65.	8.	722.	26.87	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	4	1.45	1.325	2.1	0.3	0.696	0.834	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	4	3.4	3.	3.7	1.5	1.027	1.013	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	4	63.	56.	88.	10.	1373.333	37.059	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	4	83.5	68.5	95.	12.	1521.667	39.009	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	4	0.15	0.138	0.2	0.05	0.006	0.075	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	4	10.15	9.55	11.	6.9	3.763	1.94	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	4	40.	31.25	40.	5.	306.25	17.5	**	**	**	**

** - 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

Parameter Inventory for Station: ZION0183

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	1	700.	700.	700.	700.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	80.	80.	80.	80.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	1.903	1.903	1.903	1.903	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			80.								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	1	350.	350.	350.	350.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/24/81-08/24/81	1	2.544	2.544	2.544	2.544	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			350.								
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	4	389.	349.5	447.	173.	16129.	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0183

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
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									
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00	1	0	0.00									
		Drinking Water	6.	1	1	1.00	1	1	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0184

NPS Station ID: ZION0184
LAT/LON: 37.320809/-112.999810
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCC509R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_01 /5075839
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Temple of Sinawava UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0184

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/80-07/22/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/80-07/22/80	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/80-07/22/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/80-07/22/80	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/80-07/22/80	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/22/80-07/22/80	1	10.38	10.38	10.38	10.38	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/22/80-07/22/80	1	134.	134.	134.	134.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/22/80-07/22/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/22/80-07/22/80	1	5.265	5.265	5.265	5.265	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/22/80-07/22/80	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/22/80-07/22/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/22/80-07/22/80	1	12000.	12000.	12000.	12000.	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: ZION0184

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0185

NPS Station ID: ZION0185 LAT/LON: 37.185004/-113.001948 Agency: 21UTDHDW Date Created: 06/09/90
Location: SPRINGDALE - BIG SPRING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/AMBNT/LAKE/SUPPLY STORET Station ID(s): 2701704 /UT4900416004
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.40 On/Off RF1:
RF3 Index: 15010008041600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.04 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-105

Parameter Inventory for Station: ZION0185

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/83-01/17/90	5	0.3	0.62	1.5	0.2	0.297	0.545	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/04/86-01/17/90	2	1432.	1432.	1480.	1384.	4608.	67.882	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/03/83-01/17/90	5	7.5	7.56	8.	7.2	0.083	0.288	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/03/83-01/17/90	5	7.5	7.491	8.	7.2	0.089	0.298	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/03/83-01/17/90	5	0.032	0.032	0.063	0.01	0.	0.019	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	12/04/86-01/17/90	2	15.5	15.5	19.	12.	24.5	4.95	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/25/85-01/17/90	3	312.	292.	319.	245.	1669.	40.853	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/25/85-01/17/90	3	381.	356.333	390.	298.	2572.333	50.718	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/04/86-01/17/90	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/04/86-01/17/90	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/03/83-01/17/90	6	0.7	0.717	1.1	0.4	0.066	0.256	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/25/85-01/17/90	3	447.	389.	457.	263.	11932.	109.234	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/25/85-01/17/90	3	110.	84.667	111.	33.	2002.333	44.747	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/25/85-01/17/90	3	44.	43.333	44.	42.	1.333	1.155	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/25/85-01/17/90	5	130.	120.2	141.	88.	572.2	23.921	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/25/85-01/17/90	3	5.	9.667	20.	4.	80.333	8.963	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/83-01/17/90	6	97.5	101.667	119.	94.	89.867	9.48	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/83-01/17/90	6	262.5	278.667	354.	216.	3166.267	56.27	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/03/83-01/17/90	6	0.26	0.202	0.28	0.03	0.012	0.109	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/04/86-01/17/90	2	15.	15.	18.	12.	18.	4.243	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/06/86-08/06/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/03/83-01/17/90	4 ##	0.5	0.938	2.5	0.25	1.099	1.048	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/06/86-08/06/86	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/03/83-01/17/90	4 ##	0.05	0.048	0.05	0.04	0.	0.005	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/06/86-08/06/86	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/03/83-01/17/90	4 ##	0.75	1.25	3.	0.5	1.417	1.19	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	08/06/86-01/17/90	3 ##	2.5	8.	20.	1.5	108.25	10.404	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/03/83-01/17/90	4 ##	3.75	6.5	16.	2.5	41.5	6.442	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/06/86-08/06/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/03/83-01/17/90	4 ##	10.	12.5	25.	5.	75.	8.66	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/06/86-08/06/86	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: ZION0185

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	08/06/86-08/06/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/03/83-01/17/90	4 ##	6.25	15.25	46.	2.5	432.75	20.803	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/03/83-01/17/90	4 ##	2.5	3.125	5.	2.5	1.563	1.25	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/06/86-08/06/86	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/06/86-08/06/86	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/03/83-01/17/90	4 ##	1.75	1.75	2.5	1.	0.75	0.866	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/06/86-08/06/86	1	170.	170.	170.	170.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/03/83-01/17/90	4 ##	17.5	17.5	25.	10.	75.	8.66	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/06/86-08/06/86	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	04/03/83-01/17/90	4 ##	1.375	1.375	2.5	0.25	1.688	1.299	**	**	**	**
01501	ALPHA, TOTAL	01/17/90-01/17/90	1	5.	5.	5.	5.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	08/06/86-10/07/87	2 ##	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/83-01/17/90	6	954.	933.333	1032.	740.	10077.867	100.389	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/03/83-01/17/90	5 ##	0.5	0.33	0.5	0.05	0.055	0.233	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/03/83-01/17/90	4 ##	0.018	0.029	0.07	0.01	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - 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: ZION0185

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00	2	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	6	0	0.00	5	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	250.	6	0	0.00	5	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	3	0.50	5	3	0.60	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	5	0	0.00	1	0	0.00						
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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	4	0	0.00	3	0	0.00	1	0	0.00						
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	5.	4	0	0.00	3	0	0.00	1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	1	0.33	3	1	0.33									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	3 &	0	0.00	3	0	0.00									
		Drinking Water	1300.	4	0	0.00	3	0	0.00	1	0	0.00						
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	15.	4	1	0.25	3	1	0.33	1	0	0.00						
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	1	1.00	1	1	1.00									
		Drinking Water	5000.	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						

& - 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: ZION0185

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	2.	5	0	0.00	4	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: ZION0186

NPS Station ID: ZION0186
LAT/LON: 37.163337/-113.009726
Agency: 21UTAH
Date Created: 02/23/80
Location: E FK VIRGIN R JUST AB CNFL W/N FK VIRGIN R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495140
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO R DRAINAGE
ECO Region:
RF1 Index: 15010008007
RF1 Mile Point: 0.140
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008001200.00
RF3 Mile Point: 0.00
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0186

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/82-12/11/96	102	14.65	14.982	28.9	4.5	36.102	6.008	7.53	9.25	19.175	23.24
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	5	20.	20.82	30.	14.	41.362	6.431	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/19/83-03/12/96	80	46.	54.95	156.	27.	620.985	24.92	34.1	38.	63.75	93.2
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/26/82-12/11/96	102	30.	115.884	1000.	1.2	43862.548	209.434	2.65	8.65	120.	363.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/26/82-12/11/96	101	577.	605.812	1820.	46.	27922.594	167.101	525.2	547.5	626.5	667.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/82-12/11/96	102	587.	603.333	1341.	320.	11130.898	105.503	526.9	554.5	620.5	675.8
00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	08/03/88-08/03/88	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/26/82-12/11/96	100	8.6	8.56	12.1	5.5	1.773	1.332	6.8	7.5	9.375	10.29
00335	COD, .025N K2CR2O7 MG/L	07/26/82-07/26/90	49 ##	7.	8.48	31.	5.	27.5	5.244	5.	5.	7.	16.
00400	PH (STANDARD UNITS)	07/26/82-12/11/96	99	8.4	8.396	8.9	7.	0.085	0.292	8.	8.3	8.6	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/26/82-12/11/96	99	8.4	8.236	8.9	7.	0.111	0.334	8.	8.3	8.6	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/82-12/11/96	99	0.004	0.006	0.1	0.001	0.	0.011	0.002	0.003	0.005	0.01
00403	PH, LAB, STANDARD UNITS SU	11/11/86-12/11/96	84	8.2	8.19	8.7	7.4	0.072	0.268	7.8	8.	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/11/86-12/11/96	84	8.2	8.098	8.7	7.4	0.081	0.284	7.8	8.	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/86-12/11/96	84	0.006	0.008	0.04	0.002	0.	0.006	0.003	0.004	0.01	0.016
00405	CARBON DIOXIDE (MG/L AS CO2)	07/26/82-12/11/96	102	1.	2.088	14.	0.	3.844	1.961	1.	1.	2.25	4.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	102	164.5	165.324	247.	92.	495.607	22.262	136.3	150.75	181.25	190.
00440	BICARBONATE ION (MG/L AS HCO3)	07/26/82-12/11/96	102	201.	201.186	301.	112.	764.51	27.65	164.3	182.75	220.25	232.
00445	CARBONATE ION (MG/L AS CO3)	07/26/82-12/11/96	102	0.	0.225	3.	0.	0.434	0.659	0.	0.	0.	1.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/26/82-10/31/84	8	257.5	1081.5	5870.	12.	3921439.143	1980.262	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/26/82-12/11/96	89	107.	336.882	5870.	1.5	778549.636	882.355	14.	42.5	220.5	722.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/26/82-12/11/96	102 ##	0.025	0.038	0.2	0.	0.001	0.03	0.025	0.025	0.05	0.061
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/26/82-09/05/90	37 ##	0.005	0.007	0.04	0.005	0.	0.007	0.005	0.005	0.005	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/26/82-04/19/88	13 ##	0.005	0.007	0.025	0.005	0.	0.006	0.005	0.005	0.005	0.017
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	09/15/82-09/05/90	38	0.7	0.768	4.23	0.31	0.361	0.601	0.418	0.573	0.805	0.921
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/15/82-04/19/88	14	0.695	0.696	0.93	0.31	0.026	0.162	0.415	0.607	0.827	0.91
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/26/82-04/06/94	68	0.2	0.337	1.9	0.	0.153	0.391	0.05	0.1	0.4	0.71
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/26/82-03/12/96	32	0.7	0.655	0.87	0.01	0.041	0.204	0.375	0.583	0.818	0.84
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	28	0.75	0.818	3.	0.01	0.25	0.5	0.39	0.625	0.9	1.22
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/26/82-12/11/96	102	0.041	0.111	1.06	0.003	0.028	0.169	0.006	0.02	0.134	0.316
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	29 ##	0.005	0.011	0.078	0.005	0.	0.015	0.005	0.005	0.01	0.029
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/26/82-07/26/90	44	0.013	0.069	0.42	0.003	0.01	0.102	0.003	0.003	0.115	0.24
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/82-07/26/90	49	1.	3.216	30.1	0.25	34.47	5.871	0.5	0.7	2.55	7.2
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	102	257.	261.647	709.	139.	3120.726	55.863	220.	236.	275.75	295.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/26/82-12/11/96	102	53.	54.996	220.	38.	335.563	18.318	45.	48.	55.55	63.16
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/82-12/11/96	102	30.	30.184	44.	9.	23.84	4.883	25.	26.075	33.	36.
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/82-12/11/96	101	26.	28.886	82.1	10.	99.931	9.997	23.1	25.	29.	35.84
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/26/82-12/11/96	102	4.	4.025	10.	2.	0.718	0.847	3.43	3.7	4.	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

Parameter Inventory for Station: ZION0186

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER MG/L	07/26/82-10/18/89	42	18.5	18.06	28.	0.5	21.466	4.633	12.3	17.	20.	22.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/26/82-12/11/96	67	20.	22.239	110.	0.	201.003	14.178	15.8	18.	22.	25.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/26/82-12/11/96	102	120.	129.017	690.	23.	3978.175	63.073	100.	110.	130.475	155.44
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/26/82-10/26/82	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/26/82-10/26/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	25 ##	2.5	2.4	2.5	0.	0.25	0.5	2.5	2.5	2.5	2.5
01002	ARSENIC, TOTAL (UG/L AS AS)	07/26/82-09/18/91	55 ##	1.	1.464	5.	0.25	1.357	1.165	0.25	0.5	2.5	2.5
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	25	100.	109.	160.	72.	750.167	27.389	77.2	83.	135.	144.
01007	BARIUM, TOTAL (UG/L AS BA)	07/26/82-09/18/91	55	100.	96.83	410.	0.	6761.824	82.23	0.	0.09	140.	184.
01020	BORON, DISSOLVED (UG/L AS B)	10/26/82-10/26/82	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	25 ##	0.5	0.5	1.	0.	0.021	0.144	0.5	0.5	0.5	0.5
01027	CADMIUM, TOTAL (UG/L AS CD)	07/26/82-09/18/91	55 ##	0.5	0.509	1.	0.5	0.005	0.067	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	25 ##	2.5	2.4	2.5	0.	0.25	0.5	2.5	2.5	2.5	2.5
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/26/82-10/26/82	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/26/82-09/18/91	55 ##	2.5	3.182	25.	2.5	10.29	3.208	2.5	2.5	2.5	3.5
01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	25 ##	10.	8.92	15.	6.	5.16	2.272	6.	6.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	07/26/82-09/18/91	55 ##	10.	10.873	61.	5.	57.002	7.55	5.	10.	10.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	25 ##	10.	30.32	190.	10.	2492.477	49.925	10.	10.	15.	141.6
01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	25 ##	1.5	1.7	2.5	1.5	0.167	0.408	1.5	1.5	1.5	2.5
01051	LEAD, TOTAL (UG/L AS PB)	07/26/82-09/18/91	55 ##	2.5	3.309	21.	2.5	9.949	3.154	2.5	2.5	2.5	3.5
01055	MANGANESE, TOTAL (UG/L AS MN)	07/26/82-09/18/91	55	27.	126.711	2400.	0.09	120179.973	346.67	8.6	18.	100.	260.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	25 ##	5.	5.712	18.	2.5	13.34	3.652	2.5	2.5	7.15	10.
01067	NICKEL, TOTAL (UG/L AS NI)	07/26/82-06/21/83	5 ##	5.	8.	15.	5.	20.	4.472	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	12/03/85-10/30/96	26 ##	1.	2.538	42.	0.	64.818	8.051	1.	1.	1.	1.
01077	SILVER, TOTAL (UG/L AS AG)	07/26/82-09/18/91	55 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	25 ##	15.	15.4	45.	10.	47.75	6.91	10.	12.5	15.	19.
01092	ZINC, TOTAL (UG/L AS ZN)	07/26/82-09/18/91	55 ##	10.	15.418	190.	5.	617.127	24.842	5.	10.	15.	22.
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	9 ##	15.	24.556	66.	15.	375.528	19.379	15.	15.	32.5	66.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	25 ##	1.	1.14	2.5	0.	0.74	0.86	0.5	0.5	2.25	2.5
01147	SELENIUM, TOTAL (UG/L AS SE)	07/26/82-09/18/91	55 ##	0.25	0.559	2.5	0.25	0.53	0.728	0.25	0.25	0.5	2.5
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/30/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/26/82-12/11/96	102	366.	381.314	1136.	204.	8665.94	93.091	328.6	343.5	392.	435.4
71830	HYDROXIDE ION (MG/L AS OH)	07/26/82-12/11/96	101	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/26/82-10/31/84	2 ##	0.023	0.023	0.04	0.005	0.001	0.025	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	25 ##	0.1	0.112	0.5	0.	0.007	0.083	0.1	0.1	0.1	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	07/26/82-09/18/91	55 ##	0.1	0.165	3.2	0.01	0.222	0.471	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	07/26/82-09/18/91	55	0.44	1.126	10.	0.06	3.226	1.796	0.086	0.21	1.1	3.816
82702	AS DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/30/91-04/08/92	4	185.	180.	190.	160.	200.	14.142	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/30/91-04/08/92	4	2.2	2.143	3.7	0.47	2.55	1.597	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	2.5	3.375	6.	2.5	3.063	1.75	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4	117.	123.5	230.	30.	7075.667	84.117	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/30/91-04/08/92	4 ##	15.5	16.	23.	10.	48.667	6.976	**	**	**	**

** - Less than 9 observations ## - 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: ZION0186

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	101 &	37	0.37	71	29	0.41	15	7	0.47	15	1	0.07			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	100	0	0.00	69	0	0.00	15	0	0.00	16	0	0.00			
00400	PH	Other-Hi Lim.	9.	99	0	0.00	69	0	0.00	15	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	99	0	0.00	69	0	0.00	15	0	0.00	15	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	84	0	0.00	58	0	0.00	13	0	0.00	13	0	0.00			
		Other-Lo Lim.	6.5	84	0	0.00	58	0	0.00	13	0	0.00	13	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0186

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	37	0	0.00	29	0	0.00	3	0	0.00	5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	13	0	0.00	10	0	0.00	2	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	38	0	0.00	30	0	0.00	3	0	0.00	5	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	11	0	0.00	2	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	32	0	0.00	23	0	0.00	3	0	0.00	6	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	28	0	0.00	18	0	0.00	6	0	0.00	4	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	42	0	0.00	32	0	0.00	5	0	0.00	5	0	0.00			
		Drinking Water	250.	42	0	0.00	32	0	0.00	5	0	0.00	5	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	67	0	0.00	45	0	0.00	11	0	0.00	11	0	0.00			
		Drinking Water	250.	67	0	0.00	45	0	0.00	11	0	0.00	11	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	102	2	0.02	72	2	0.03	15	0	0.00	15	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	50.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	5.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	5.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	1300.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	55	4	0.07	40	3	0.08	8	0	0.00	7	1	0.14			
		Drinking Water	1300.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	15.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	15.	55	2	0.04	40	1	0.03	8	0	0.00	7	1	0.14			
01067	NICKEL, TOTAL	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	26	1	0.04	20	1	0.05	3	0	0.00	3	0	0.00			
		Drinking Water	100.	26	0	0.00	20	0	0.00	3	0	0.00	3	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	100.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	5000.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	55	1	0.02	40	1	0.03	8	0	0.00	7	0	0.00			
		Drinking Water	5000.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	50.	55	0	0.00	40	0	0.00	8	0	0.00	7	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	2.	25	0	0.00	19	0	0.00	3	0	0.00	3	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	55	1	0.02	40	1	0.03	8	0	0.00	7	0	0.00			
		Drinking Water	2.	55	1	0.02	40	1	0.03	8	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 3/19 - Station ZION0186

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/82-12/11/96	71	13.6	14.004	28.9	4.5	38.496	6.205	7.1	8.5	18.5	23.08
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/19/83-03/12/96	58	48.	52.879	156.	27.	484.459	22.01	31.8	38.	62.25	82.4
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/26/82-12/11/96	72	34.5	122.665	1000.	1.2	47298.838	217.483	5.16	18.	131.25	316.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/26/82-12/11/96	71	577.	610.507	1820.	46.	37900.511	194.681	524.	552.	620.	694.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/82-12/11/96	72	589.5	609.958	1341.	505.	12957.477	113.831	529.3	561.25	619.75	692.1
00300	OXYGEN, DISSOLVED MG/L	07/26/82-12/11/96	69	8.9	8.817	12.1	6.2	1.839	1.356	6.8	7.8	9.8	10.5
00335	COD, .025N K2CR2O7 MG/L	07/26/82-07/26/90	36 ##	7.	8.819	31.	5.	30.488	5.522	5.	5.	9.25	16.6
00400	PH (STANDARD UNITS)	07/26/82-12/11/96	69	8.4	8.357	8.9	7.	0.106	0.325	7.9	8.2	8.6	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/26/82-12/11/96	69	8.4	8.167	8.9	7.	0.142	0.377	7.9	8.2	8.6	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/82-12/11/96	69	0.004	0.007	0.1	0.001	0.	0.013	0.002	0.003	0.006	0.013
00403	PH, LAB, STANDARD UNITS SU	11/11/86-12/11/96	58	8.2	8.193	8.6	7.6	0.054	0.232	7.89	8.	8.3	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/11/86-12/11/96	58	8.2	8.125	8.6	7.6	0.059	0.242	7.89	8.	8.3	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/86-12/11/96	58	0.006	0.007	0.025	0.003	0.	0.005	0.003	0.005	0.01	0.013
00405	CARBON DIOXIDE (MG/L AS CO2)	07/26/82-12/11/96	72	2.	1.889	7.	0.	1.931	1.39	1.	1.	2.	3.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	72	165.5	165.806	198.	92.	411.736	20.291	138.2	152.25	182.75	190.
00440	BICARBONATE ION (MG/L AS HCO3)	07/26/82-12/11/96	72	202.5	201.847	242.	112.	653.314	25.56	168.3	185.25	222.75	232.
00445	CARBONATE ION (MG/L AS CO3)	07/26/82-12/11/96	72	0.	0.208	3.	0.	0.393	0.627	0.	0.	0.	1.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/26/82-12/11/96	61	114.	310.262	5564.	12.	562310.897	749.874	20.4	62.5	279.	628.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/26/82-12/11/96	72 ##	0.025	0.037	0.18	0.003	0.001	0.025	0.025	0.025	0.05	0.06
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/26/82-09/05/90	29 ##	0.005	0.007	0.04	0.005	0.	0.007	0.005	0.005	0.005	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	09/15/82-09/05/90	30	0.7	0.812	4.23	0.4	0.441	0.664	0.441	0.607	0.813	0.929
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/26/82-04/06/94	50	0.2	0.322	1.9	0.	0.153	0.391	0.05	0.1	0.4	0.7
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/26/82-03/12/96	23	0.72	0.725	0.87	0.36	0.015	0.121	0.584	0.69	0.83	0.846
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/26/82-12/11/96	72	0.05	0.105	0.767	0.003	0.018	0.134	0.01	0.022	0.158	0.292
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	19 ##	0.005	0.014	0.078	0.005	0.	0.018	0.005	0.005	0.013	0.038
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/26/82-07/26/90	33	0.02	0.062	0.31	0.003	0.007	0.083	0.003	0.004	0.11	0.202
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/82-07/26/90	36	1.	2.556	24.1	0.25	21.62	4.65	0.47	0.7	1.5	6.5
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	72	260.	265.847	709.	209.	3720.469	60.996	220.	241.	274.5	290.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/26/82-12/11/96	72	53.9	56.369	220.	40.4	440.24	20.982	46.	51.	56.	64.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/82-12/11/96	72	31.	30.351	44.	24.	16.199	4.025	25.	27.	33.	35.
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/82-12/11/96	71	26.	28.221	82.1	21.	80.792	8.988	23.	24.	29.	31.16
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/26/82-12/11/96	72	4.	4.136	10.	3.	0.804	0.896	3.5	3.8	4.	5.
00940	CHLORIDE,TOTAL IN WATER MG/L	07/26/82-10/18/89	32	18.	17.891	28.	0.5	23.802	4.879	11.8	17.	20.	21.7
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/26/82-12/11/96	45	20.	21.844	110.	0.	195.907	13.997	16.6	18.	22.	24.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/26/82-12/11/96	72	117.65	132.413	690.	94.	5370.396	73.283	100.	109.25	130.075	166.3
01002	ARSENIC, TOTAL (UG/L AS AS)	07/26/82-09/18/91	40 ##	1.	1.463	5.	0.25	1.505	1.227	0.25	0.5	2.5	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	07/26/82-09/18/91	40	110.	99.51	410.	0.	6936.266	83.284	0.	0.075	147.5	178.
01027	CADMIUM, TOTAL (UG/L AS CD)	07/26/82-09/18/91	40 ##	0.5	0.513	1.	0.5	0.006	0.079	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/26/82-09/18/91	40 ##	2.5	2.688	5.	2.5	0.445	0.667	2.5	2.5	2.5	2.5
01042	COPPER, TOTAL (UG/L AS CU)	07/26/82-09/18/91	40 ##	10.	11.025	61.	5.	74.589	8.636	5.	10.	10.	10.
01051	LEAD, TOTAL (UG/L AS PB)	07/26/82-09/18/91	40 ##	2.5	3.05	21.	2.5	8.779	2.963	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	07/26/82-09/18/91	40	31.5	115.075	2400.	5.	142065.097	376.915	10.	20.	73.75	129.5
01075	SILVER, DISSOLVED (UG/L AS AG)	12/03/85-10/30/96	20 ##	1.	3.05	42.	1.	84.05	9.168	1.	1.	1.	1.
01077	SILVER, TOTAL (UG/L AS AG)	07/26/82-09/18/91	40 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	07/26/82-09/18/91	40 ##	10.	15.65	190.	5.	821.554	28.663	5.	10.	15.	20.
01147	SELENIUM, TOTAL (UG/L AS SE)	07/26/82-09/18/91	40 ##	0.25	0.544	2.5	0.25	0.516	0.718	0.25	0.25	0.25	2.45
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/26/82-12/11/96	72	366.	386.444	1136.	270.	11275.067	106.184	326.6	346.5	384.	471.
71830	HYDROXIDE ION (MG/L AS OH)	07/26/82-12/11/96	72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	07/26/82-09/18/91	40 ##	0.1	0.195	3.2	0.01	0.304	0.551	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	07/26/82-09/18/91	40	0.495	1.045	10.	0.06	2.983	1.727	0.122	0.223	1.06	2.939

** - 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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0186

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/82-12/11/96	15	14.5	14.36	21.7	8.6	13.505	3.675	9.5	11.3	17.3	20.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/19/83-03/12/96	12	59.5	73.75	141.	37.	1320.75	36.342	38.5	43.5	114.5	134.7
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/26/82-12/11/96	15	30.	154.433	792.	1.4	53634.177	231.591	1.64	5.3	300.	589.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/26/82-12/11/96	15	585.	591.133	659.	501.	2831.552	53.212	516.	544.	650.	658.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/82-12/11/96	15	585.	582.8	695.	320.	7915.171	88.967	443.	569.	650.	686.
00300	OXYGEN, DISSOLVED MG/L	07/26/82-12/11/96	15	8.	8.433	11.2	7.3	0.972	0.986	7.42	7.8	8.8	10.12
00335	COD, .025N K2CR2O7 MG/L	07/26/82-07/26/90	7 ##	7.	8.571	22.	5.	35.952	5.996	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/82-12/11/96	15	8.5	8.497	8.85	8.1	0.045	0.212	8.1	8.4	8.6	8.766
00400	CONVERTED PH (STANDARD UNITS)	07/26/82-12/11/96	15	8.5	8.446	8.85	8.1	0.048	0.218	8.1	8.4	8.6	8.766
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/82-12/11/96	15	0.003	0.004	0.008	0.001	0.	0.002	0.002	0.003	0.004	0.008
00403	PH, LAB, STANDARD UNITS SU	11/11/86-12/11/96	13	8.3	8.246	8.7	7.7	0.088	0.296	7.74	8.1	8.5	8.66
00403	CONVERTED PH, LAB, STANDARD UNITS	11/11/86-12/11/96	13	8.3	8.15	8.7	7.7	0.098	0.312	7.74	8.1	8.5	8.66
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/86-12/11/96	13	0.005	0.007	0.02	0.002	0.	0.005	0.002	0.003	0.008	0.018
00405	CARBON DIOXIDE (MG/L AS CO2)	07/26/82-12/11/96	15	1.	2.133	7.	1.	3.41	1.846	1.	1.	3.	5.8
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	15	176.	173.6	247.	133.	1006.114	31.719	133.	151.	190.	227.8
00440	BICARBONATE ION (MG/L AS HCO3)	07/26/82-12/11/96	15	212.	210.667	301.	157.	1507.667	38.829	160.6	184.	232.	277.6
00445	CARBONATE ION (MG/L AS CO3)	07/26/82-12/11/96	15	0.	0.467	3.	0.	0.981	0.99	0.	0.	0.	2.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/26/82-12/11/96	14	84.	641.214	5870.	11.	2367358.951	1538.622	13.	30.75	749.	3377.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/26/82-12/11/96	15 ##	0.025	0.039	0.2	0.	0.002	0.046	0.015	0.025	0.025	0.117
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/26/82-09/05/90	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	09/15/82-09/05/90	3	0.34	0.377	0.48	0.31	0.008	0.091	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/26/82-04/06/94	10	0.45	0.487	1.7	0.05	0.226	0.476	0.055	0.115	0.55	1.6
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/26/82-03/12/96	3	0.41	0.323	0.42	0.14	0.025	0.159	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/26/82-12/11/96	15	0.031	0.125	0.57	0.005	0.032	0.178	0.005	0.012	0.23	0.492
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/26/82-07/26/90	6 ##	0.121	0.158	0.42	0.003	0.033	0.18	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/82-07/26/90	7	1.6	3.943	13.4	0.7	22.156	4.707	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	15	246.	255.8	337.	139.	2485.886	49.859	187.6	223.	296.	326.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/26/82-12/11/96	15	50.	53.367	83.	41.	121.411	11.019	42.8	46.1	60.	74.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/82-12/11/96	15	29.5	29.793	41.	9.	58.965	7.679	18.6	26.3	35.	40.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/82-12/11/96	15	27.	30.573	69.	10.	189.966	13.783	16.	26.	30.	58.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/26/82-12/11/96	15	3.8	3.533	4.	2.	0.366	0.605	2.54	3.	4.	4.
00940	CHLORIDE,TOTAL IN WATER MG/L	07/26/82-10/18/89	5	16.	16.8	24.	12.	23.7	4.868	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/26/82-12/11/96	11	20.	19.545	27.	12.	21.073	4.591	12.4	15.	23.	26.4
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/26/82-12/11/96	15	122.2	116.607	140.	23.	816.084	28.567	69.2	110.	132.1	139.4
01002	ARSENIC, TOTAL (UG/L AS AS)	07/26/82-09/18/91	8 ##	1.25	1.406	2.5	0.25	1.106	1.052	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/26/82-09/18/91	8	95.	100.025	240.	0.	6594.291	81.205	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/26/82-09/18/91	8 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/26/82-09/18/91	8 ##	2.5	3.438	10.	2.5	7.031	2.652	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/26/82-09/18/91	8 ##	10.	9.375	10.	5.	3.125	1.768	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/26/82-09/18/91	8 ##	2.5	3.75	10.	2.5	7.143	2.673	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/26/82-09/18/91	8	155.	229.625	945.	8.	96678.268	310.931	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	12/03/85-10/30/96	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/26/82-09/18/91	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/26/82-09/18/91	8	17.5	17.75	31.	10.	63.071	7.942	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/26/82-09/18/91	8 ##	0.25	0.594	2.5	0.25	0.606	0.778	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/26/82-12/11/96	15	374.	368.667	434.	204.	3274.095	57.22	279.6	342.	412.	429.2
71830	HYDROXIDE ION (MG/L AS OH)	07/26/82-12/11/96	14	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	07/26/82-09/18/91	8 ##	0.1	0.081	0.1	0.05	0.001	0.026	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/26/82-09/18/91	8	0.355	1.761	4.9	0.06	4.706	2.169	**	**	**	**

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0186

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/82-12/11/96	16	20.95	19.906	26.1	12.5	20.054	4.478	13.97	14.9	24.	26.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/19/83-03/12/96	10	40.5	44.4	67.	32.	145.822	12.076	32.4	36.75	50.	66.8
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/26/82-12/11/96	15	7.9	44.787	495.	1.5	15685.513	125.242	1.62	2.3	22.	222.18
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/26/82-12/11/96	15	569.	598.267	786.	494.	6709.352	81.911	512.6	528.	666.	734.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/26/82-12/11/96	15	572.	592.067	803.	507.	5859.924	76.55	516.6	540.	629.	720.2
00300	OXYGEN, DISSOLVED MG/L	07/26/82-12/11/96	16	7.45	7.569	9.2	5.5	1.088	1.043	6.27	6.725	8.5	9.13
00335	COD, .025N K2CR2O7 MG/L	07/26/82-07/26/90	6 ##	7.	6.333	7.	5.	1.067	1.033	**	**	**	**
00400	PH (STANDARD UNITS)	07/26/82-12/11/96	15	8.5	8.475	8.69	8.3	0.013	0.116	8.3	8.4	8.6	8.636
00400	CONVERTED PH (STANDARD UNITS)	07/26/82-12/11/96	15	8.5	8.461	8.69	8.3	0.014	0.117	8.3	8.4	8.6	8.636
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/82-12/11/96	15	0.003	0.003	0.005	0.002	0.	0.001	0.002	0.003	0.004	0.005
00403	PH, LAB, STANDARD UNITS SU	11/11/86-12/11/96	13	8.2	8.123	8.5	7.4	0.145	0.381	7.48	7.8	8.5	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/11/86-12/11/96	13	8.2	7.957	8.5	7.4	0.175	0.418	7.48	7.8	8.5	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/86-12/11/96	13	0.006	0.011	0.04	0.003	0.	0.011	0.003	0.003	0.016	0.034
00405	CARBON DIOXIDE (MG/L AS CO2)	07/26/82-12/11/96	15	1.	3.	14.	1.	13.429	3.665	1.	1.	4.	10.4
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	15	154.	154.733	186.	131.	286.495	16.926	132.8	136.	169.	178.8
00440	BICARBONATE ION (MG/L AS HCO3)	07/26/82-12/11/96	15	188.	188.533	227.	160.	424.41	20.601	162.4	166.	206.	218.
00445	CARBONATE ION (MG/L AS CO3)	07/26/82-12/11/96	15	0.	0.067	1.	0.	0.067	0.258	0.	0.	0.	0.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/26/82-12/11/96	14	19.5	148.536	1556.	1.5	166271.402	407.764	3.75	9.25	102.75	849.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/26/82-12/11/96	15 ##	0.025	0.043	0.16	0.025	0.001	0.037	0.025	0.025	0.05	0.112
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/26/82-09/05/90	5 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	09/15/82-09/05/90	5	0.74	0.74	0.85	0.59	0.011	0.103	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/26/82-04/06/94	8	0.2	0.238	0.8	0.05	0.059	0.243	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/26/82-03/12/96	6	0.595	0.55	0.81	0.01	0.081	0.284	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/26/82-12/11/96	15	0.02	0.128	1.06	0.005	0.082	0.286	0.005	0.01	0.057	0.725
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	4 ##	0.005	0.008	0.018	0.005	0.	0.006	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/26/82-07/26/90	5 ##	0.003	0.006	0.02	0.003	0.	0.008	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/82-07/26/90	6	1.05	6.333	30.1	0.7	137.443	11.724	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/26/82-12/11/96	15	232.	247.333	293.	215.	812.952	28.512	217.4	222.	272.	292.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/26/82-12/11/96	15	50.	50.033	59.	38.	27.857	5.278	42.2	46.1	53.	58.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/26/82-12/11/96	15	26.	29.773	41.	25.	30.386	5.512	25.06	25.9	33.	39.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/26/82-12/11/96	15	27.	30.347	68.	25.	112.29	10.597	25.	26.	30.	45.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/26/82-12/11/96	15	4.	3.983	6.	3.	0.414	0.644	3.36	3.7	4.	5.1
00940	CHLORIDE,TOTAL IN WATER MG/L	07/26/82-10/18/89	5	20.	20.4	22.	18.	2.8	1.673	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/26/82-12/11/96	11	22.	26.545	87.	12.	414.473	20.359	13.2	19.	24.	74.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/26/82-12/11/96	15	120.	125.127	173.4	100.	407.502	20.187	102.88	110.	134.1	165.36
01002	ARSENIC, TOTAL (UG/L AS AS)	07/26/82-09/18/91	7 ##	2.	1.536	2.5	0.25	1.134	1.065	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/26/82-09/18/91	7	80.	77.87	250.	0.	7596.475	87.158	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/26/82-09/18/91	7 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/26/82-09/18/91	7 ##	2.5	5.714	25.	2.5	72.321	8.504	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/26/82-09/18/91	7 ##	10.	11.714	22.	10.	20.571	4.536	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/26/82-09/18/91	7 ##	2.5	4.286	15.	2.5	22.321	4.725	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/26/82-09/18/91	7	15.	75.584	450.	0.09	27331.353	165.322	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	12/03/85-10/30/96	3 ##	1.	0.667	1.	0.	0.333	0.577	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/26/82-09/18/91	7 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/26/82-09/18/91	7 ##	10.	11.429	35.	5.	114.286	10.69	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/26/82-09/18/91	7 ##	0.25	0.607	2.5	0.25	0.705	0.84	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/26/82-12/11/96	15	364.	369.333	452.	320.	1603.238	40.04	326.	336.	396.	437.6
71830	HYDROXIDE ION (MG/L AS OH)	07/26/82-12/11/96	15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	07/26/82-09/18/91	7 ##	0.1	0.086	0.1	0.05	0.001	0.024	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/26/82-09/18/91	7	0.23	0.864	5.1	0.07	3.495	1.87	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0187

NPS Station ID: ZION0187
LAT/LON: 37.163060/-113.010559
Agency: 112WRD
Date Created: 12/19/81
Location: E. FK. VIRGIN R. ABOVE CONFLUENCE, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370947113003801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008007
RF1 Mile Point: 0.140
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008043900.00
RF3 Mile Point: 0.19
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0187

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	4	19.75	18.125	24.5	8.5	49.563	7.04	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	4	27.75	26.25	40.	9.5	173.083	13.156	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	5	663.	662.4	671.	653.	41.8	6.465	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	4	51.5	50.	58.	39.	64.667	8.042	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	4	640.	632.5	695.	555.	3608.333	60.069	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	4	7.8	8.325	10.6	7.1	2.516	1.586	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-08/23/82	4	8.15	8.075	8.5	7.5	0.189	0.435	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-08/23/82	4	8.125	7.905	8.5	7.5	0.228	0.477	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	4	0.008	0.012	0.032	0.003	0.	0.013	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	4	8.25	8.25	8.4	8.1	0.017	0.129	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	4	8.247	8.236	8.4	8.1	0.017	0.13	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	4	0.006	0.006	0.008	0.004	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	4	0.85	0.85	1.	0.7	0.017	0.129	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	4 ##	0.01	0.009	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	4	280.	297.5	360.	270.	1825.	42.72	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	4	60.5	68.	97.	54.	383.333	19.579	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	4	30.	30.5	34.	28.	9.	3.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	4	28.	28.25	31.	26.	4.25	2.062	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	4	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-08/23/82	4	17.	17.	18.	16.	0.667	0.816	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	4	4.75	4.65	5.4	3.7	0.577	0.759	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	4	18.5	18.5	20.	17.	1.667	1.291	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	4	140.	167.5	260.	130.	3825.	61.847	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	4	0.3	0.25	0.3	0.1	0.01	0.1	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	4	11.5	11.5	12.	11.	0.333	0.577	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	4	55.	55.	70.	40.	166.667	12.91	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	4	394.	423.75	529.	378.	5046.917	71.042	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	4	57.15	57.7	75.7	40.8	228.62	15.12	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	4	0.535	0.575	0.72	0.51	0.01	0.098	**	**	**	**

** - Less than 9 observations ## - 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: ZION0187

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	1	0.25	3	1	0.33	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0188

NPS Station ID: ZION0188 LAT/LON: 37.162809/-113.011199 Agency: 11NPSWRD Date Created: 08/02/97
Location: EAST FORK VIRGIN RIVER ABOVE CONFLUENCE FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_56
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3780 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE WEST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE EAST FORK VIRGIN RIVER ABOVE CONFLUENCE WITH THE NORTH FORK. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0188

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	5	17.5	15.	24.5	2.5	86.	9.274	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	5	620.	621.	695.	560.	3330.	57.706	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	5	8.2	9.16	12.5	7.1	5.373	2.318	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	5	8.3	8.26	8.5	8.	0.033	0.182	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	5	8.3	8.229	8.5	8.	0.034	0.185	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	5	0.005	0.006	0.01	0.003	0.	0.003	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	160.	157.	180.	125.	445.	21.095	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	5	0.8	0.82	1.	0.7	0.017	0.13	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	5 ##	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	5	270.	290.	360.	260.	1650.	40.62	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	120.	132.2	230.	81.	3244.2	56.958	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	5	60.	65.4	97.	54.	321.3	17.925	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	5	30.	30.4	34.	28.	6.8	2.608	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	5	28.	27.2	31.	23.	8.7	2.95	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	5	0.1	0.38	0.8	0.1	0.147	0.383	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	5	4.4	4.56	5.4	3.7	0.473	0.688	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	5	18.	18.4	20.	17.	1.3	1.14	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	5	140.	156.	260.	110.	3530.	59.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	5	0.3	0.26	0.3	0.1	0.008	0.089	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	5	11.	11.12	12.	9.6	0.972	0.986	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	5	50.	52.	70.	40.	170.	13.038	**	**	**	**

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

Parameter Inventory for Station: ZION0188

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	60.	60.	60.	60.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	1.778	1.778	1.778	1.778	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			60.								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	1	470.	470.	470.	470.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/24/81-08/24/81	1	2.672	2.672	2.672	2.672	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			470.								
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	5	384.	411.2	529.	361.	4572.7	67.622	**	**	**	**

** - Less than 9 observations ## - 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: ZION0188

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	1	0.20	4	1	0.25	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
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									
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00	1	0	0.00									
		Drinking Water	6.	0 &	0	0.00												
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0189

NPS Station ID: ZION0189
LAT/LON: 37.163337/-113.012226
Agency: 112WRD
Date Created: 12/19/81
Location: N. FK. VIRGIN R. ABOVE CONFLUENCE, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370948113004401
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 0.100
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008000700.00
RF3 Mile Point: 0.15
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0189

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	4	15.	15.75	24.5	8.5	71.583	8.461	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	4	28.75	25.625	34.	11.	110.563	10.515	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	5	663.	662.2	671.	652.	46.7	6.834	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	4	53.5	215.	720.	33.	113526.	336.936	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	4	615.	597.5	820.	340.	44825.	211.719	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	4	8.55	8.55	9.9	7.2	2.257	1.502	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-08/23/82	4	8.35	8.275	8.4	8.	0.036	0.189	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-08/23/82	4	8.347	8.241	8.4	8.	0.037	0.193	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	4	0.004	0.006	0.01	0.004	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	4	8.1	8.1	8.3	7.9	0.027	0.163	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	4	8.1	8.077	8.3	7.9	0.027	0.165	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	4	0.008	0.008	0.013	0.005	0.	0.003	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/23/82-08/23/82	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/23/82-08/23/82	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	4	0.1	0.111	0.2	0.045	0.004	0.065	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/04/82-08/23/82	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/20/81-08/23/82	3	0.02	0.018	0.03	0.005	0.	0.013	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	4	230.	220.	260.	160.	2066.667	45.461	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	4	58.5	56.75	63.	47.	46.917	6.85	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	4	21.5	19.65	26.	9.6	62.89	7.93	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	4	50.	43.675	67.	7.7	789.423	28.097	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	4	1.5	1.325	2.	0.3	0.629	0.793	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-08/23/82	4	30.	26.5	36.	10.	139.667	11.818	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	4	3.65	3.225	4.	1.6	1.216	1.103	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	4	64.	61.5	100.	18.	1545.667	39.315	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	4	99.5	82.75	110.	22.	1738.25	41.692	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	4	9.75	9.4	11.	7.1	3.74	1.934	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	4	45.	40.	50.	20.	200.	14.142	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	4	406.5	368.75	470.	192.	16760.917	129.464	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	4	57.55	132.425	373.	41.6	25791.389	160.597	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	4	0.555	0.503	0.64	0.26	0.031	0.177	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/23/82-08/23/82	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: ZION0189

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0190

NPS Station ID: ZION0190
LAT/LON: 37.213615/-113.012505
Agency: 21USU
Date Created: / /
Location: N F VIRGIN RIV ABV CONFL E FORK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000206A
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0038.65 0015.18 000.02
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.69
Distance from RF3: 0.01
On/Off RF3:
Description:
N F VIRGIN RIVER 1000 FT ABOVE CONFLUENCE WITH E FORK AT RANCH ROAD CROS SING

Parameter Inventory for Station: ZION0190

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	3	15.5	16.	23.	9.5	45.75	6.764	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	2	4.85	4.85	8.7	1.	29.645	5.445	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	3	781.	765.333	815.	700.	3490.333	59.079	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	3	8.6	9.1	10.4	8.3	1.29	1.136	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	3	0.9	1.133	1.6	0.9	0.163	0.404	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-07/15/74	3	8.1	8.067	8.1	8.	0.003	0.058	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-07/15/74	3	8.1	8.064	8.1	8.	0.003	0.058	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-07/15/74	3	0.008	0.009	0.01	0.008	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	12.	12.	21.	3.	162.	12.728	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	175.	170.667	178.	159.	104.333	10.214	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/15/74	3	105.	72.	107.	4.	3469.	58.898	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	215.5	215.5	217.	214.	4.5	2.121	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	3	16.	16.667	21.	13.	16.333	4.041	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.123	0.115	0.125	0.097	0.	0.016	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.001	0.001	0.002	0.001	0.	0.001	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.04	0.043	0.06	0.03	0.	0.015	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	3	0.005	0.006	0.01	0.003	0.	0.004	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	3	0.022	0.023	0.032	0.014	0.	0.009	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	3	4.5	4.833	6.	4.	1.083	1.041	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	3	39.	38.167	43.5	32.	33.583	5.795	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	3	45.	43.	48.	36.	39.	6.245	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	246.	245.667	253.	238.	56.333	7.506	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	3	59.	59.667	62.	58.	4.333	2.082	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	3	24.	23.667	24.	23.	0.333	0.577	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	3	65.	65.333	69.	62.	12.333	3.512	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	3	4.	3.333	4.	2.	1.333	1.155	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	3	90.	83.333	92.	68.	177.333	13.317	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	3	90.	88.333	100.	75.	158.333	12.583	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	0.105	0.105	0.11	0.1	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	9.	9.	9.	9.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	3	10.	6.667	10.	0.	33.333	5.774	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	3	30.	95.	230.	25.	13675.	116.94	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0190

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	2	30.	30.	60.	0.	1800.	42.426	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	3	0.	10.	30.	0.	300.	17.321	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	3	0.	2.667	8.	0.	21.333	4.619	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	3	9300.	10843.333	23000.	230.	131404633.333	11463.186	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-07/15/74	3	3.968	3.564	4.362	2.362	1.123	1.06	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			3664.203								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	750.	7993.333	23000.	230.	168967633.333	12998.755	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	2.875	3.2	4.362	2.362	1.079	1.039	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1583.09								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	3 ##	3.655	7.902	16.4	3.65	54.166	7.36	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	3	456.	452.	488.	412.	1456.	38.158	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0190

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00				1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	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			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	2	0.67	1	1	1.00	1	0	0.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0191

NPS Station ID: ZION0191
LAT/LON: 37.213615/-113.012505
Agency: 21USU
Date Created: / /
Location: N F VIRGIN RIV ABV CONFL E FORK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 00206A
RMI-Indexes: 1101001 005770 01810
Within Park Boundary: Yes
RMI-Miles: 0038.65 0015.18 000.02
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002414.73
RF3 Mile Point: 15.90
Distance from RF3: 0.06
On/Off RF3:
Description:
N F VIRGIN RIVER 1000 FT ABOVE CONFLUENCE WITH E FORK AT RANCH ROAD CROS SING

Parameter Inventory for Station: ZION0191

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: ZION0192

NPS Station ID: ZION0192
LAT/LON: 37.163337/-113.013059
Agency: 21UTAH
Date Created: 02/23/80
Location: N FK VIRGIN R JUST AB CNFL W/E FK VIRGIN R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495095
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO DRAINAGE
ECO Region:
RF1 Index: 15010008012
RF1 Mile Point: 0.100
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008000608.96
RF3 Mile Point: 10.43
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-12/11/96	117	11.9	12.697	25.5	3.2	36.211	6.018	5.6	7.05	17.05	22.06
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	4	20.25	21.875	33.	14.	73.063	8.548	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/19/79-08/29/95	52	57.	114.673	714.	29.	20306.067	142.499	31.3	44.25	119.	265.4
00076p	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/19/79-12/11/96	111	11.	63.386	1000.	1.	20475.836	143.094	2.	3.5	56.	182.2
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-12/11/96	116	742.5	688.414	1006.	9.	33998.662	184.387	414.	588.	817.5	887.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/19/79-12/11/96	111	745.	702.703	983.	300.	27809.084	166.761	470.8	560.	822.	909.8
00300p	OXYGEN, DISSOLVED MG/L	04/19/79-12/11/96	114	9.	9.053	12.4	4.4	1.892	1.375	7.25	8.	10.	11.
00310	BOD, 5 DAY, 20 DEG C MG/L	04/19/79-06/19/79	2	1.55	1.55	1.7	1.4	0.045	0.212	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	04/19/79-06/13/90	60 ##	7.	10.675	90.	5.	168.227	12.97	5.	5.	9.5	16.9
00400p	PH (STANDARD UNITS)	04/19/79-12/11/96	113	8.37	8.307	8.8	7.4	0.059	0.243	8.	8.2	8.5	8.568
00400p	CONVERTED PH (STANDARD UNITS)	04/19/79-12/11/96	113	8.37	8.223	8.8	7.4	0.066	0.257	8.	8.2	8.5	8.568
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	113	0.004	0.006	0.04	0.002	0.	0.005	0.003	0.003	0.006	0.01
00403p	PH, LAB, STANDARD UNITS SU	04/19/79-12/11/96	83	8.2	8.141	8.6	6.1	0.109	0.33	7.8	8.	8.3	8.5
00403p	CONVERTED PH, LAB, STANDARD UNITS	04/19/79-12/11/96	83	8.2	7.754	8.6	6.1	0.261	0.51	7.8	8.	8.3	8.5
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	83	0.006	0.018	0.794	0.003	0.007	0.087	0.003	0.005	0.01	0.016
00405p	CARBON DIOXIDE (MG/L AS CO2)	04/19/79-12/11/96	110	2.	4.691	274.	0.	675.06	25.982	1.	1.	3.	4.
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	111	175.	172.577	224.	80.	537.483	23.184	147.2	162.	187.	194.8
00440p	BICARBONATE ION (MG/L AS HCO3)	04/19/79-12/11/96	111	214.	209.991	265.	98.	816.918	28.582	180.	198.	228.	237.6
00445p	CARBONATE ION (MG/L AS CO3)	04/19/79-12/11/96	110	0.	0.264	4.	0.	0.655	0.809	0.	0.	0.	1.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	04/19/79-08/28/84	16	160.	393.063	1580.	2.	261248.996	511.125	6.2	49.5	699.75	1412.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-12/11/96	97	40.	192.665	5560.	1.	377597.743	614.49	6.	17.5	130.	350.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-12/11/96	111 ##	0.025	0.038	0.108	0.	0.	0.022	0.025	0.025	0.05	0.062
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	45 ##	0.005	0.012	0.11	0.005	0.	0.017	0.005	0.005	0.015	0.025
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/19/79-04/19/88	20 ##	0.005	0.014	0.025	0.005	0.	0.01	0.005	0.005	0.025	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	45	0.06	0.108	0.8	0.005	0.021	0.144	0.008	0.03	0.13	0.29
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/19/79-04/19/88	20	0.09	0.144	0.8	0.005	0.037	0.193	0.005	0.026	0.15	0.44
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/06/94	78	0.2	0.299	1.31	0.	0.062	0.249	0.05	0.1	0.403	0.7
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-03/12/96	42	0.06	0.118	0.71	0.01	0.022	0.149	0.01	0.025	0.15	0.35
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	28	0.1	0.237	1.8	0.005	0.14	0.375	0.02	0.038	0.2	0.64
00665p	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-12/11/96	111	0.028	0.084	0.88	0.003	0.022	0.148	0.005	0.014	0.08	0.218
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	29 ##	0.005	0.012	0.097	0.005	0.	0.018	0.005	0.005	0.011	0.028
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/19/79-06/13/90	51 ##	0.009	0.02	0.174	0.	0.001	0.033	0.003	0.003	0.02	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/20/80-06/13/90	58	1.8	3.768	32.4	0.25	32.607	5.71	0.69	1.2	3.75	9.04
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	111	244.	238.171	320.	111.	1396.561	37.371	191.2	215.	262.	278.2
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	04/19/79-12/11/96	111	57.2	56.665	81.	28.2	80.901	8.994	46.	52.	62.	66.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/19/79-12/11/96	111	25.	23.485	29.	8.	25.337	5.034	16.	20.	27.	28.
00930p	SODIUM, DISSOLVED (MG/L AS NA)	04/19/79-12/11/96	111	61.	56.618	100.	10.	580.969	24.103	18.8	36.	75.	85.
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	04/19/79-12/11/96	111	3.	2.981	5.7	1.	0.62	0.787	2.	2.5	3.4	4.

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

Parameter Inventory for Station: ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER MG/L	04/19/79-10/18/89	54	67.5	61.037	132.	12.	990.904	31.479	18.5	27.25	82.	95.5
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/19/79-12/11/96	75	71.	67.453	160.	0.	1268.062	35.61	18.2	30.	98.	110.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	04/19/79-12/11/96	111	98.	93.808	159.	29.5	840.745	28.996	46.98	79.	110.	128.74
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/19/79-04/14/81	9	0.15	0.148	0.24	0.09	0.002	0.044	0.09	0.115	0.17	0.24
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/19/79-04/14/81	9	10.	9.444	11.	6.	2.528	1.59	6.	8.5	10.5	11.
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	24 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01002	ARSENIC, TOTAL (UG/L AS AS)	04/19/79-09/18/91	64 ##	1.	1.594	7.	0.25	2.068	1.438	0.25	0.5	2.5	3.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	24	85.5	85.542	120.	57.	186.868	13.67	62.5	81.	94.75	100.
01007	BARIUM, TOTAL (UG/L AS BA)	04/19/79-09/18/91	64	70.	60.642	800.	0.	10708.646	103.483	0.	0.06	90.	100.
01020	BORON, DISSOLVED (UG/L AS B)	04/19/79-04/14/81	9	75.	81.667	105.	60.	212.5	14.577	60.	72.5	95.	105.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	24 ##	0.5	0.563	2.	0.5	0.094	0.306	0.5	0.5	0.5	0.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/19/79-09/18/91	64 ##	0.5	0.523	1.	0.5	0.011	0.107	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	24 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/19/79-04/14/81	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/19/79-09/18/91	64 ##	2.5	3.086	20.	2.5	7.489	2.737	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	24 ##	10.	8.875	15.	6.	5.332	2.309	6.	6.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/19/79-09/18/91	64 ##	10.	9.531	41.	5.	21.142	4.598	5.	10.	10.	10.
01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	24 ##	10.	18.063	43.	10.	119.876	10.949	10.	10.	28.5	36.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	24 ##	1.5	1.667	2.5	1.5	0.145	0.381	1.5	1.5	1.5	2.5
01051	LEAD, TOTAL (UG/L AS PB)	04/19/79-09/18/91	64 ##	2.5	3.352	25.	2.5	10.029	3.167	2.5	2.5	2.5	5.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/19/79-09/18/91	64	22.5	83.954	1800.	0.07	54316.716	233.059	12.	14.25	73.5	165.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	24	9.9	10.729	31.	2.5	36.389	6.032	5.15	6.25	12.	19.
01067	NICKEL, TOTAL (UG/L AS NI)	04/19/79-06/21/83	18 ##	5.	7.167	15.	5.	13.765	3.71	5.	5.	10.625	14.1
01075	SILVER, DISSOLVED (UG/L AS AG)	05/21/92-10/30/96	24 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01077	SILVER, TOTAL (UG/L AS AG)	04/19/79-09/18/91	64 ##	1.	1.109	5.	1.	0.313	0.56	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	24 ##	15.	14.375	25.	10.	9.375	3.062	10.	15.	15.	15.
01092	ZINC, TOTAL (UG/L AS ZN)	04/19/79-09/18/91	64 ##	10.	14.281	92.	2.5	186.666	13.663	5.	7.5	15.	32.5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	9 ##	15.	17.667	39.	15.	64.	8.	15.	15.	15.	39.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	24 ##	0.5	1.063	2.5	0.5	0.746	0.864	0.5	0.5	2.125	2.5
01147	SELENIUM, TOTAL (UG/L AS SE)	04/19/79-09/18/91	64 ##	0.25	0.484	2.5	0.25	0.361	0.601	0.25	0.25	0.5	0.5
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-06/19/79	2	1415.	1415.	2400.	430.	1940450.	1393.	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-06/19/79	2	3.007	3.007	3.38	2.633	0.279	0.528	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			1015.874								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-06/19/79	2 ##	50.75	50.75	90.	11.5	3081.125	55.508	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-06/19/79	2 ##	1.507	1.507	1.954	1.061	0.399	0.632	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			32.171								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/19/79-06/19/79	2 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/19/79-12/11/96	115	434.	405.583	576.	8.	14851.035	121.865	262.	326.	492.	538.
71830p	HYDROXIDE ION (MG/L AS OH)	04/19/79-12/11/96	109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	04/19/79-04/14/81	9 ##	0.01	0.014	0.04	0.01	0.	0.01	0.01	0.01	0.015	0.04
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	24 ##	0.1	0.121	0.6	0.1	0.01	0.102	0.1	0.1	0.1	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	04/19/79-09/18/91	64 ##	0.1	0.089	0.4	0.01	0.003	0.059	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	04/19/79-09/18/91	64	0.205	0.717	8.7	0.07	1.772	1.331	0.075	0.11	0.712	1.785
82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	95.	100.	120.	90.	200.	14.142	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	0.4	0.8	2.3	0.1	1.031	1.016	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	3.625	7.	2.5	5.063	2.25	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4	33.5	65.5	180.	15.	5951.	77.143	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	13.25	23.	10.	42.25	6.5	**	**	**	**

** - 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: ZION0192

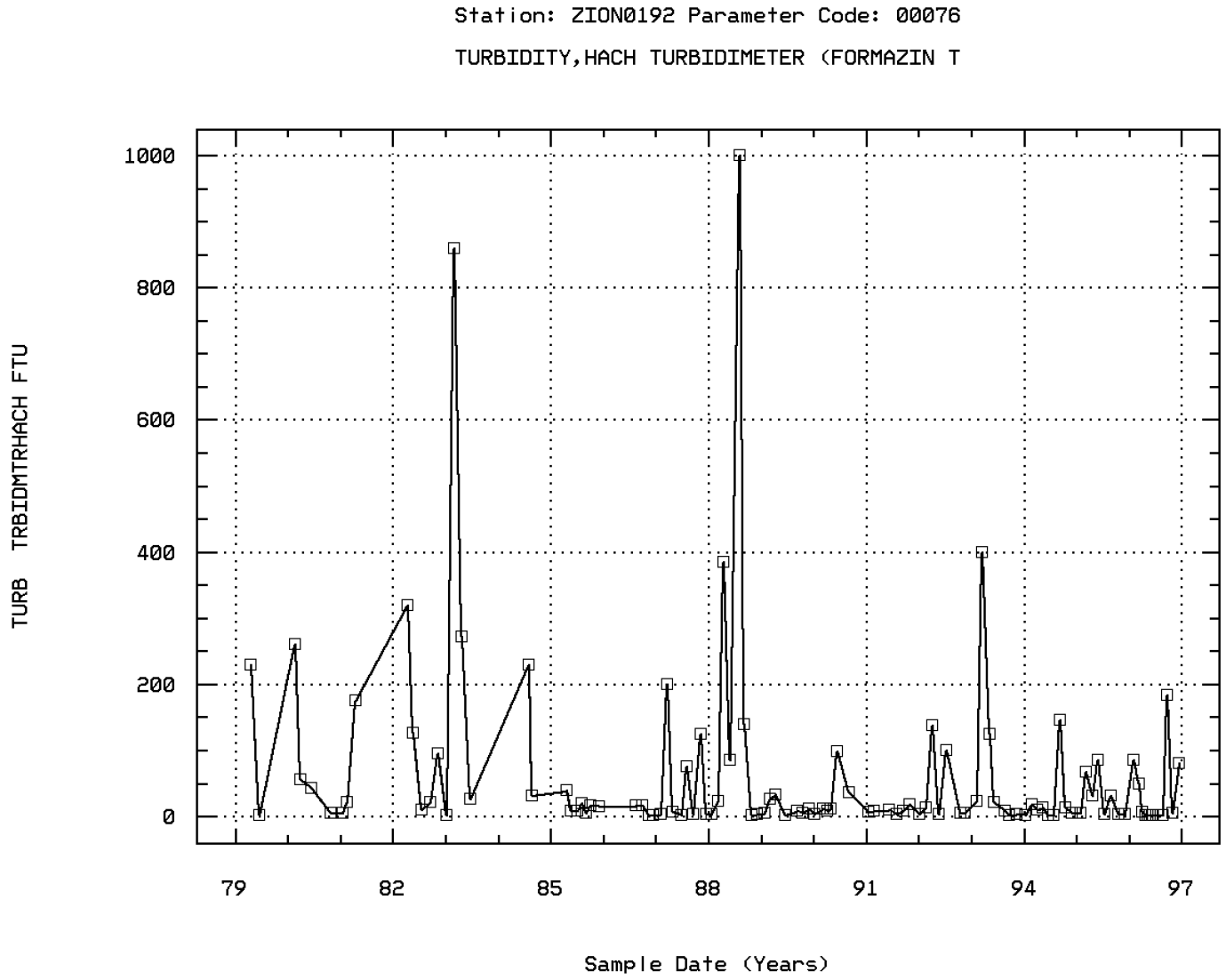
Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	111	29	0.26	75	17	0.23	18	8	0.44	18	4	0.22			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	114	0	0.00	76	0	0.00	18	0	0.00	20	0	0.00			
00400	PH	Other-Hi Lim.	9.	113	0	0.00	76	0	0.00	18	0	0.00	19	0	0.00			
		Other-Lo Lim.	6.5	113	0	0.00	76	0	0.00	18	0	0.00	19	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	83	0	0.00	56	0	0.00	13	0	0.00	14	0	0.00			
		Other-Lo Lim.	6.5	83	1	0.01	56	1	0.02	13	0	0.00	14	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	45	0	0.00	32	0	0.00	6	0	0.00	7	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	20	0	0.00	12	0	0.00	5	0	0.00	3	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	45	0	0.00	32	0	0.00	6	0	0.00	7	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	20	0	0.00	12	0	0.00	5	0	0.00	3	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	42	0	0.00	28	0	0.00	6	0	0.00	8	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	28	0	0.00	17	0	0.00	6	0	0.00	5	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	54	0	0.00	37	0	0.00	9	0	0.00	8	0	0.00			
		Drinking Water	250.	54	0	0.00	37	0	0.00	9	0	0.00	8	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	75	0	0.00	47	0	0.00	14	0	0.00	14	0	0.00			
		Drinking Water	250.	75	0	0.00	47	0	0.00	14	0	0.00	14	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	111	0	0.00	75	0	0.00	18	0	0.00	18	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	50.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	5.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	5.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	100.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	1300.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	64	1	0.02	43	1	0.02	11	0	0.00	10	0	0.00			
		Drinking Water	1300.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	15.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	15.	64	1	0.02	43	1	0.02	11	0	0.00	10	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	18	0	0.00	9	0	0.00	5	0	0.00	4	0	0.00			
		Drinking Water	100.	18	0	0.00	9	0	0.00	5	0	0.00	4	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	100.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	63 &	0	0.00	42	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	100.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	5000.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	5000.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	50.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	1	0.50				1	1	1.00	1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	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

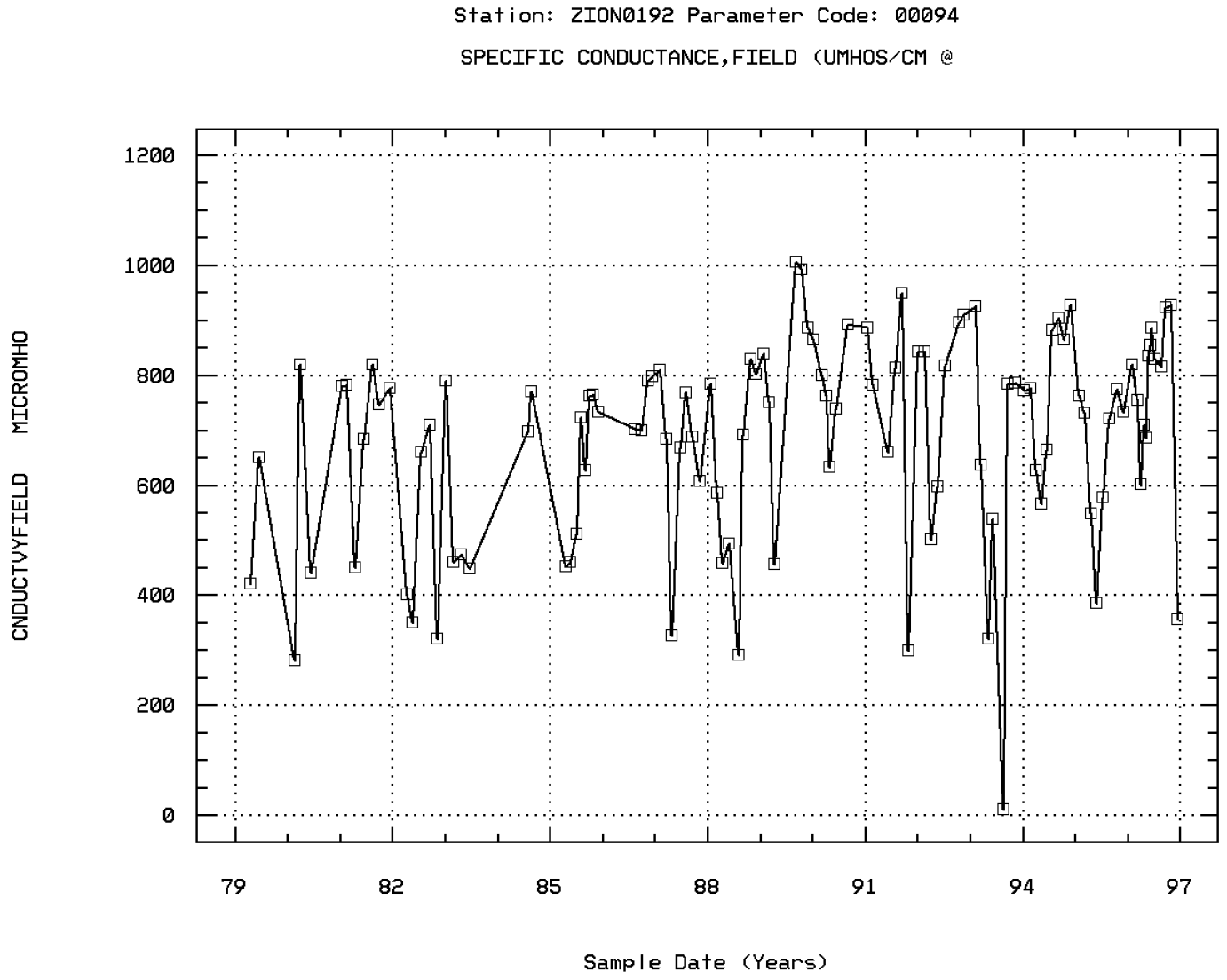
EPA Water Quality Criteria Analysis for Station: ZION0192

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	2.	24	0	0.00	18	0	0.00	3	0	0.00	3	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			
		Drinking Water	2.	64	0	0.00	43	0	0.00	11	0	0.00	10	0	0.00			

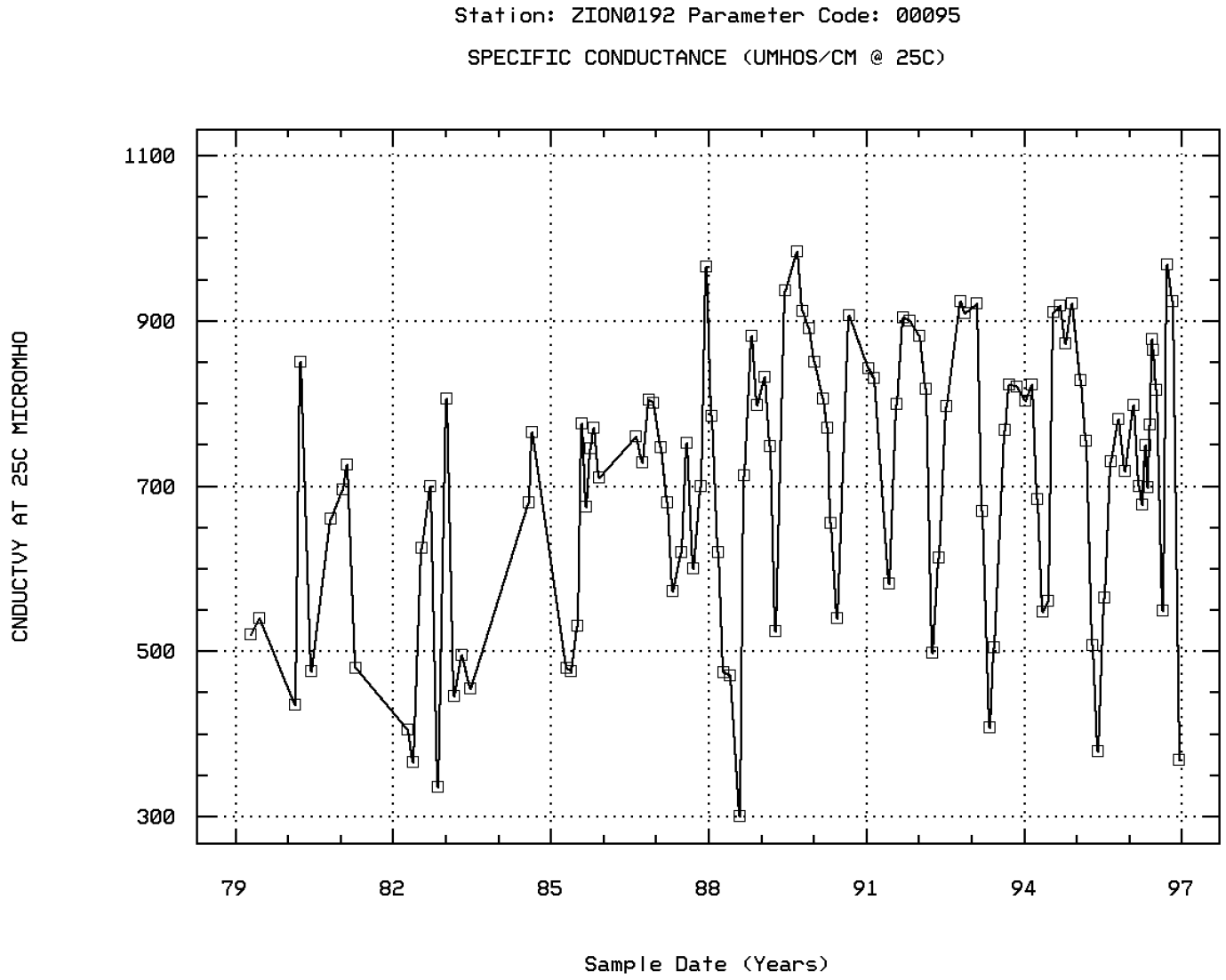
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter



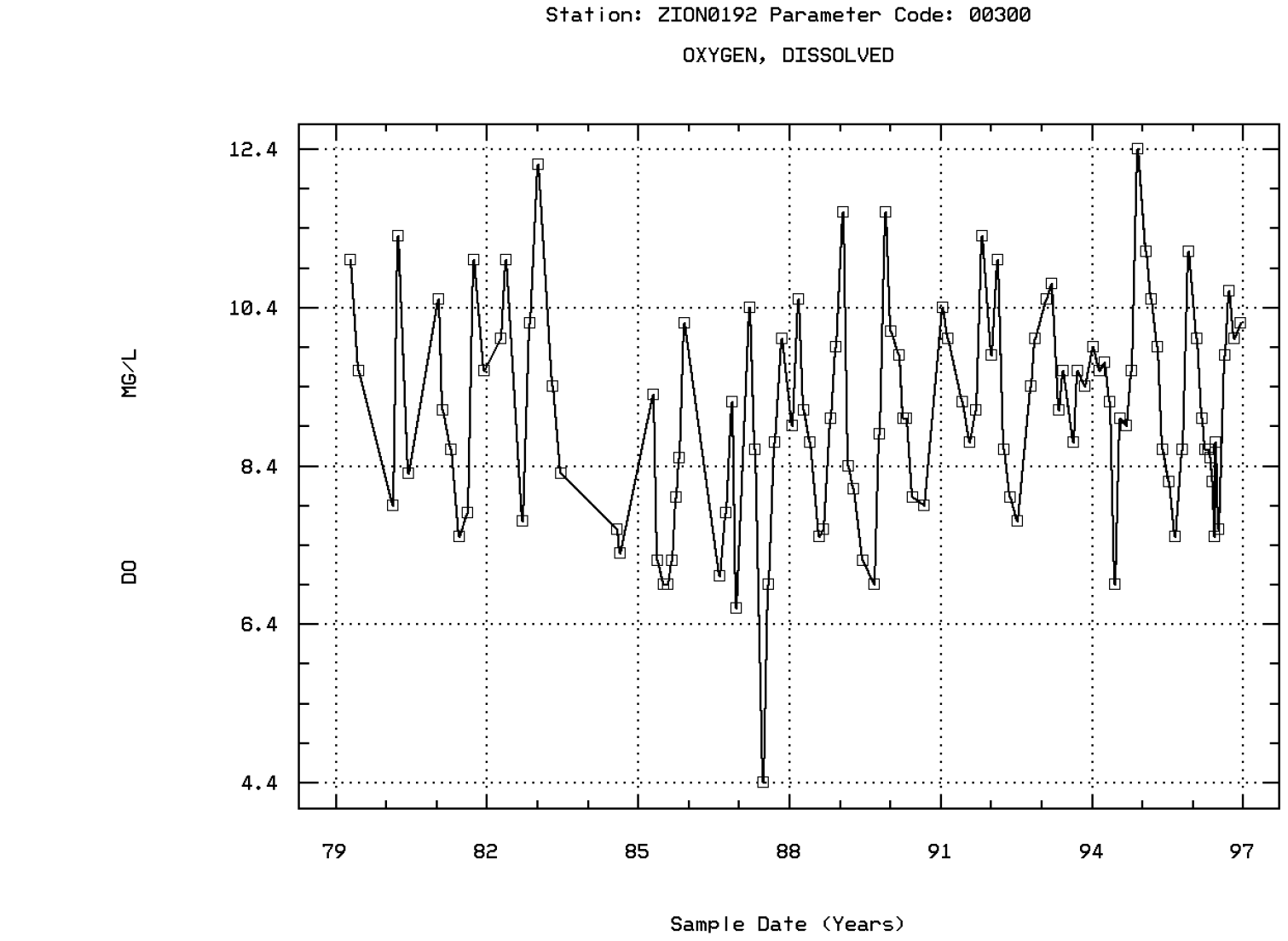
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



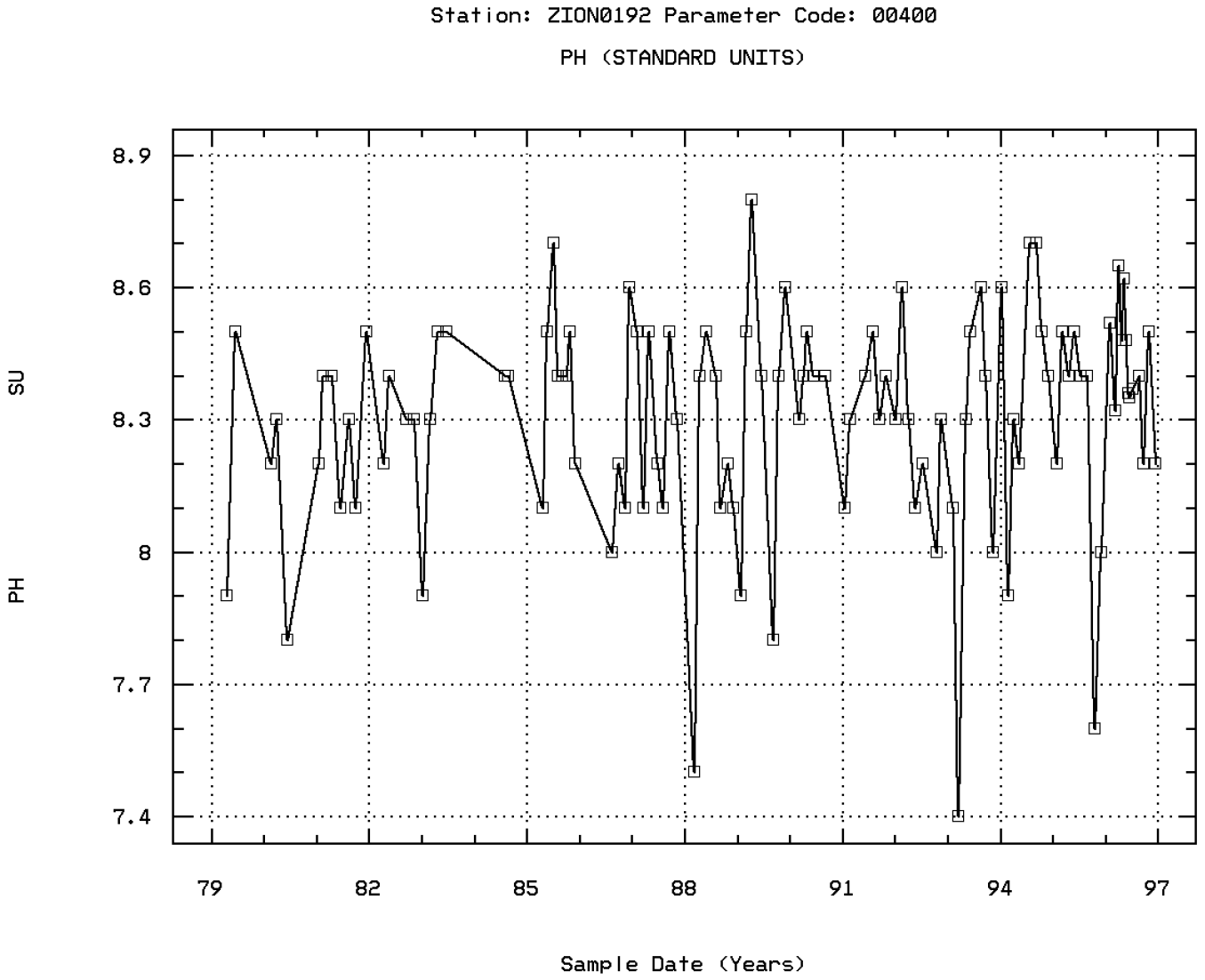
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



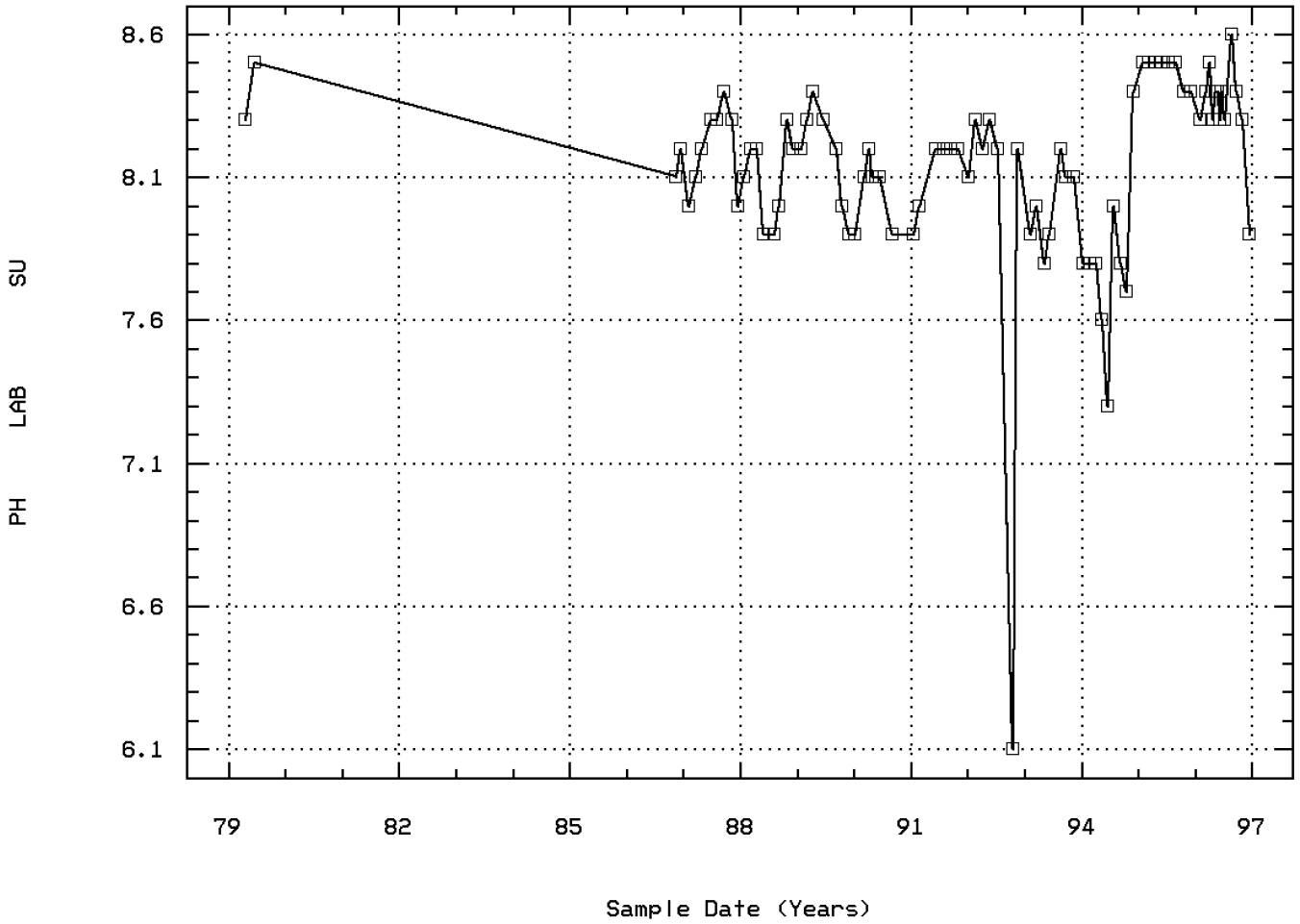
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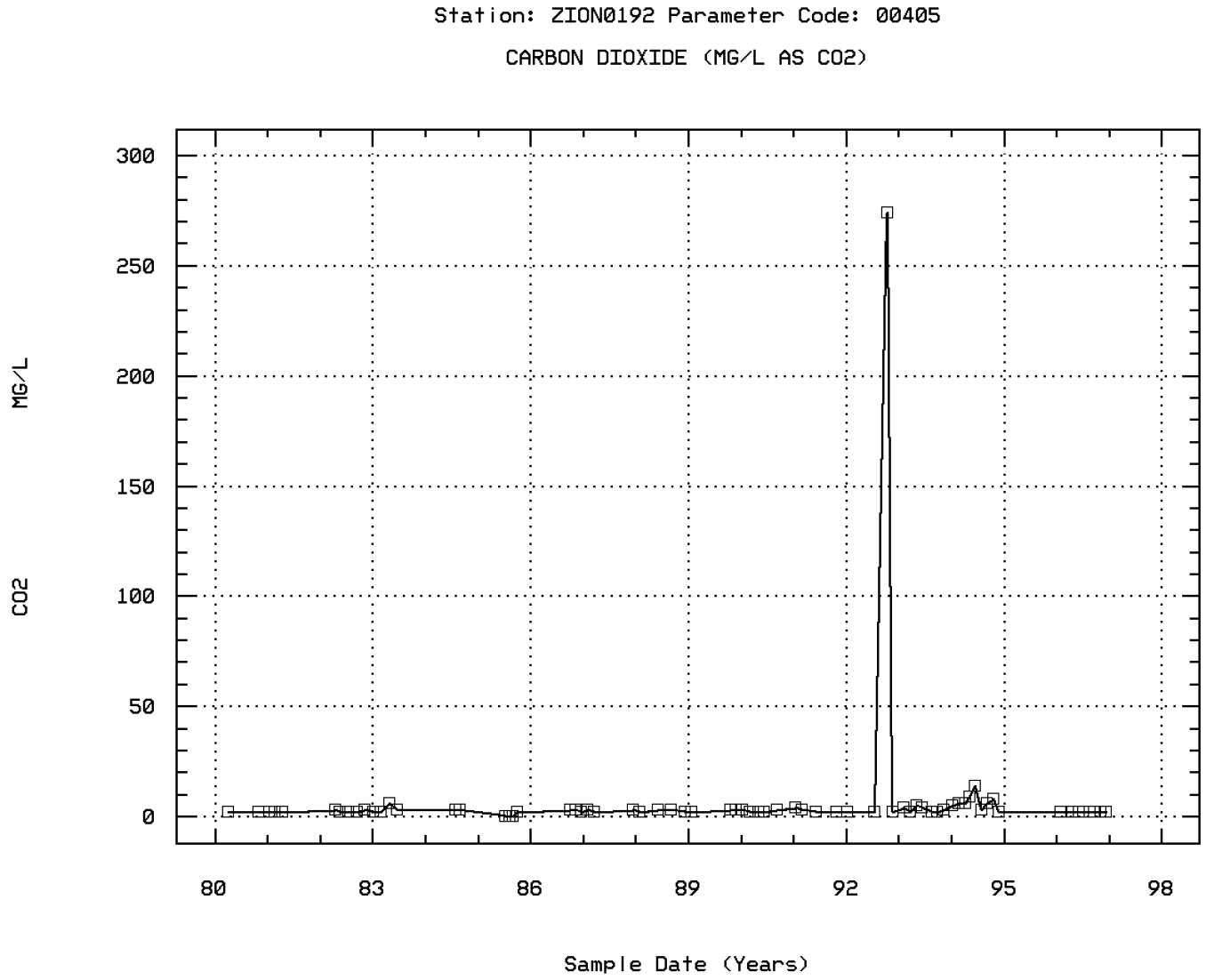
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00403

PH, LAB, STANDARD UNITS



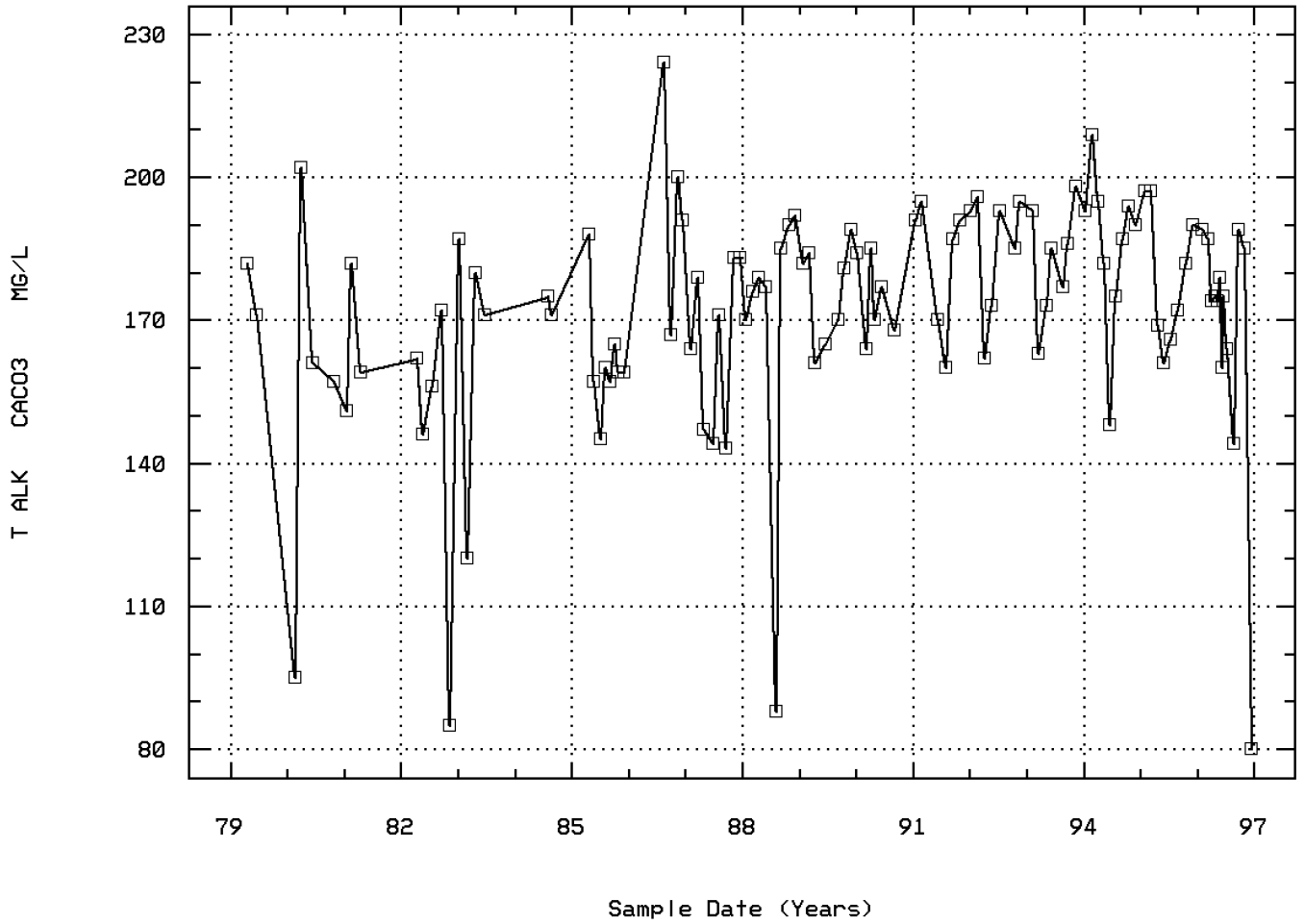
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



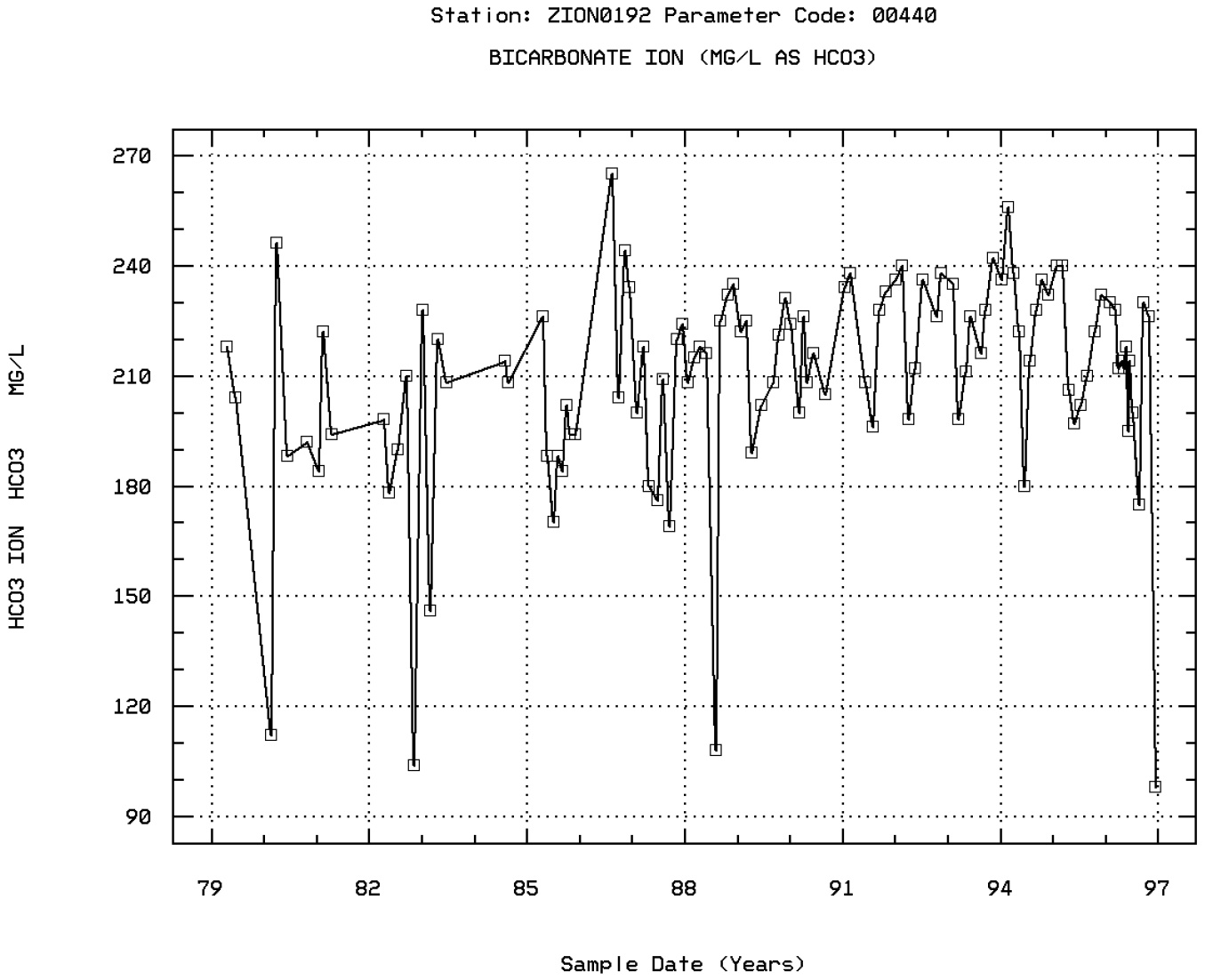
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00410

ALKALINITY, TOTAL (MG/L AS CACO3)



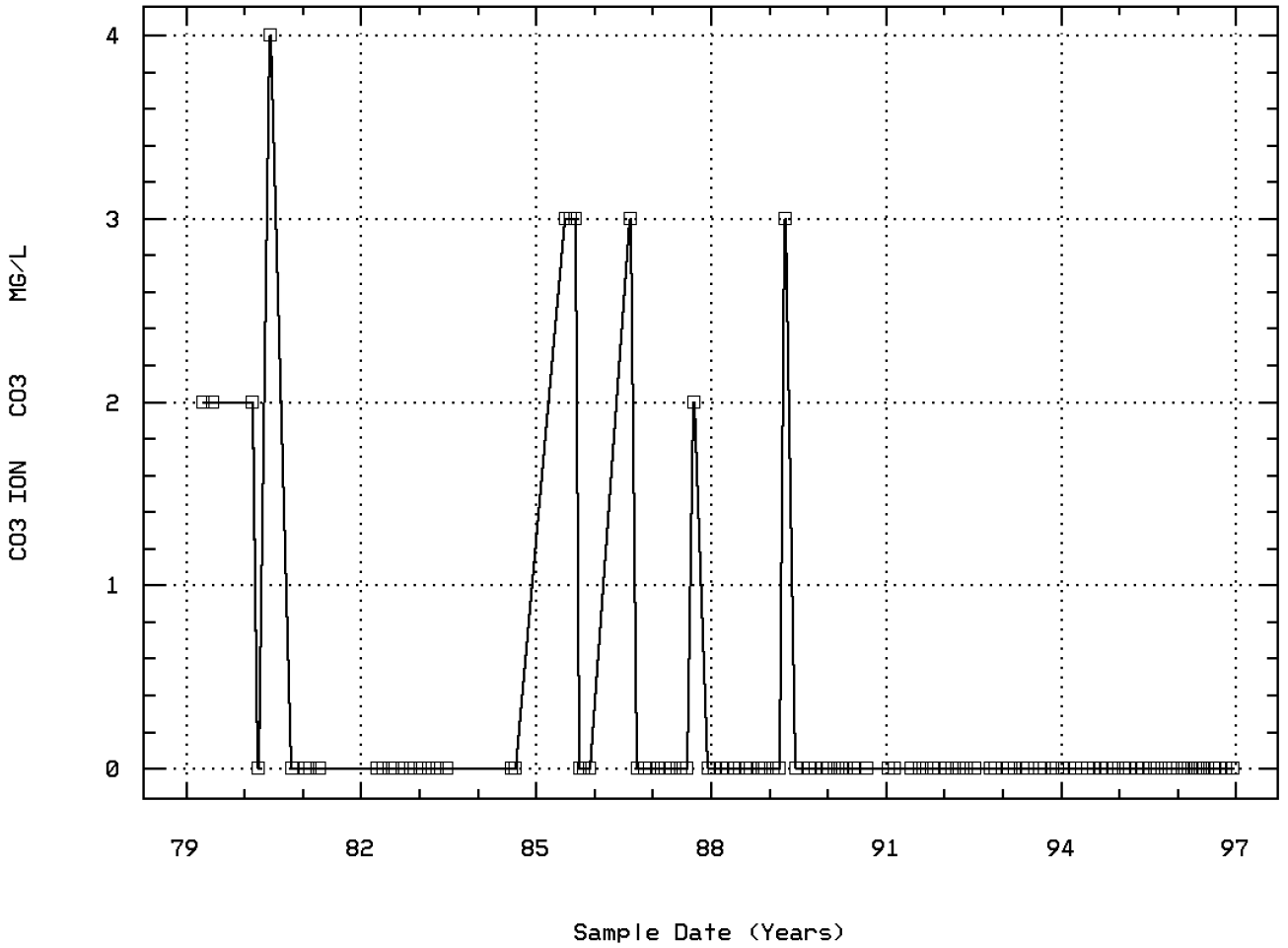
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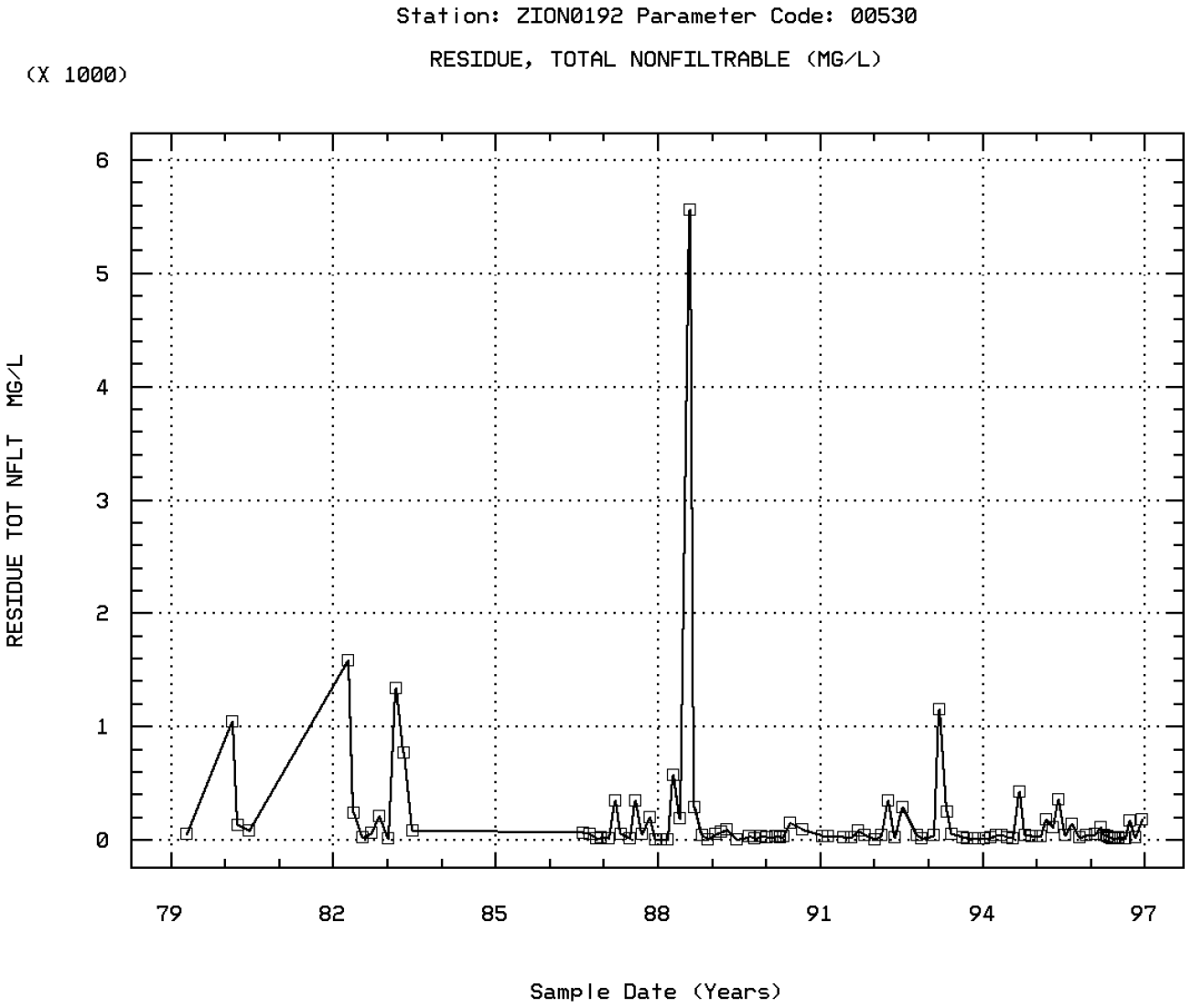
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00445

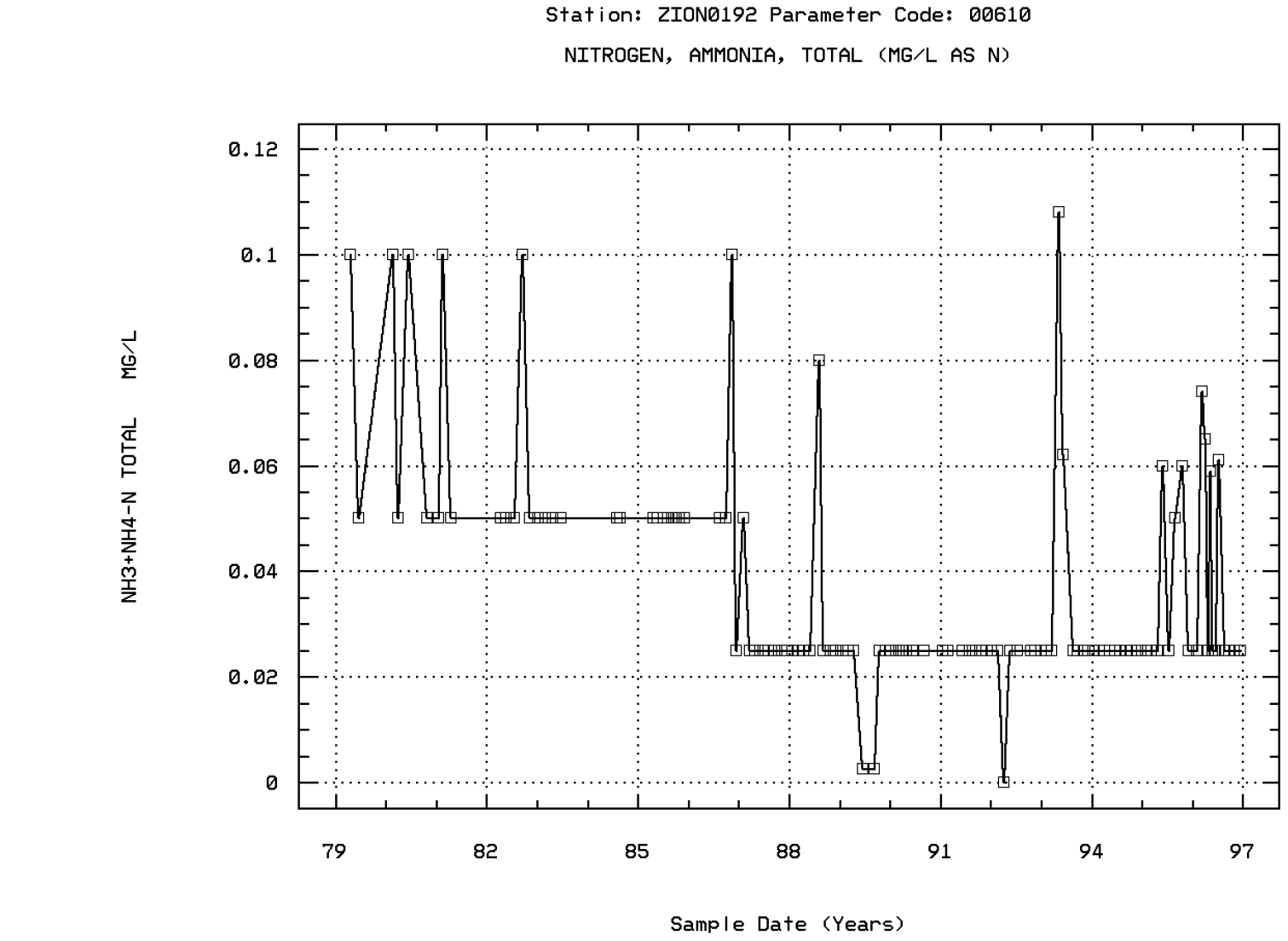
CARBONATE ION (MG/L AS CO3)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



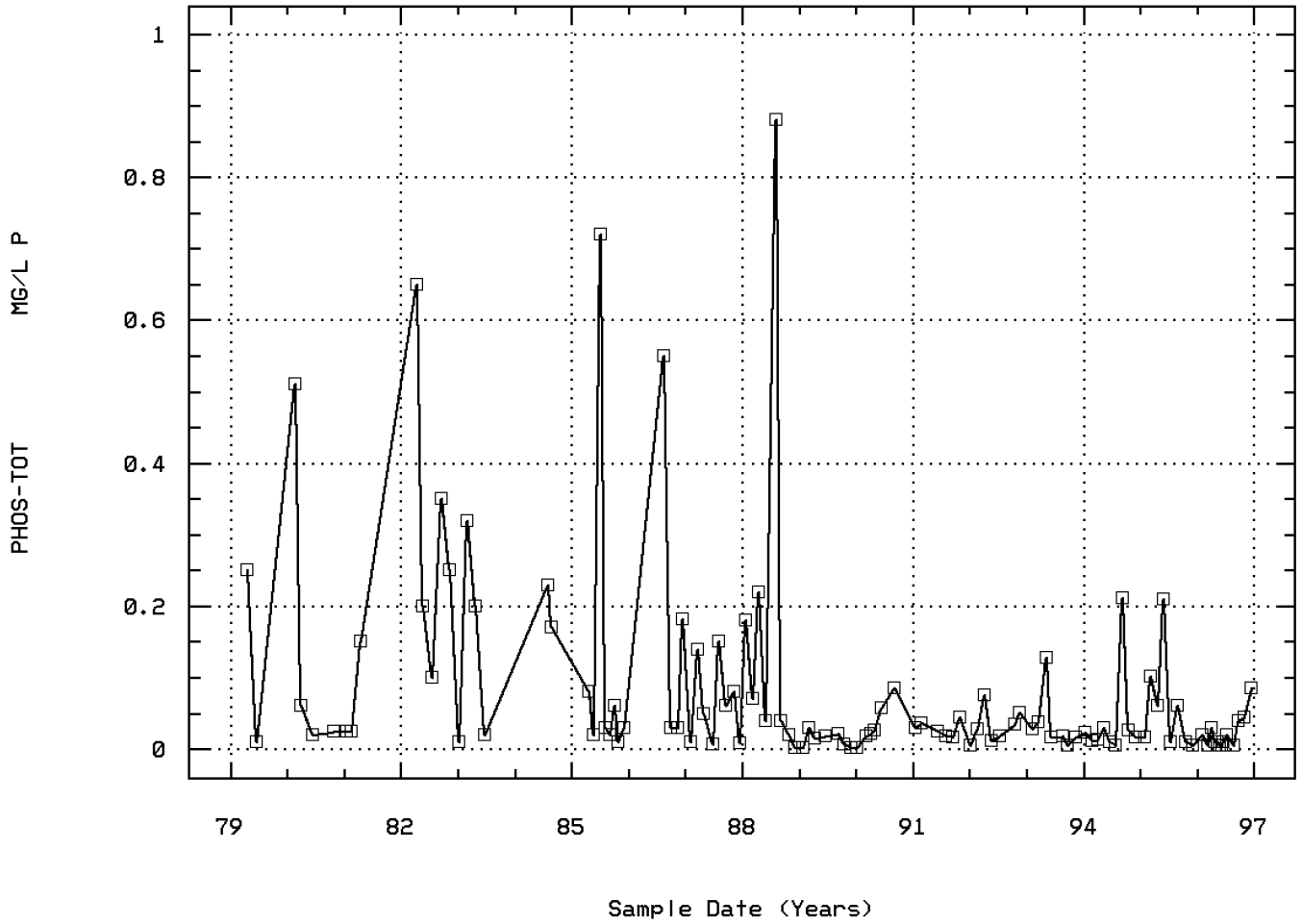
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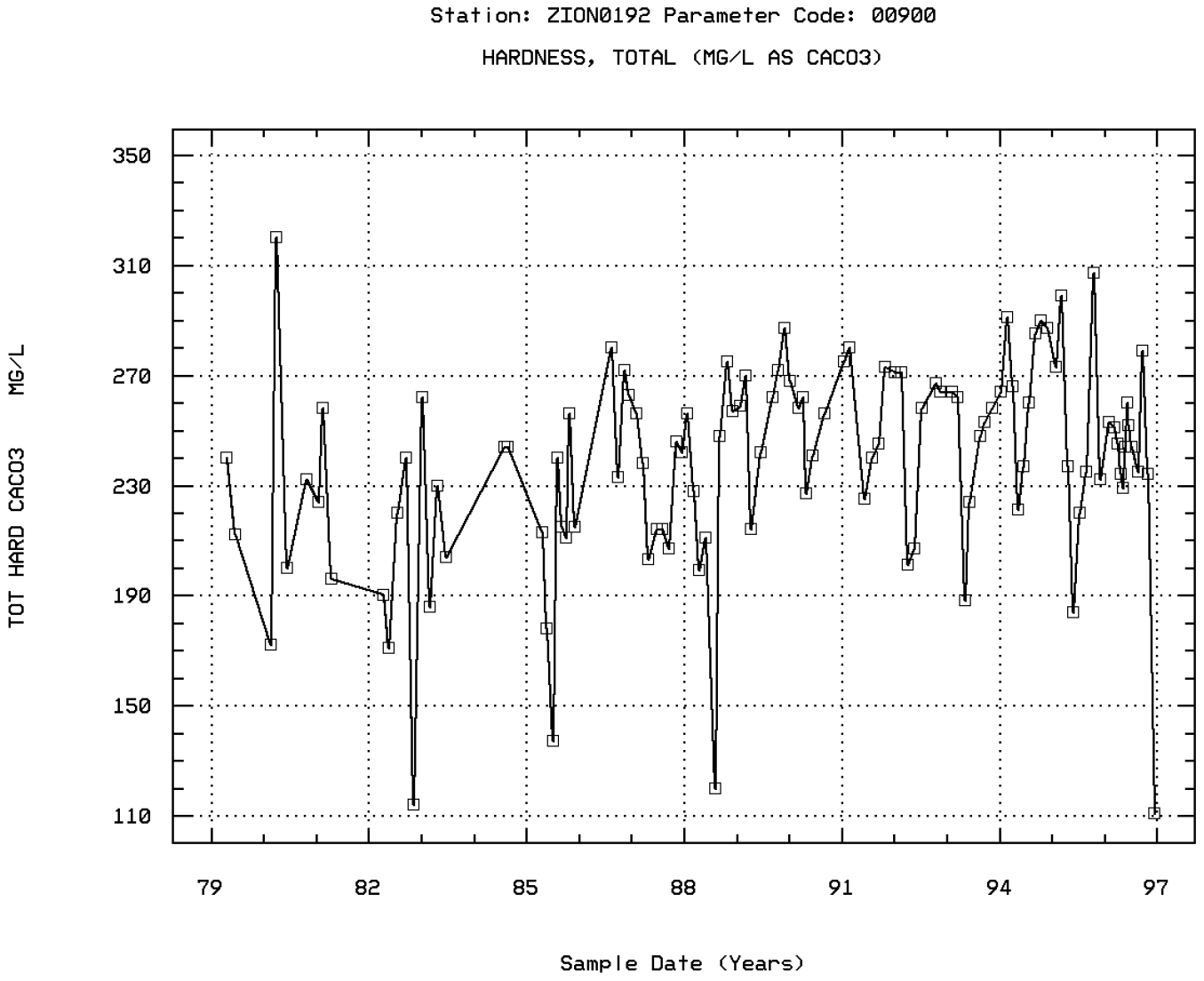
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00665

PHOSPHORUS, TOTAL (MG/L AS P)



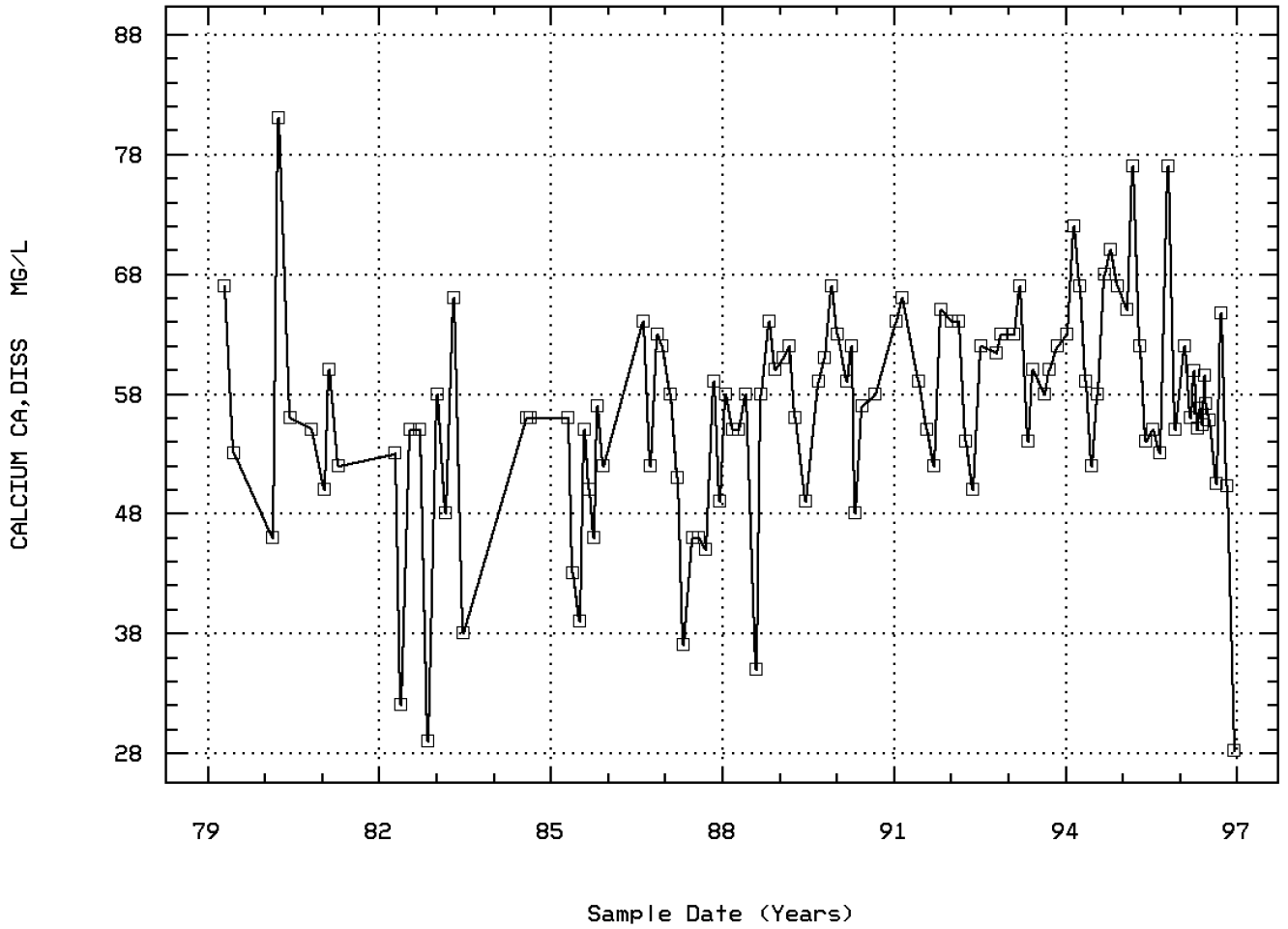
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00915

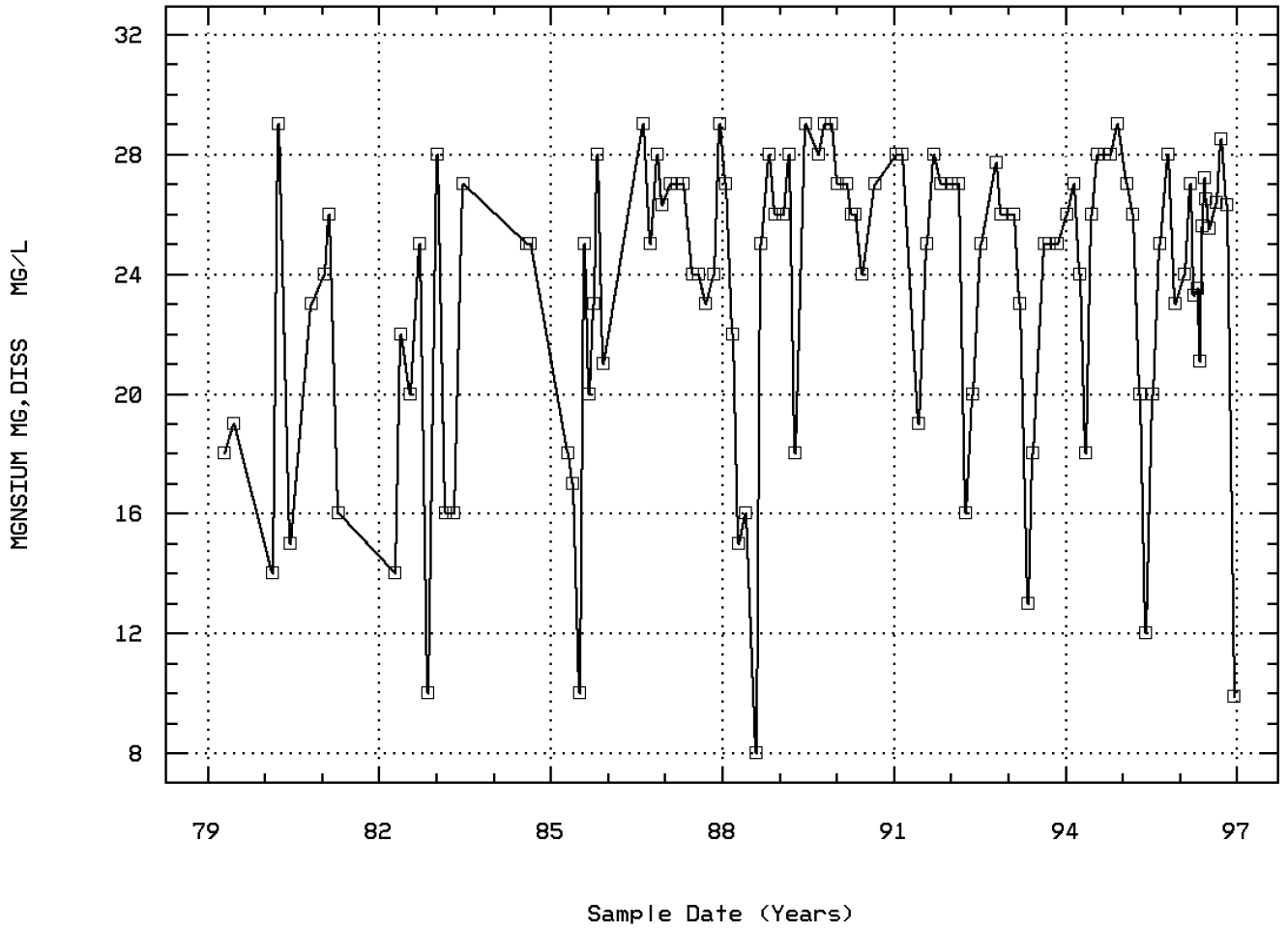
CALCIUM, DISSOLVED (MG/L AS CA)



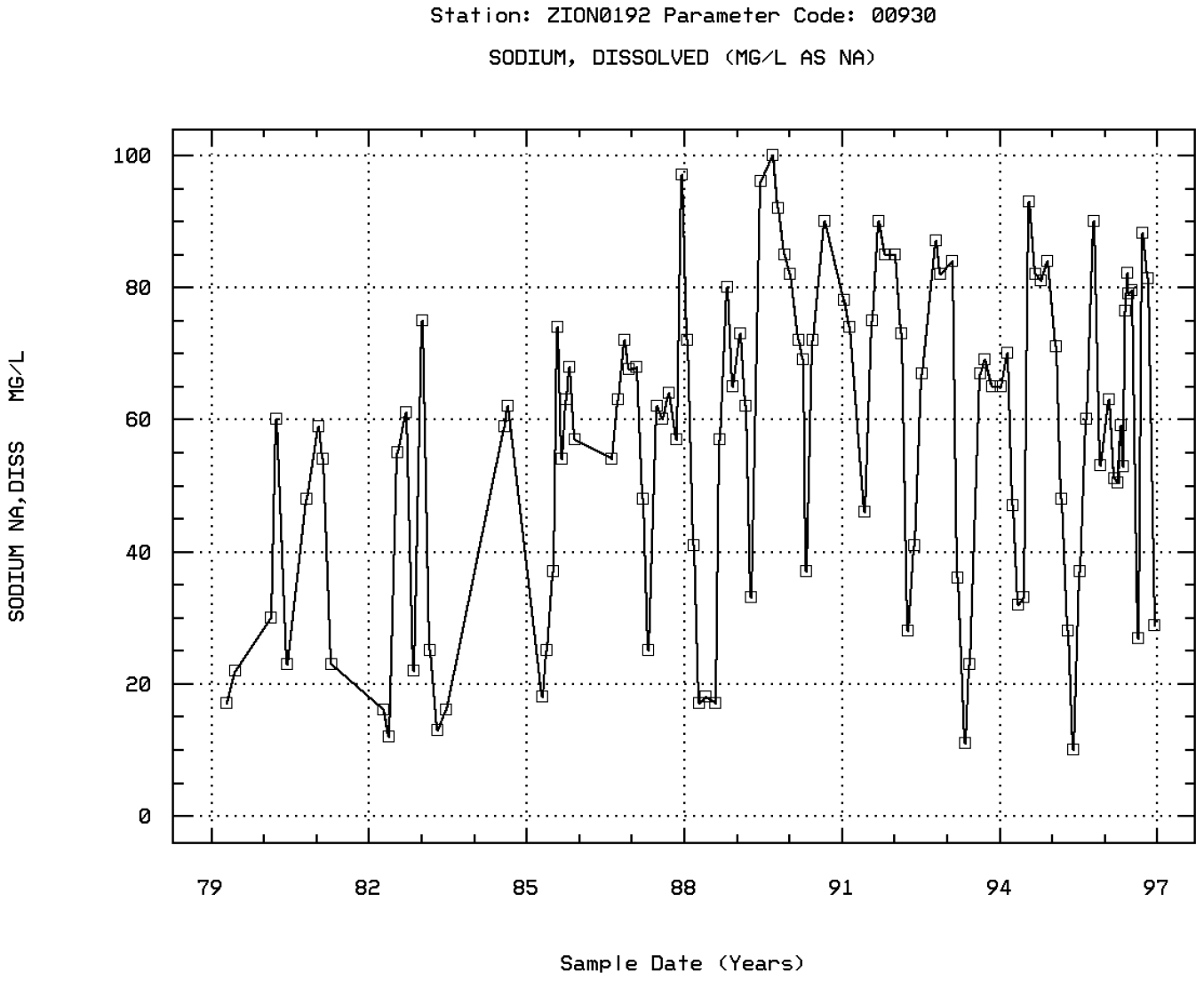
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00925

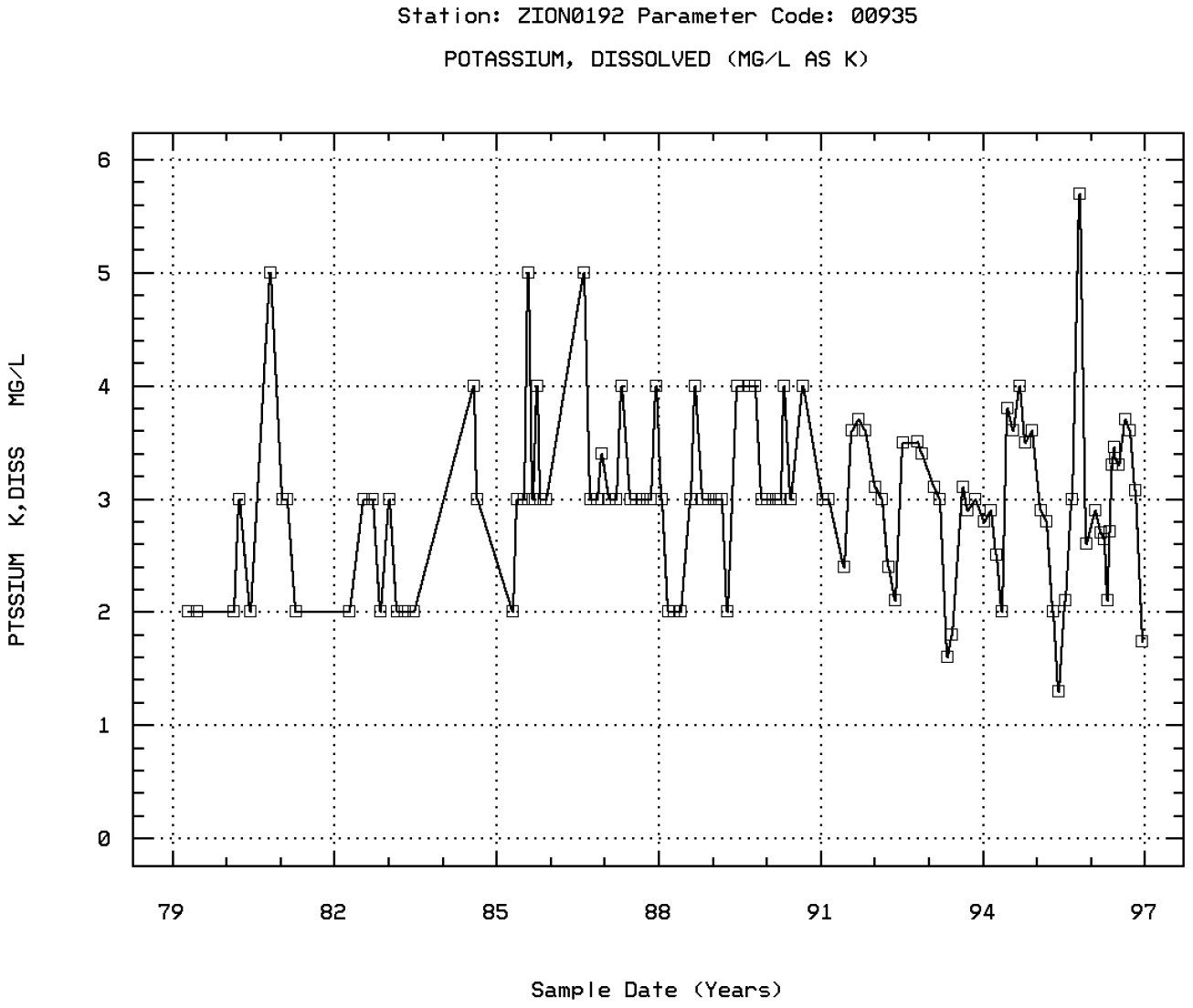
MAGNESIUM, DISSOLVED (MG/L AS MG)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



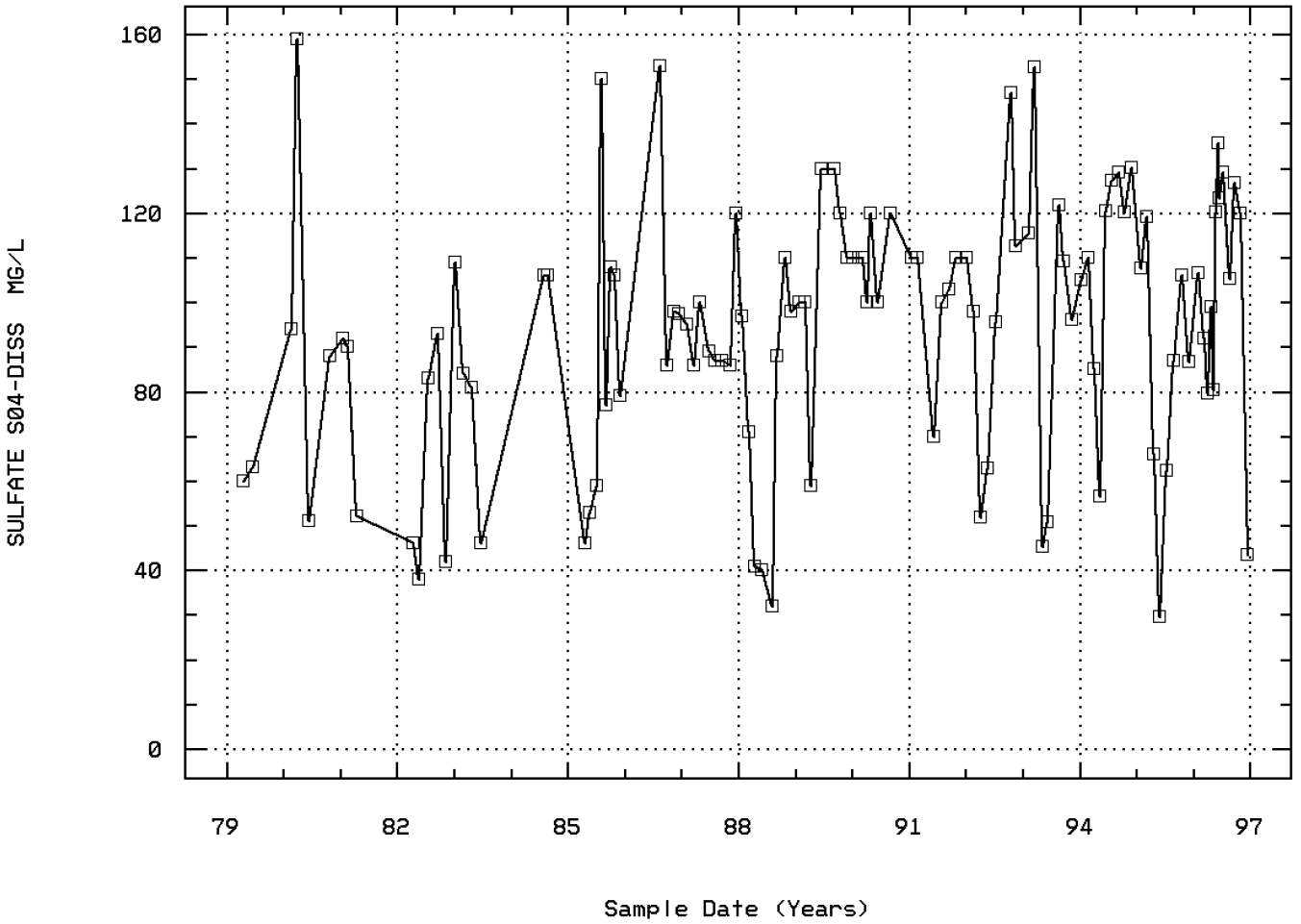
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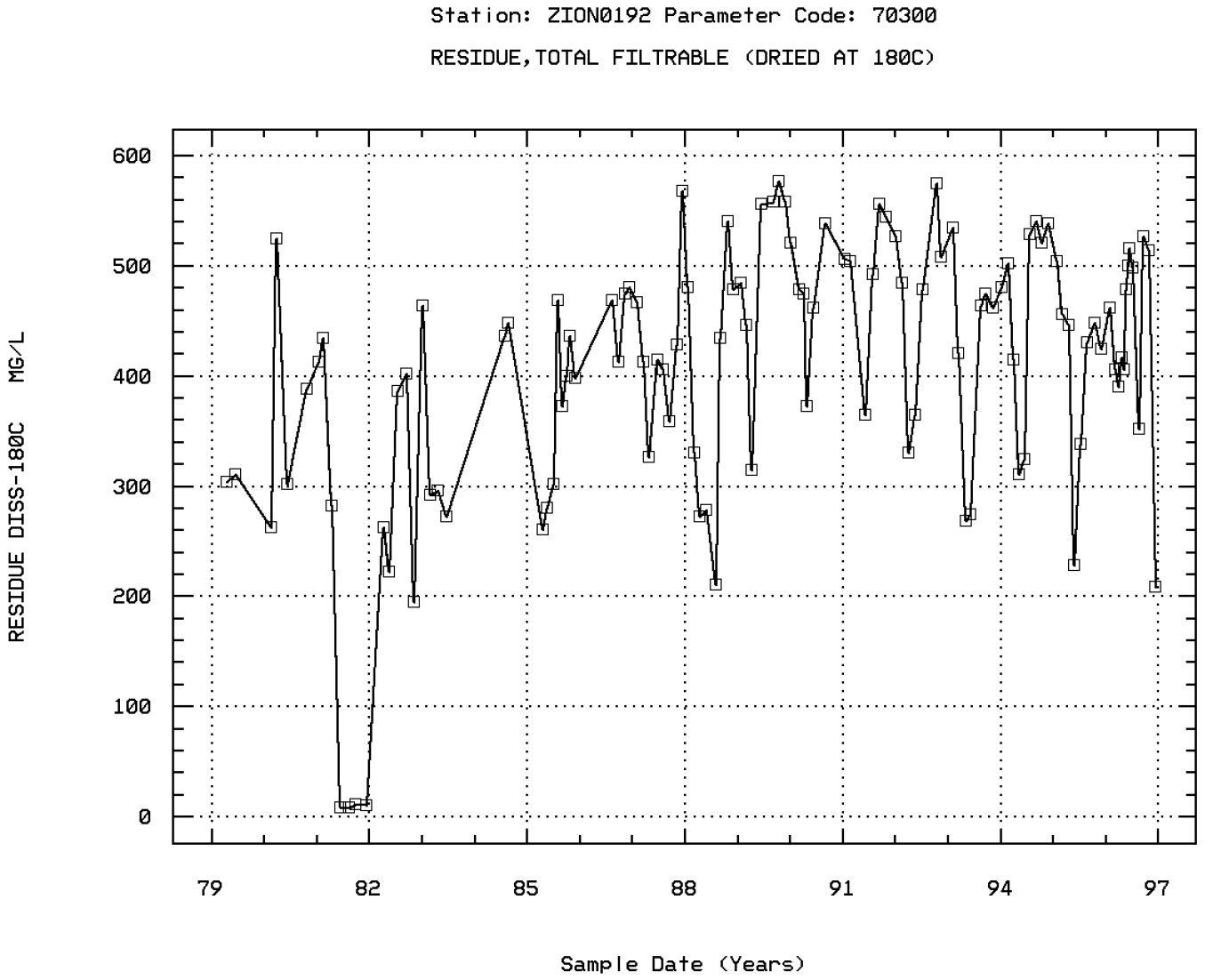
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00946

SULFATE, DISSOLVED (MG/L AS SO4)



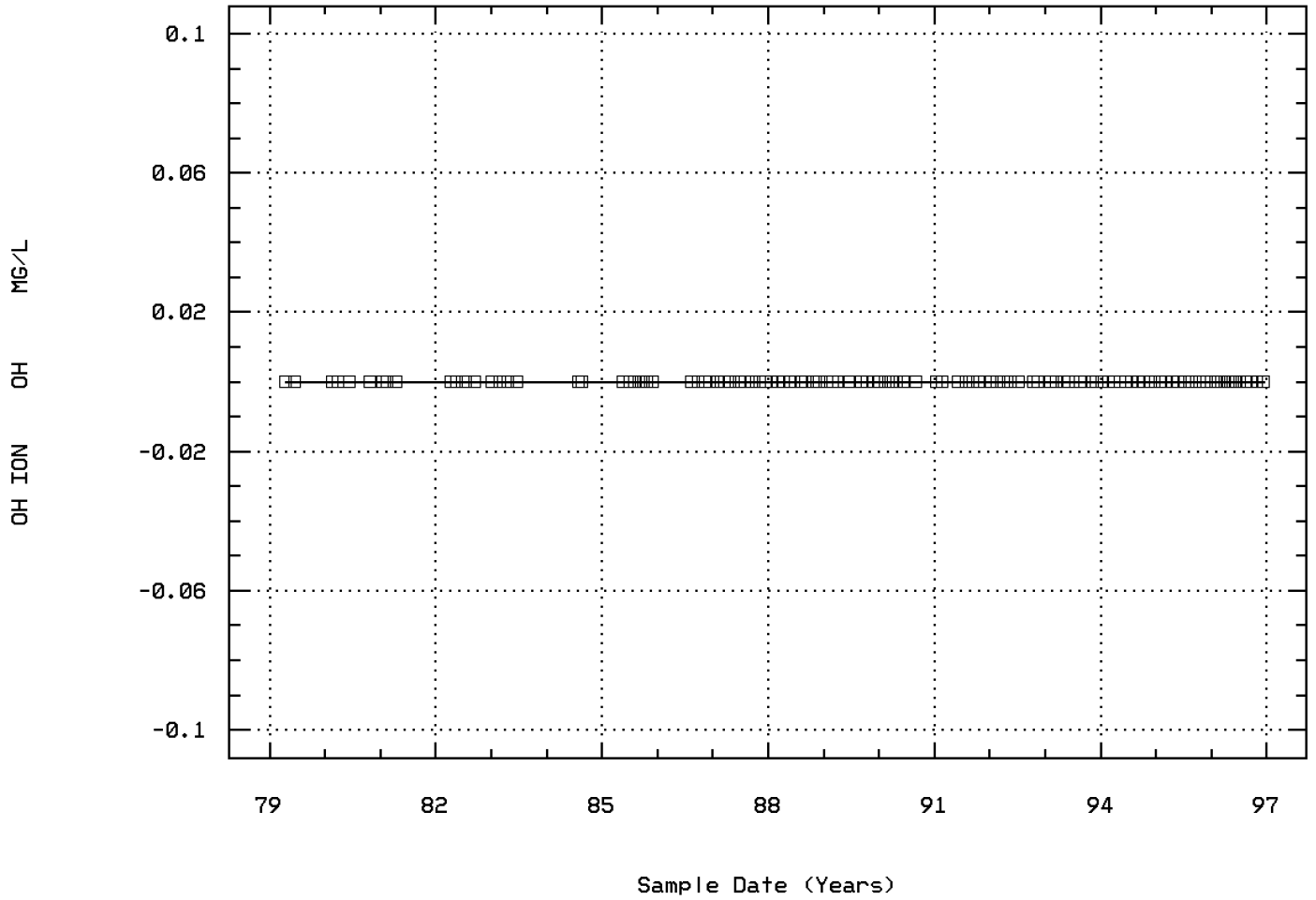
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 71830

HYDROXIDE ION (MG/L AS OH)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-12/11/96	79	10.2	12.073	24.4	3.2	39.866	6.314	5.3	6.6	17.2	22.3
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/19/79-08/29/95	37	54.	70.162	264.	30.	2659.64	51.572	31.8	44.5	73.5	140.
00076p	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/19/79-12/11/96	75	8.9	62.004	1000.	1.	25909.883	160.965	2.	3.5	32.	160.6
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-12/11/96	79	776.	742.013	1006.	9.	30073.038	173.416	510.	702.	829.	909.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/19/79-12/11/96	75	785.	759.707	983.	300.	20682.129	143.813	558.6	700.	850.	918.8
00300p	OXYGEN, DISSOLVED MG/L	04/19/79-12/11/96	76	9.4	9.237	12.4	6.6	1.981	1.407	7.27	7.9	10.2	11.03
00335	COD, .025N K2CR2O7 MG/L	04/19/79-06/13/90	40 ##	7.	10.05	90.	5.	180.408	13.432	5.	5.	9.5	14.
00400p	PH (STANDARD UNITS)	04/19/79-12/11/96	76	8.3	8.28	8.7	7.4	0.066	0.258	7.97	8.1	8.475	8.6
00400p	CONVERTED PH (STANDARD UNITS)	04/19/79-12/11/96	76	8.3	8.186	8.7	7.4	0.076	0.275	7.97	8.1	8.475	8.6
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	76	0.005	0.007	0.04	0.002	0.	0.006	0.003	0.003	0.008	0.011
00403p	PH, LAB, STANDARD UNITS SU	04/19/79-12/11/96	56	8.2	8.121	8.6	6.1	0.12	0.347	7.87	8.	8.3	8.43
00403p	CONVERTED PH, LAB, STANDARD UNITS	04/19/79-12/11/96	56	8.2	7.66	8.6	6.1	0.337	0.58	7.87	8.	8.3	8.43
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	56	0.006	0.022	0.794	0.003	0.011	0.105	0.004	0.005	0.01	0.014
00405p	CARBON DIOXIDE (MG/L AS CO2)	04/19/79-12/11/96	75	2.	5.72	274.	0.	987.583	31.426	1.	1.	3.	3.4
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	75	182.	173.56	224.	80.	711.952	26.682	144.6	164.	190.	195.4
00440p	BICARBONATE ION (MG/L AS HCO3)	04/19/79-12/11/96	75	222.	211.293	265.	98.	1079.453	32.855	173.	200.	232.	238.8
00445p	CARBONATE ION (MG/L AS CO3)	04/19/79-12/11/96	75	0.	0.227	3.	0.	0.556	0.746	0.	0.	0.	0.4
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-12/11/96	64	38.	207.938	5560.	1.5	526818.202	725.822	6.	16.25	103.75	343.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-12/11/96	75 ##	0.025	0.037	0.1	0.003	0.	0.021	0.025	0.025	0.05	0.06
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	32 ##	0.005	0.012	0.11	0.005	0.	0.019	0.005	0.005	0.01	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	32	0.05	0.075	0.35	0.005	0.006	0.076	0.01	0.026	0.087	0.195
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/06/94	53	0.2	0.293	1.31	0.	0.068	0.26	0.05	0.1	0.424	0.72
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-03/12/96	28	0.05	0.104	0.71	0.01	0.025	0.158	0.01	0.025	0.087	0.36
00665p	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-12/11/96	75	0.028	0.088	0.88	0.003	0.025	0.16	0.005	0.016	0.08	0.238
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	18 ##	0.005	0.016	0.097	0.005	0.001	0.023	0.005	0.005	0.014	0.048
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	75	256.	245.547	307.	111.	1501.44	38.748	209.4	234.	270.	282.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	04/19/79-12/11/96	75	58.	57.465	77.	28.2	80.222	8.957	46.	53.	63.	67.
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/19/79-12/11/96	75	26.	24.768	29.	8.	21.164	4.6	20.	24.	28.	28.
00930p	SODIUM, DISSOLVED (MG/L AS NA)	04/19/79-12/11/96	75	67.	65.487	100.	17.	352.235	18.768	36.6	55.	81.	88.92
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	04/19/79-12/11/96	75	3.	3.219	5.7	1.74	0.466	0.682	2.66	3.	3.6	4.
00940	CHLORIDE,TOTAL IN WATER MG/L	04/19/79-10/18/89	37	75.	73.649	132.	21.	617.123	24.842	28.2	64.5	86.	101.
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	04/19/79-12/11/96	47	87.	81.66	160.	0.	992.229	31.5	28.2	66.	106.	113.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	04/19/79-12/11/96	75	105.2	102.164	153.	32.	516.022	22.716	78.2	88.	112.6	129.14
01002	ARSENIC, TOTAL (UG/L AS AS)	04/19/79-09/18/91	43 ##	2.	1.785	7.	0.25	2.534	1.592	0.25	0.5	2.5	3.
01007	BARIUM, TOTAL (UG/L AS BA)	04/19/79-09/18/91	43	80.	72.573	800.	0.	14869.661	121.941	0.	0.06	90.	106.
01027	CADMIUM, TOTAL (UG/L AS CD)	04/19/79-09/18/91	43 ##	0.5	0.512	1.	0.5	0.006	0.076	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/19/79-09/18/91	43 ##	2.5	2.791	15.	2.5	3.634	1.906	2.5	2.5	2.5	2.5
01042	COPPER, TOTAL (UG/L AS CU)	04/19/79-09/18/91	43 ##	10.	9.977	41.	5.	28.452	5.334	5.	10.	10.	10.
01051	LEAD, TOTAL (UG/L AS PB)	04/19/79-09/18/91	43 ##	2.5	3.419	25.	2.5	13.499	3.674	2.5	2.5	2.5	5.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/19/79-09/18/91	43	20.	85.233	1800.	5.	75422.849	274.632	12.	14.	54.	160.
01077	SILVER, TOTAL (UG/L AS AG)	04/19/79-09/18/91	43 ##	1.	1.093	5.	1.	0.372	0.61	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	04/19/79-09/18/91	43 ##	10.	13.616	92.	2.5	196.76	14.027	5.	7.5	15.	25.
01147	SELENIUM, TOTAL (UG/L AS SE)	04/19/79-09/18/91	43 ##	0.25	0.5	2.5	0.25	0.429	0.655	0.25	0.25	0.5	1.7
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/19/79-12/11/96	78	464.	433.654	576.	8.	14168.619	119.032	289.	405.	506.5	540.4
71830p	HYDROXIDE ION (MG/L AS OH)	04/19/79-12/11/96	74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	04/19/79-09/18/91	43 ##	0.1	0.096	0.4	0.01	0.005	0.069	0.05	0.05	0.1	0.16
74010	IRON, TOTAL (MG/L AS FE)	04/19/79-09/18/91	43	0.19	0.587	8.7	0.07	1.881	1.371	0.074	0.1	0.39	1.476

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-12/11/96	18	10.85	10.878	20.2	5.3	16.598	4.074	5.75	7.375	13.9	17.32
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/19/79-08/29/95	7	264.	270.	714.	44.	51462.333	226.853	**	**	**	**
00076p	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/19/79-12/11/96	18	36.5	102.839	385.	1.5	15227.539	123.4	2.22	7.625	188.75	326.5
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-12/11/96	18	487.	535.5	820.	320.	21220.147	145.671	325.4	442.5	646.	767.8

** - 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: 3/20 to 5/09 - Station ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/19/79-12/11/96	18	522.	580.278	850.	405.	17364.801	131.776	406.8	480.	687.5	778.
00300p	OXYGEN, DISSOLVED MG/L	04/19/79-12/11/96	18	9.05	9.244	11.3	8.1	0.744	0.862	8.46	8.6	9.75	11.03
00335	COD, .025N K2CR2O7 MG/L	04/19/79-06/13/90	11 ##	7.	10.864	32.	5.	80.205	8.956	5.	7.	10.	30.6
00400p	PH (STANDARD UNITS)	04/19/79-12/11/96	18	8.4	8.392	8.8	7.9	0.043	0.207	8.08	8.3	8.5	8.665
00400p	CONVERTED PH (STANDARD UNITS)	04/19/79-12/11/96	18	8.4	8.342	8.8	7.9	0.045	0.213	8.08	8.3	8.5	8.665
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	18	0.004	0.005	0.013	0.002	0.	0.003	0.002	0.003	0.005	0.008
00403p	PH, LAB, STANDARD UNITS SU	04/19/79-12/11/96	13	8.2	8.223	8.5	7.8	0.05	0.224	7.8	8.15	8.4	8.5
00403p	CONVERTED PH, LAB, STANDARD UNITS	04/19/79-12/11/96	13	8.2	8.164	8.5	7.8	0.054	0.233	7.8	8.15	8.4	8.5
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	13	0.006	0.007	0.016	0.003	0.	0.004	0.003	0.004	0.007	0.016
00405p	CARBON DIOXIDE (MG/L AS CO2)	04/19/79-12/11/96	17	1.	2.176	6.	1.	3.154	1.776	1.	1.	2.5	6.
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	18	174.	174.278	202.	147.	183.507	13.546	157.8	162.	182.75	195.7
00440p	BICARBONATE ION (MG/L AS HCO3)	04/19/79-12/11/96	18	212.	211.889	246.	180.	275.634	16.602	188.1	198.	221.5	238.8
00445p	CARBONATE ION (MG/L AS CO3)	04/19/79-12/11/96	17	0.	0.294	3.	0.	0.721	0.849	0.	0.	0.	2.2
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-12/11/96	16	69.	256.313	1580.	16.	172189.429	414.957	20.9	31.75	322.5	1010.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-12/11/96	18 ##	0.038	0.043	0.108	0.	0.001	0.028	0.023	0.025	0.052	0.101
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	6 ##	0.015	0.015	0.025	0.005	0.	0.011	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	6	0.275	0.314	0.8	0.005	0.084	0.29	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/06/94	14	0.3	0.361	0.9	0.05	0.06	0.244	0.05	0.2	0.53	0.8
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-03/12/96	6	0.225	0.224	0.4	0.025	0.02	0.14	**	**	**	**
00665p	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-12/11/96	18	0.061	0.114	0.65	0.01	0.024	0.154	0.01	0.02	0.163	0.29
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	6 ##	0.005	0.007	0.017	0.005	0.	0.005	**	**	**	**
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	18	228.	227.444	320.	188.	1076.379	32.808	189.8	200.5	241.25	271.4
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	04/19/79-12/11/96	18	56.	57.878	81.	37.	85.364	9.239	46.9	53.75	63.	68.4
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/19/79-12/11/96	18	19.	20.217	29.	13.	24.206	4.92	13.9	16.	24.5	27.2
00930p	SODIUM, DISSOLVED (MG/L AS NA)	04/19/79-12/11/96	18	28.	33.578	69.	11.	337.351	18.367	12.8	17.	51.025	60.9
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	04/19/79-12/11/96	18	2.05	2.442	4.	1.6	0.47	0.685	1.96	2.	2.783	4.
00940	CHLORIDE,TOTAL IN WATER MG/L	04/19/79-10/18/89	9	20.	26.444	62.	12.	237.778	15.42	12.	17.5	33.5	62.
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	04/19/79-12/11/96	14	30.	38.071	71.	11.	470.995	21.702	11.5	18.5	59.75	70.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	04/19/79-12/11/96	18	72.8	76.178	159.	41.	966.715	31.092	44.78	50.35	99.325	123.9
01002	ARSENIC, TOTAL (UG/L AS AS)	04/19/79-09/18/91	11 ##	1.	1.295	3.	0.25	1.01	1.005	0.3	0.5	2.5	2.9
01007	BARIUM, TOTAL (UG/L AS BA)	04/19/79-09/18/91	11	0.1	35.485	90.	0.	1724.899	41.532	0.005	0.06	80.	90.
01027	CADMIUM, TOTAL (UG/L AS CD)	04/19/79-09/18/91	11 ##	0.5	0.545	1.	0.5	0.023	0.151	0.5	0.5	0.5	0.9
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/19/79-09/18/91	11 ##	2.5	3.182	7.5	2.5	2.614	1.617	2.5	2.5	2.5	7.
01042	COPPER, TOTAL (UG/L AS CU)	04/19/79-09/18/91	11 ##	10.	9.182	11.	5.	4.364	2.089	5.	10.	10.	10.8
01051	LEAD, TOTAL (UG/L AS PB)	04/19/79-09/18/91	11 ##	2.5	3.864	10.	2.5	5.455	2.335	2.5	2.5	5.	9.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/19/79-09/18/91	11	50.	118.182	500.	12.	20566.164	143.409	12.6	20.	160.	437.
01077	SILVER, TOTAL (UG/L AS AG)	04/19/79-09/18/91	11 ##	1.	1.136	2.5	1.	0.205	0.452	1.	1.	1.	2.2
01092	ZINC, TOTAL (UG/L AS ZN)	04/19/79-09/18/91	11 ##	10.	17.727	39.	2.5	197.268	14.045	3.	7.5	35.	38.4
01147	SELENIUM, TOTAL (UG/L AS SE)	04/19/79-09/18/91	11 ##	0.25	0.364	0.5	0.25	0.017	0.131	0.25	0.25	0.5	0.5
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/19/79-12/11/96	18	328.	353.056	524.	260.	6414.408	80.09	261.8	279.5	414.5	479.
71830p	HYDROXIDE ION (MG/L AS OH)	04/19/79-12/11/96	17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	04/19/79-09/18/91	11 ##	0.1	0.077	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	04/19/79-09/18/91	11	0.72	1.381	4.72	0.16	2.372	1.54	0.162	0.25	1.78	4.516

** - 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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0192

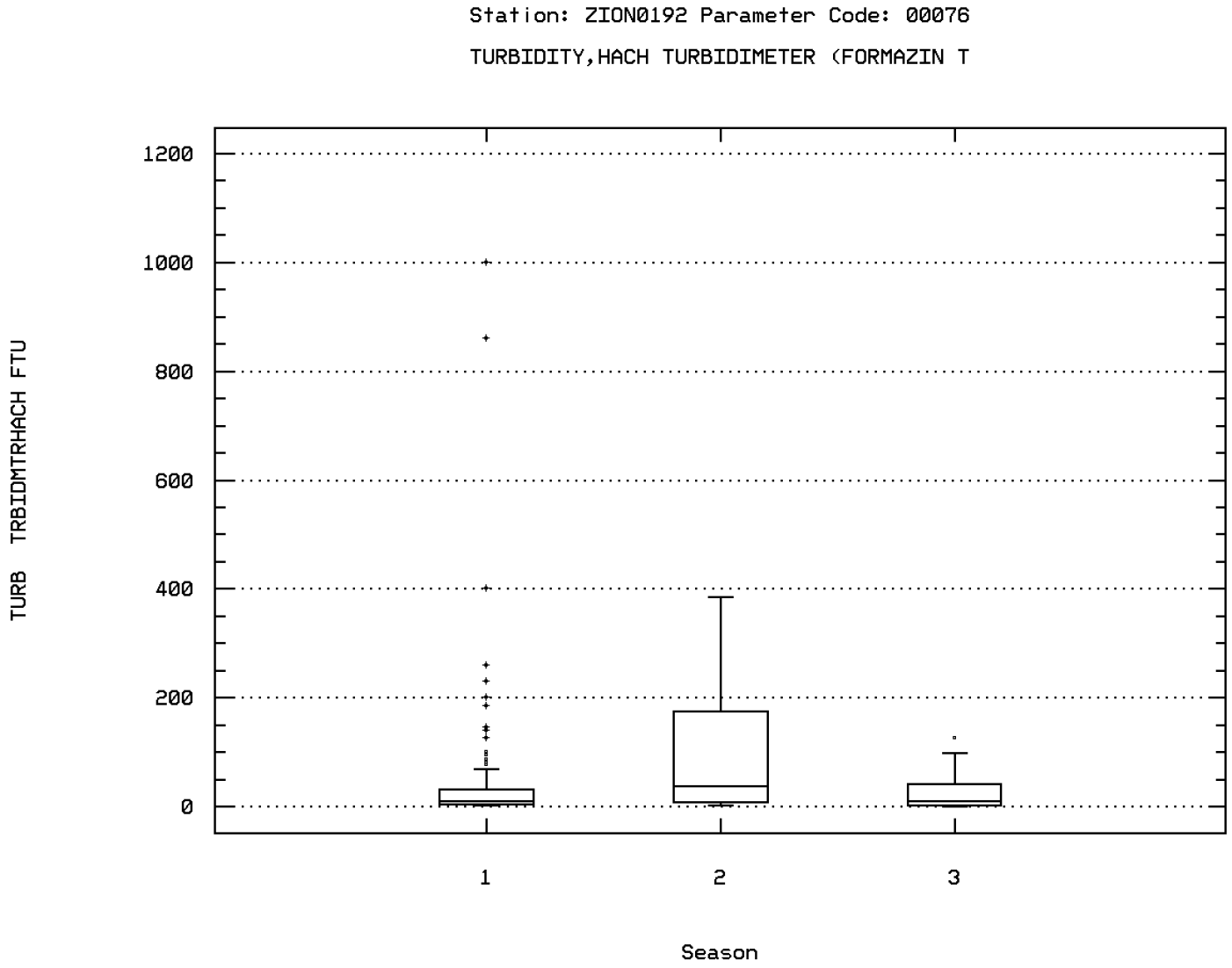
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-12/11/96	20	16.2	16.795	25.5	9.8	20.133	4.487	10.24	13.8	20.425	24.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/19/79-08/29/95	8	100.	184.625	687.	29.	49964.554	223.528	**	**	**	**
00076p	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/19/79-12/11/96	18	9.25	29.694	126.	1.1	1620.559	40.256	1.82	2.25	52.75	100.8
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-12/11/96	19	650.	610.421	885.	350.	24443.924	156.346	386.	459.	683.	855.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/19/79-12/11/96	18	544.	587.611	936.	365.	28317.663	168.279	377.6	473.75	657.75	882.9
00300p	OXYGEN, DISSOLVED MG/L	04/19/79-12/11/96	20	8.25	8.18	11.	4.4	1.795	1.34	6.93	7.5	9.075	9.6
00335	COD, .025N K2CR2O7 MG/L	04/19/79-06/13/90	9 ##	7.	13.222	54.	5.	251.632	15.863	5.	6.	13.25	54.
00400p	PH (STANDARD UNITS)	04/19/79-12/11/96	19	8.4	8.331	8.5	7.8	0.038	0.196	8.1	8.2	8.5	8.5

** - 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

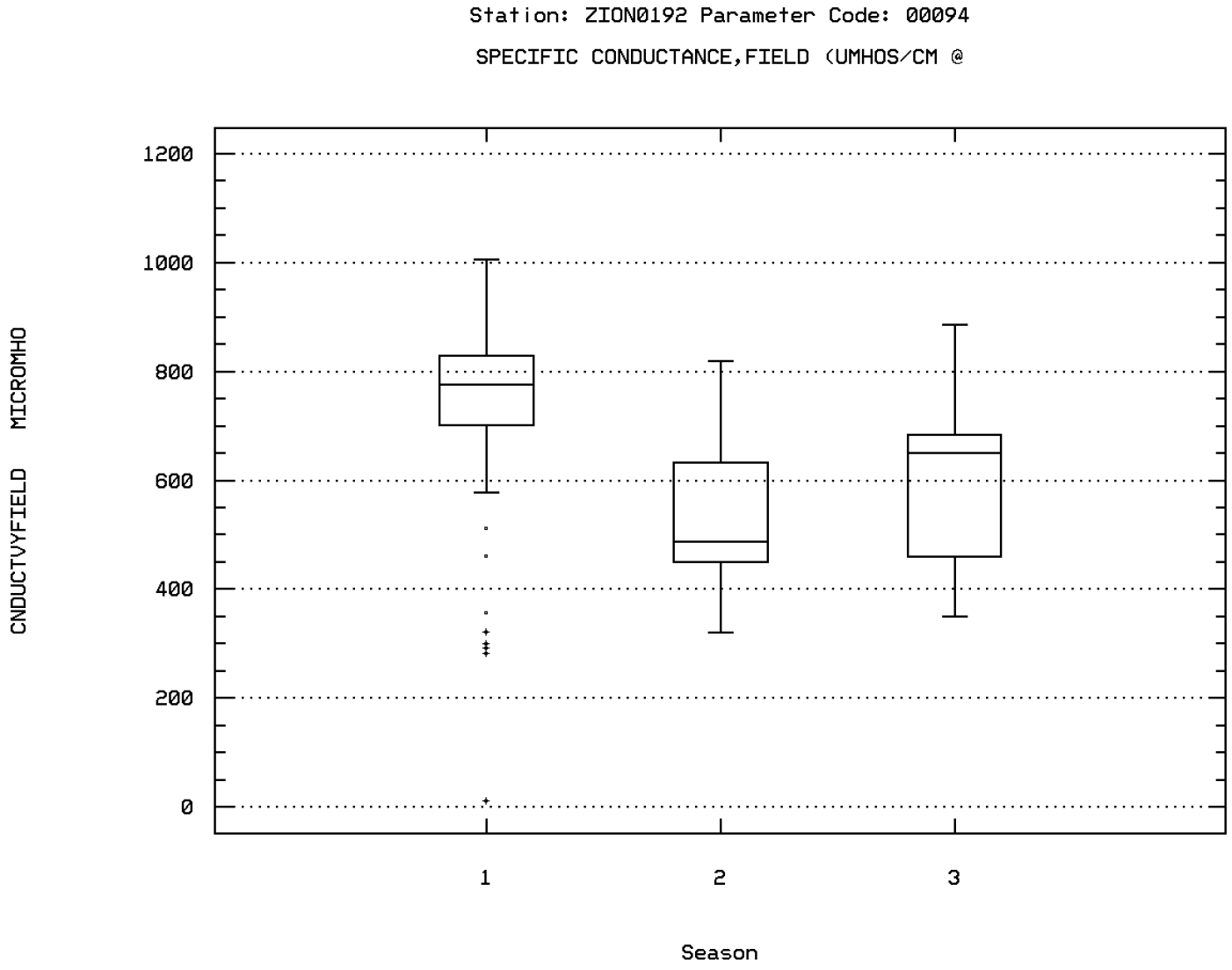
Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0192

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p	CONVERTED PH (STANDARD UNITS)	04/19/79-12/11/96	19	8.4	8.282	8.5	7.8	0.041	0.202	8.1	8.2	8.5	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	19	0.004	0.005	0.016	0.003	0.	0.003	0.003	0.003	0.006	0.008
00403p	PH, LAB, STANDARD UNITS SU	04/19/79-12/11/96	14	8.3	8.143	8.5	7.3	0.124	0.352	7.45	7.9	8.4	8.5
00403p	CONVERTED PH, LAB, STANDARD UNITS	04/19/79-12/11/96	14	8.3	7.973	8.5	7.3	0.155	0.394	7.45	7.9	8.4	8.5
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-12/11/96	14	0.005	0.011	0.05	0.003	0.	0.013	0.003	0.004	0.013	0.038
00405p	CARBON DIOXIDE (MG/L AS CO2)	04/19/79-12/11/96	18	1.5	2.778	14.	1.	11.595	3.405	1.	1.	3.	9.5
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	18	170.5	166.778	185.	144.	152.301	12.341	145.8	159.25	177.	182.3
00440p	BICARBONATE ION (MG/L AS HCO3)	04/19/79-12/11/96	18	206.	202.667	226.	176.	243.412	15.602	177.8	188.	216.	222.4
00445p	CARBONATE ION (MG/L AS CO3)	04/19/79-12/11/96	18	0.	0.389	4.	0.	1.075	1.037	0.	0.	0.	2.2
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-12/11/96	17	24.	75.265	358.	1.	10183.941	100.916	1.4	8.5	115.	261.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-12/11/96	18 ##	0.025	0.037	0.1	0.003	0.	0.022	0.023	0.025	0.05	0.066
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	7 ##	0.005	0.011	0.025	0.005	0.	0.01	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/19/79-09/05/90	7	0.07	0.081	0.15	0.005	0.003	0.057	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/06/94	11	0.2	0.245	0.7	0.05	0.04	0.201	0.05	0.1	0.4	0.64
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-03/12/96	8	0.065	0.089	0.25	0.01	0.008	0.088	**	**	**	**
00665p	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-12/11/96	18	0.019	0.04	0.21	0.005	0.004	0.062	0.005	0.01	0.033	0.201
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	5 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	04/19/79-12/11/96	18	217.5	218.167	260.	171.	638.971	25.278	177.3	203.	241.25	252.8
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	04/19/79-12/11/96	18	54.7	52.117	60.	32.	62.624	7.914	37.4	48.25	58.25	59.55
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/19/79-12/11/96	18	21.	21.406	29.	12.	24.464	4.946	14.7	17.75	26.125	27.38
00930p	SODIUM, DISSOLVED (MG/L AS NA)	04/19/79-12/11/96	18	32.5	42.706	96.	10.	774.579	27.831	11.8	21.	73.1	83.58
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	04/19/79-12/11/96	18	2.25	2.529	4.	1.	0.74	0.86	1.27	2.	3.315	3.82
00940	CHLORIDE,TOTAL IN WATER MG/L	04/19/79-10/18/89	8	26.	41.625	113.	16.	1247.125	35.315	**	**	**	**
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	04/19/79-12/11/96	14	36.5	49.143	103.	12.	1215.824	34.869	14.	21.25	94.	101.5
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	04/19/79-12/11/96	18	62.9	76.622	135.6	29.5	1277.308	35.739	37.15	49.675	120.25	130.56
01002	ARSENIC, TOTAL (UG/L AS AS)	04/19/79-09/18/91	10 ##	0.5	1.1	2.5	0.25	0.975	0.987	0.25	0.438	2.5	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	04/19/79-09/18/91	10 ##	30.013	37.01	90.	0.	1578.067	39.725	0.003	0.025	72.5	89.
01027	CADMIUM, TOTAL (UG/L AS CD)	04/19/79-09/18/91	10 ##	0.5	0.55	1.	0.5	0.025	0.158	0.5	0.5	0.5	0.95
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/19/79-09/18/91	10 ##	2.5	4.25	20.	2.5	30.625	5.534	2.5	2.5	2.5	18.25
01042	COPPER, TOTAL (UG/L AS CU)	04/19/79-09/18/91	10 ##	10.	8.	10.	5.	6.667	2.582	5.	5.	10.	10.
01051	LEAD, TOTAL (UG/L AS PB)	04/19/79-09/18/91	10 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	04/19/79-09/18/91	10	18.	40.807	120.	0.07	1884.21	43.407	1.063	13.75	90.5	117.8
01077	SILVER, TOTAL (UG/L AS AG)	04/19/79-09/18/91	10 ##	1.	1.15	2.5	1.	0.225	0.474	1.	1.	1.	2.35
01092	ZINC, TOTAL (UG/L AS ZN)	04/19/79-09/18/91	10 ##	10.	13.35	45.	2.5	151.669	12.315	2.75	5.	16.5	42.6
01147	SELENIUM, TOTAL (UG/L AS SE)	04/19/79-09/18/91	10 ##	0.25	0.55	2.5	0.25	0.483	0.695	0.25	0.25	0.5	2.3
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/19/79-12/11/96	19	310.	340.105	556.	8.	16689.099	129.186	222.	274.	462.	516.
71830p	HYDROXIDE ION (MG/L AS OH)	04/19/79-12/11/96	18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	04/19/79-09/18/91	10 ##	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	04/19/79-09/18/91	10	0.275	0.547	1.8	0.07	0.338	0.581	0.07	0.153	1.085	1.73

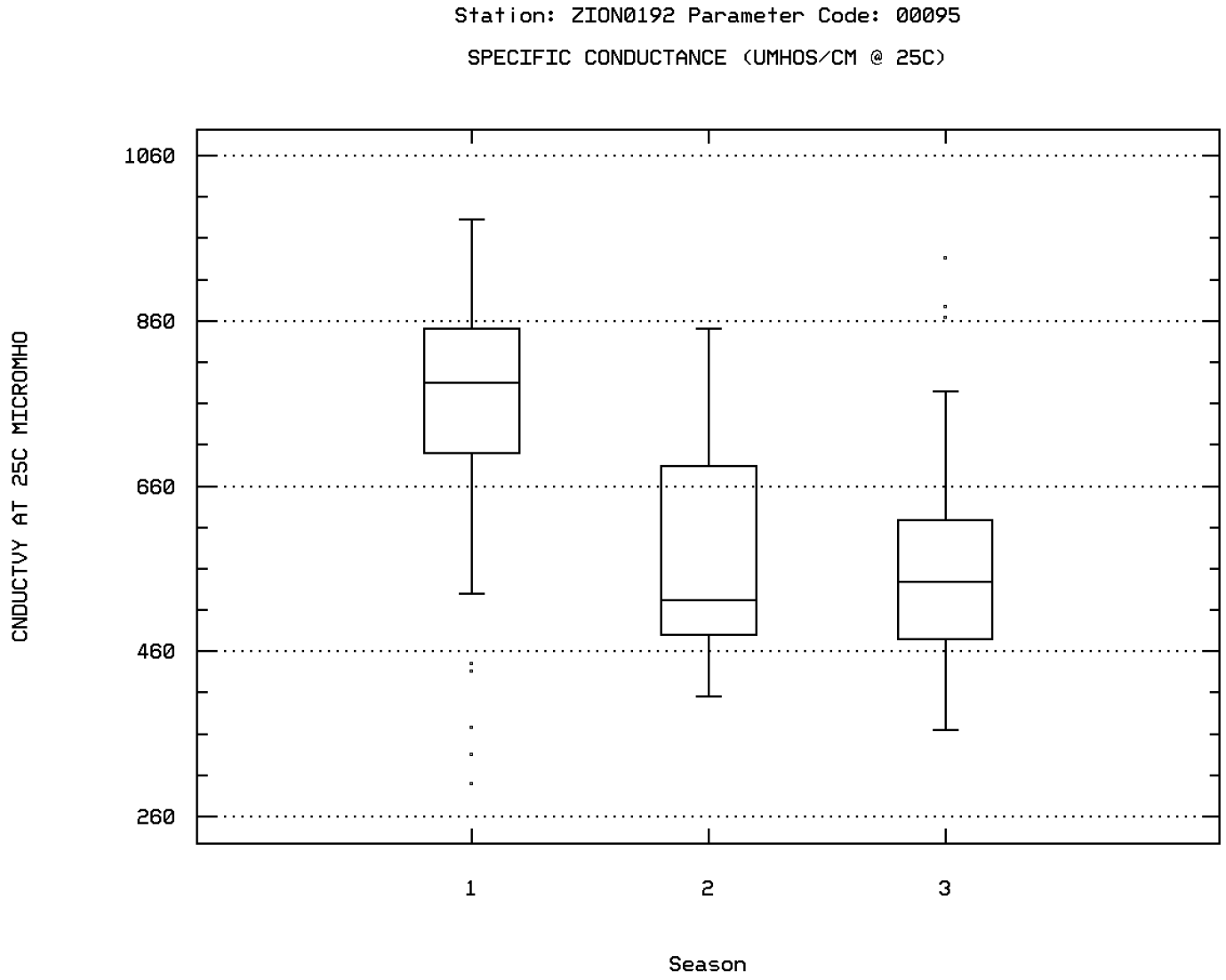
** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



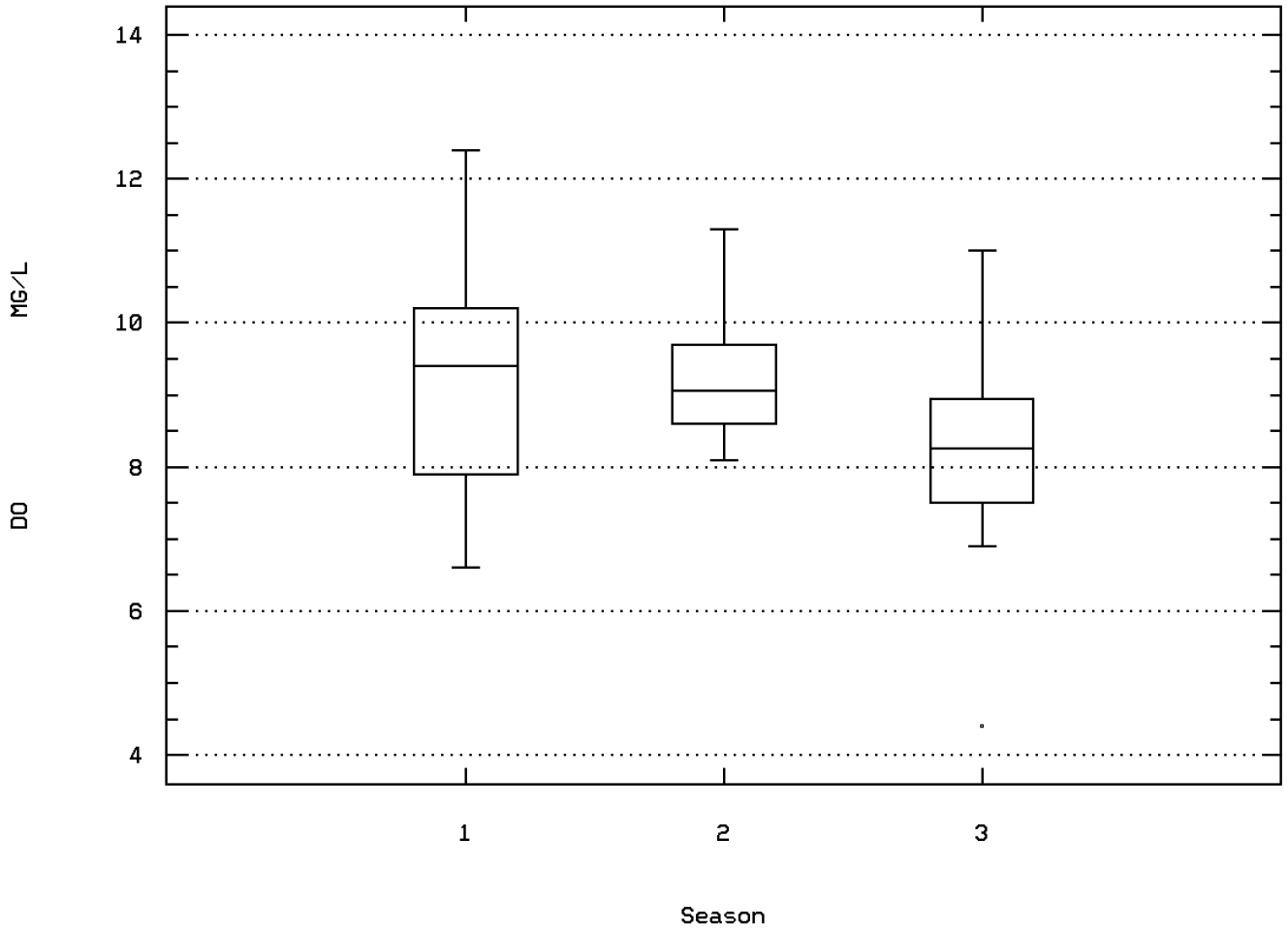
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



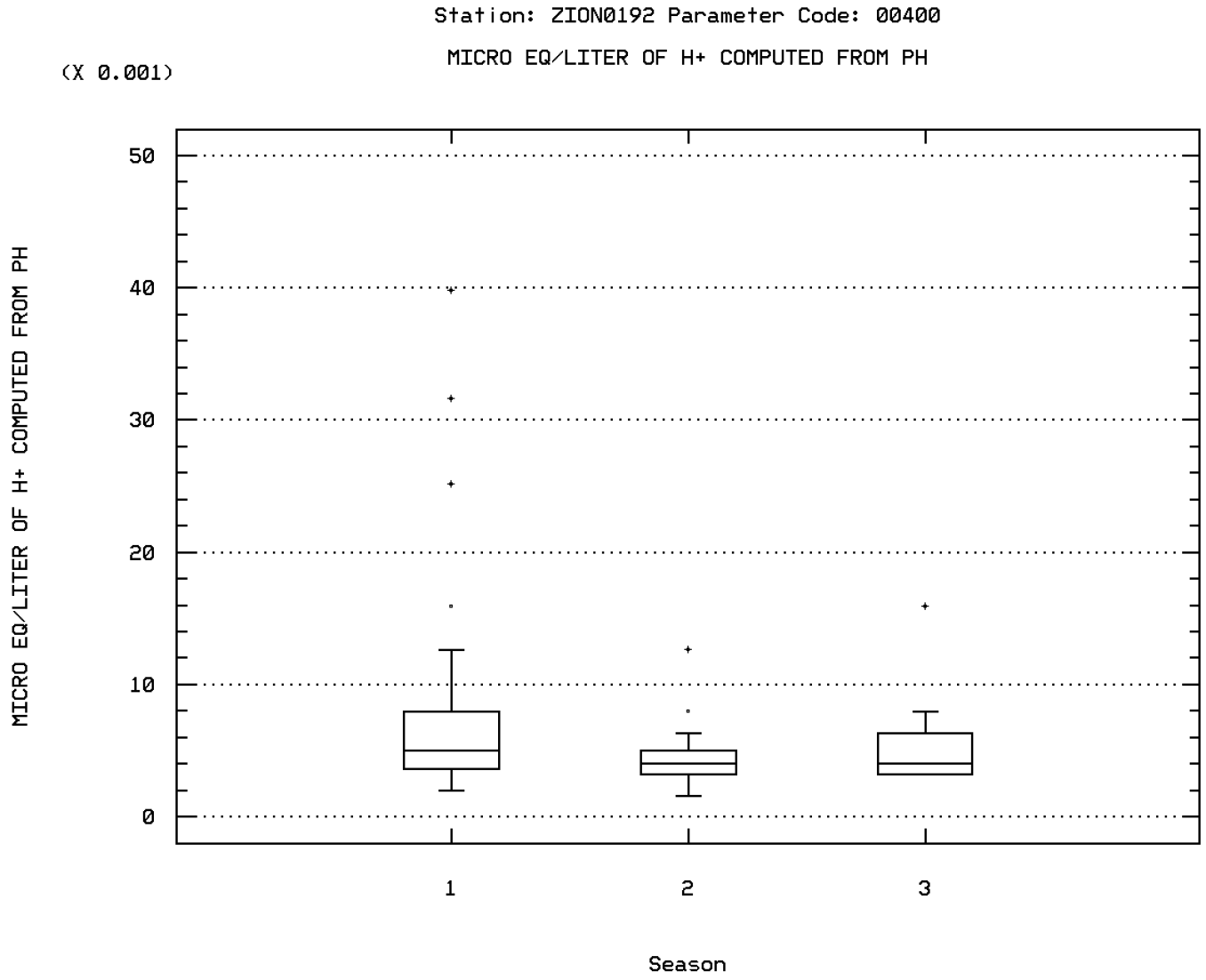
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00300

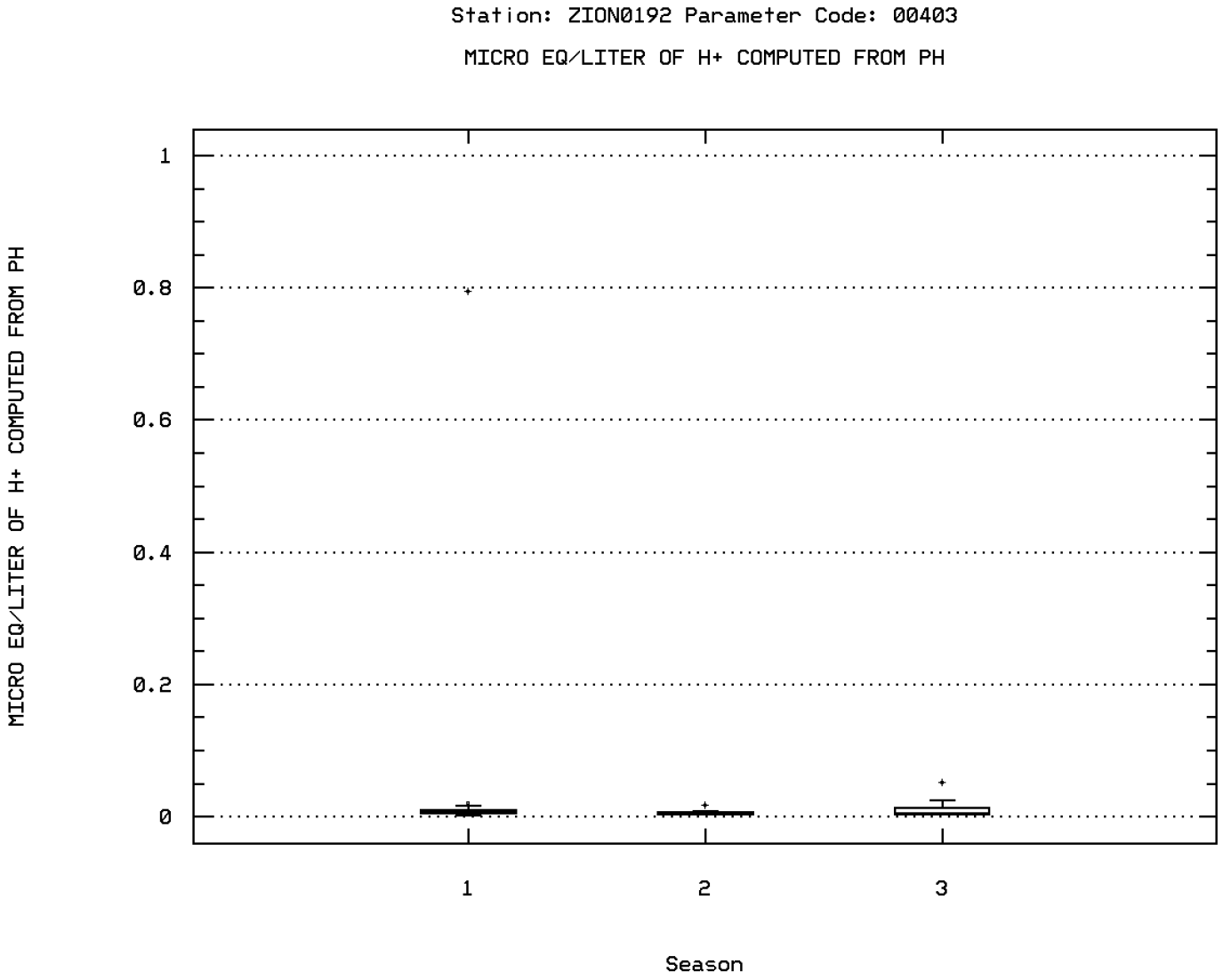
OXYGEN, DISSOLVED



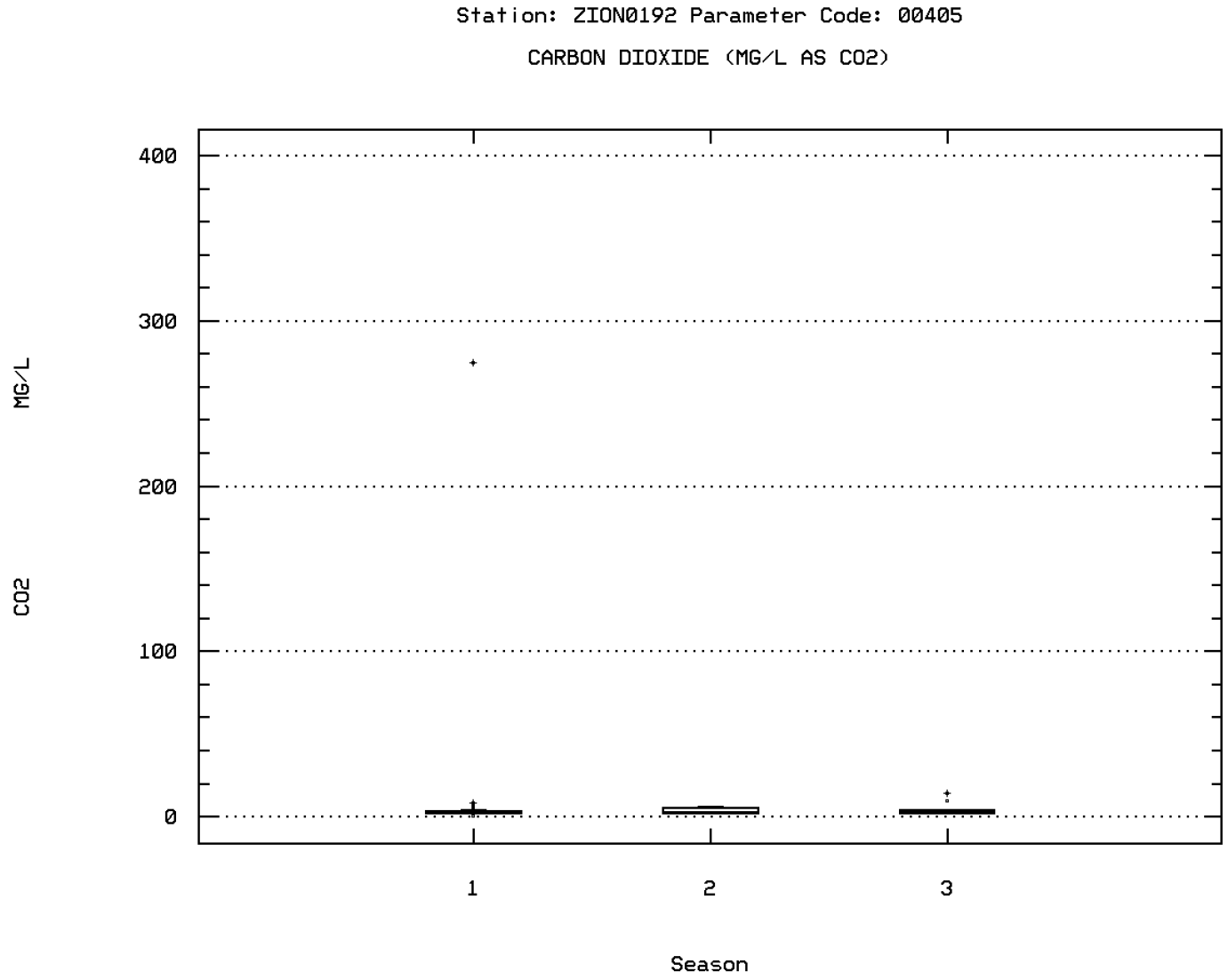
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



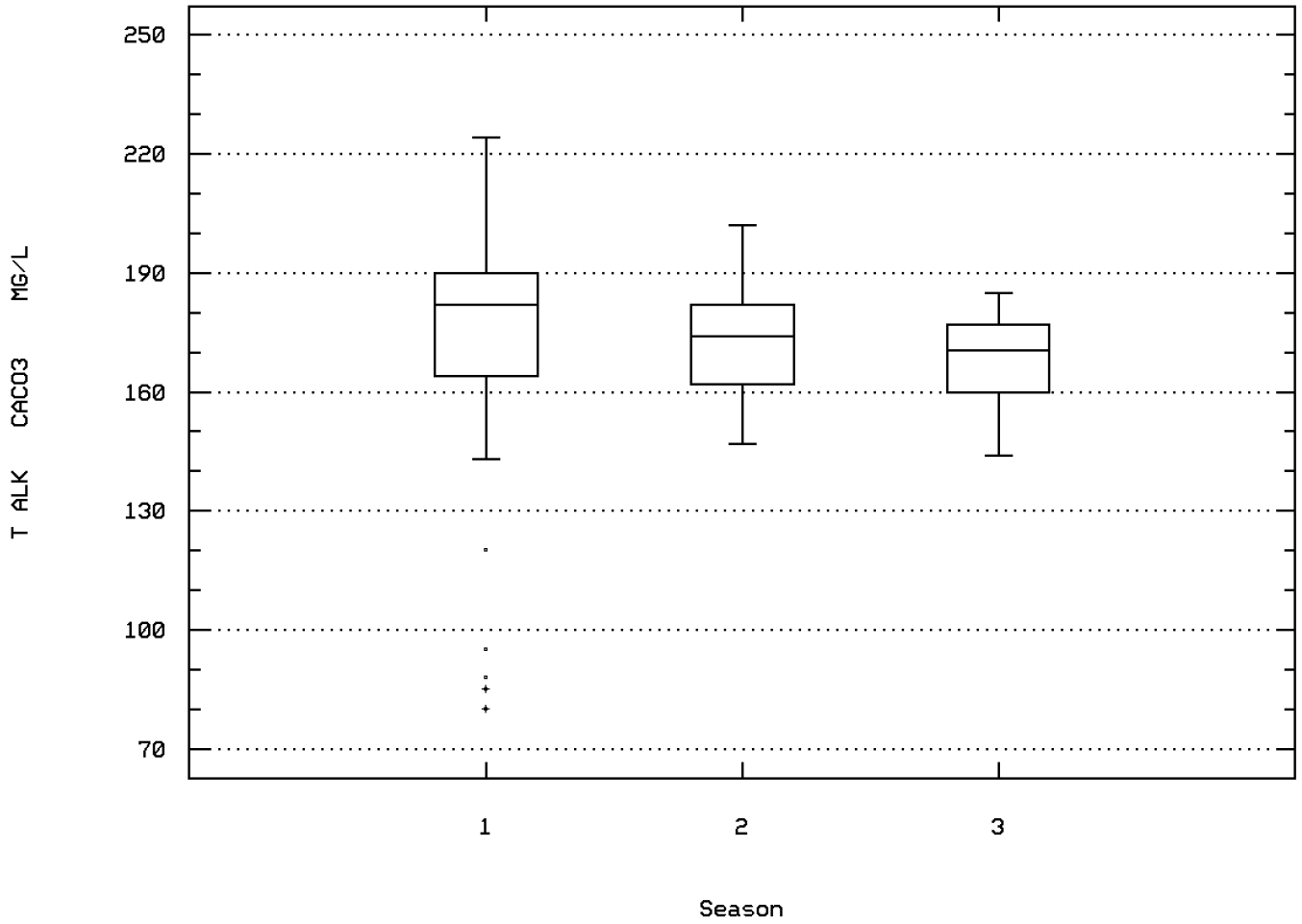
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



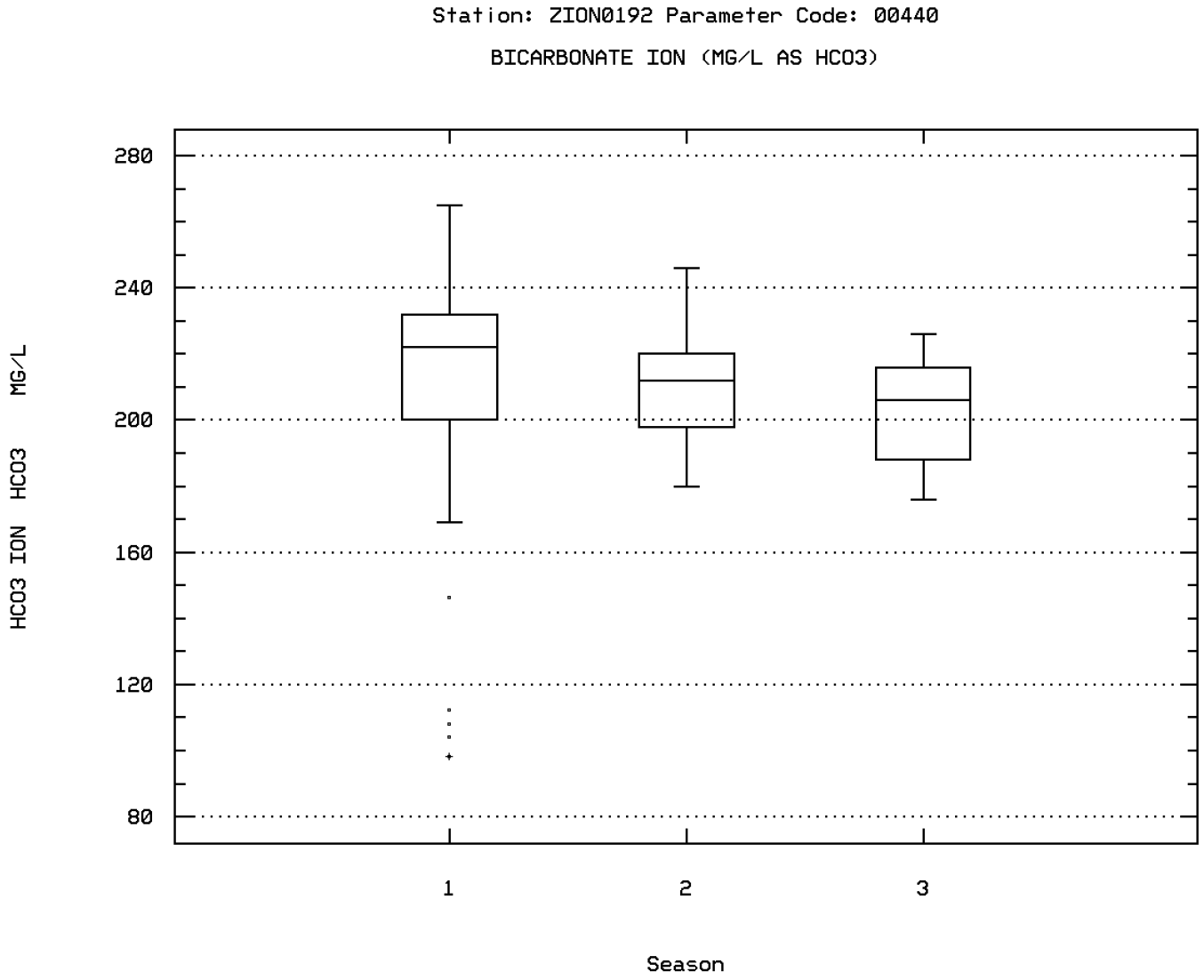
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00410

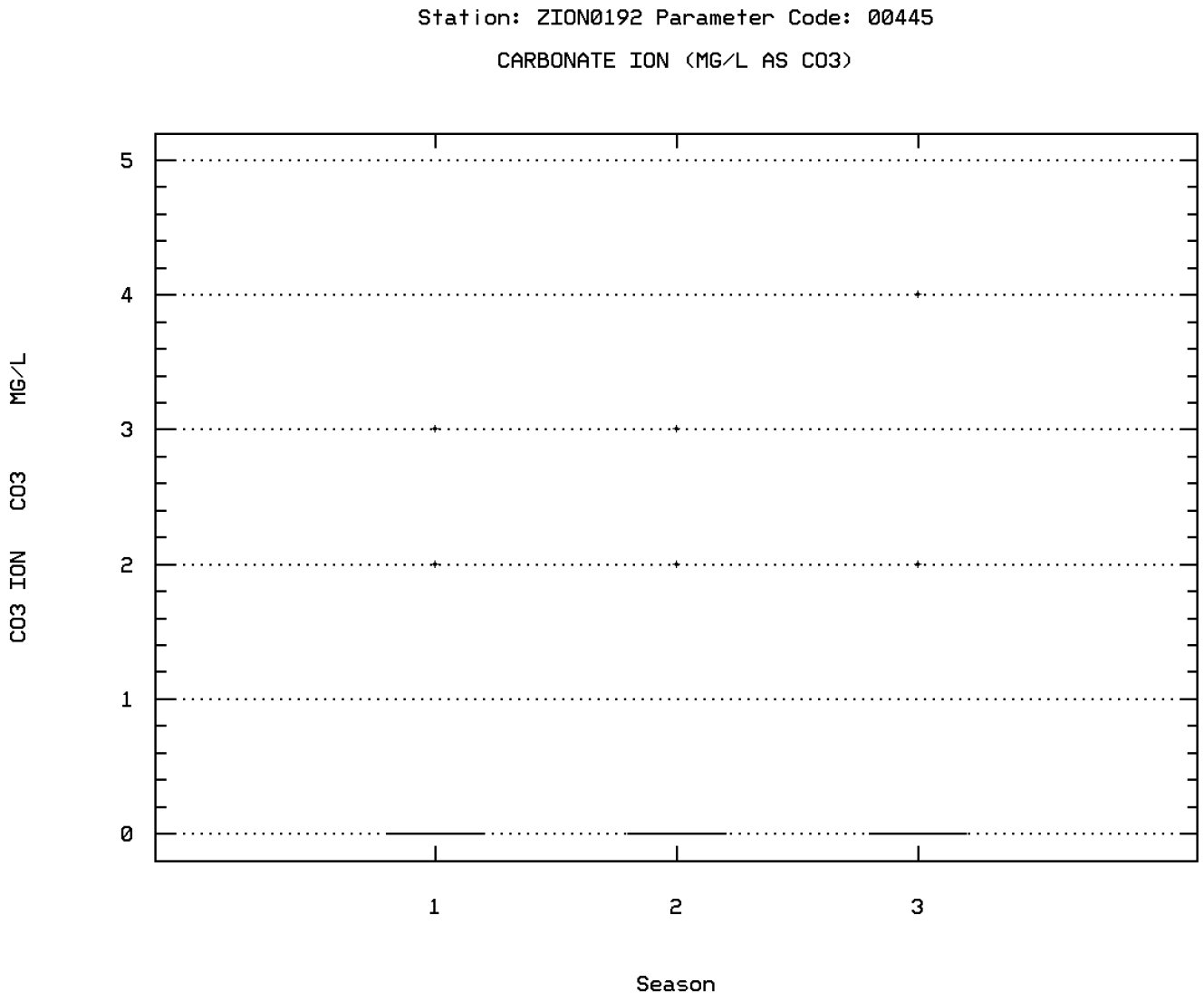
ALKALINITY, TOTAL (MG/L AS CACO3)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



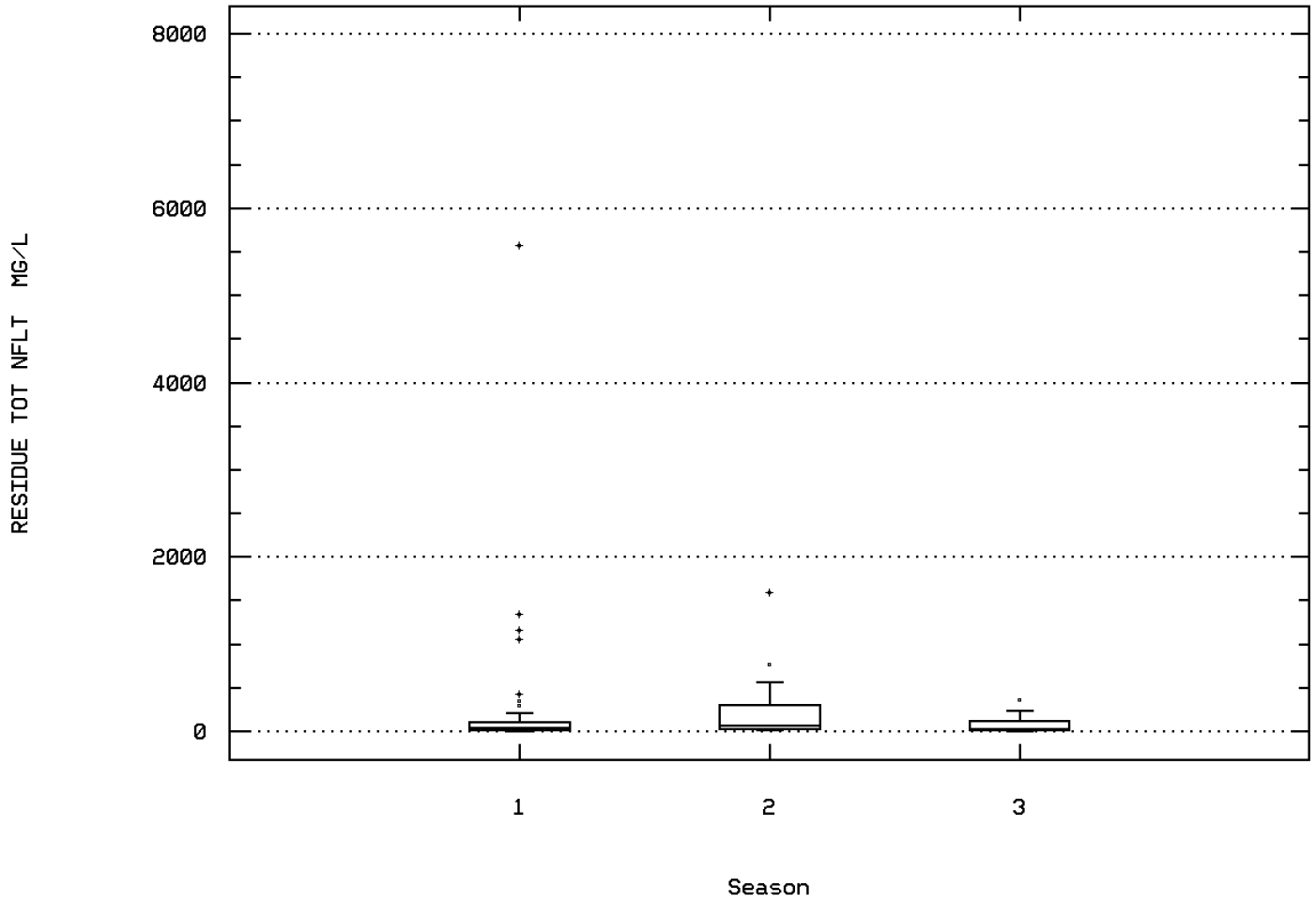
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00530

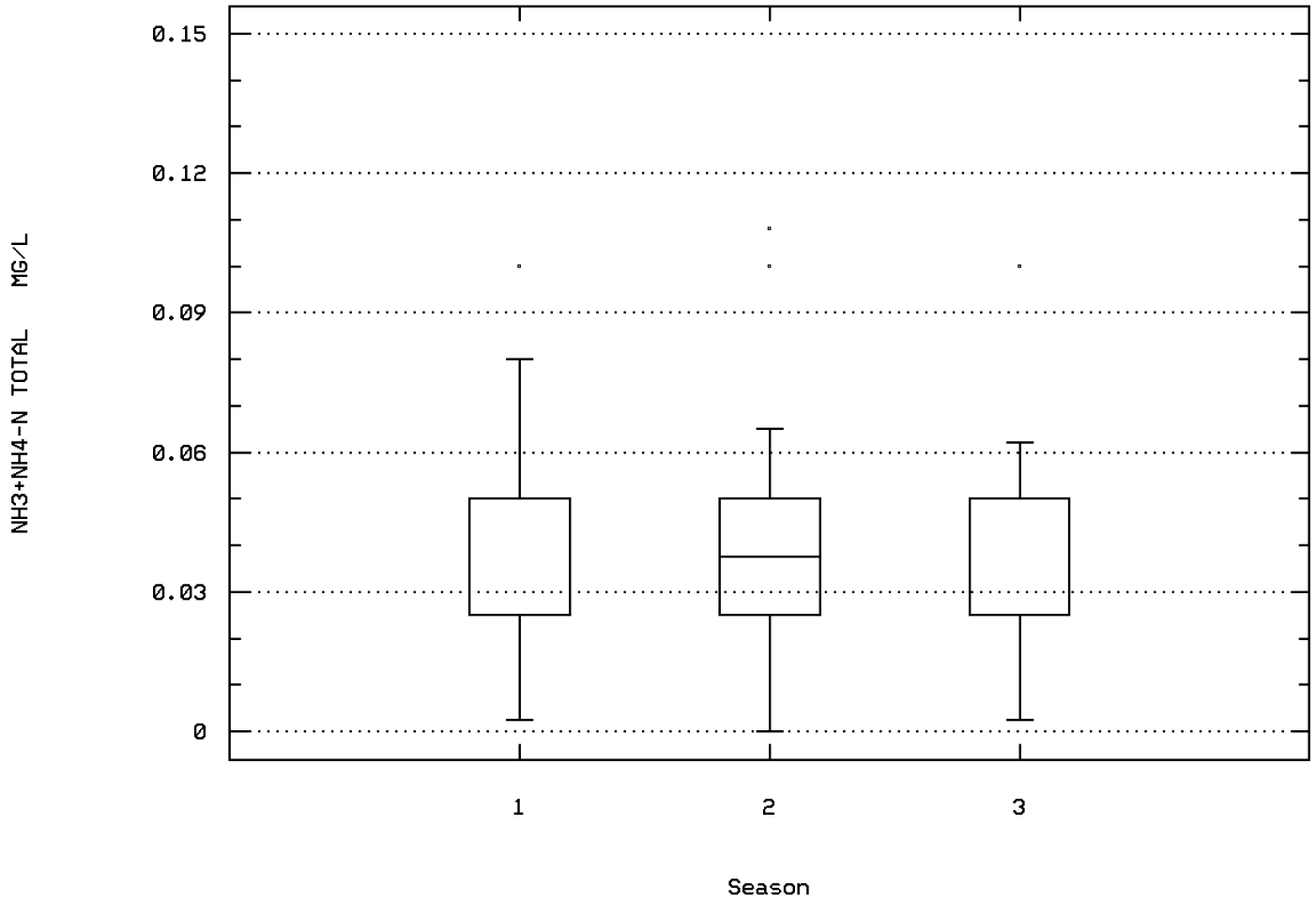
RESIDUE, TOTAL NONFILTRABLE (MG/L)



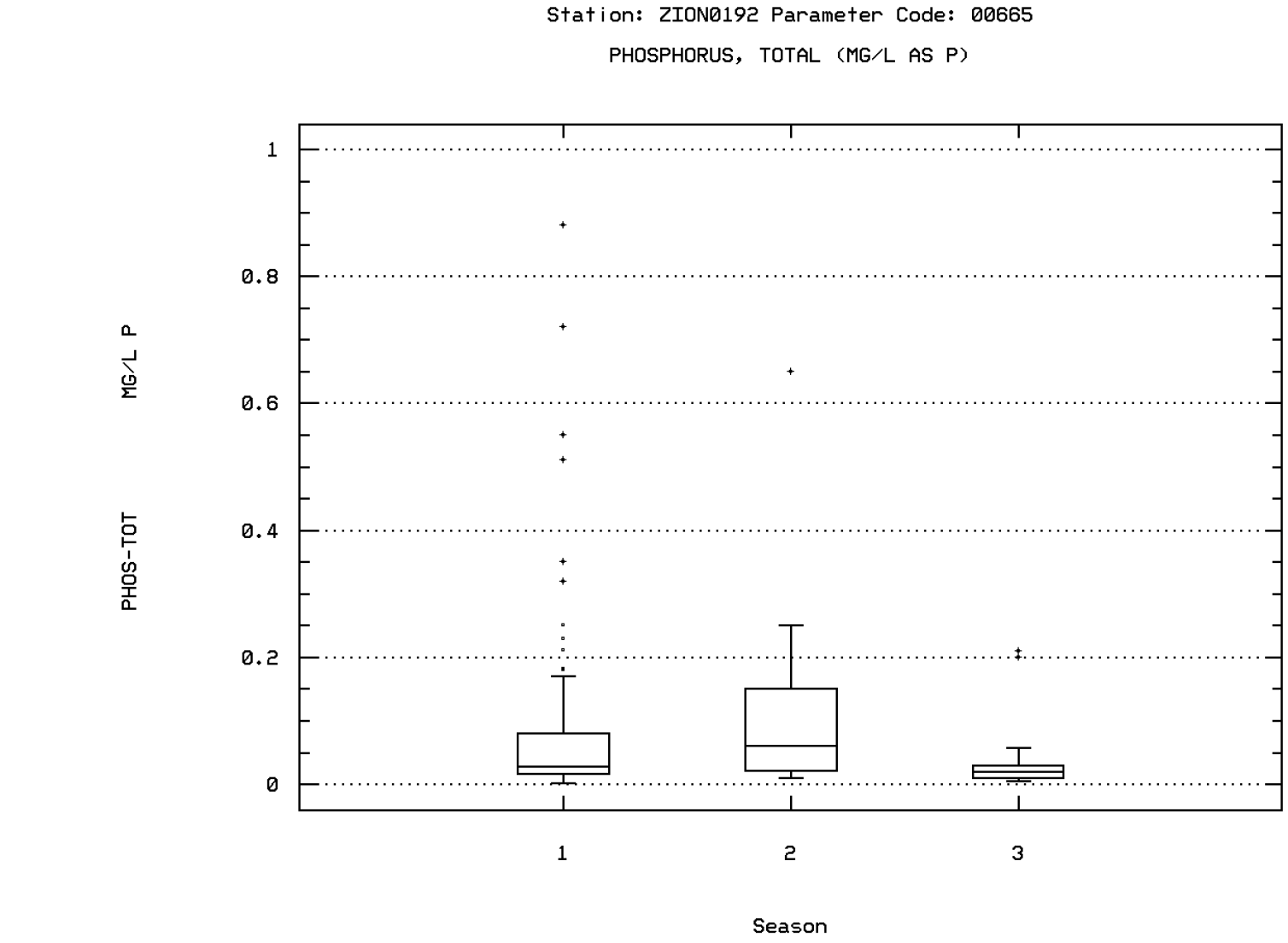
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00610

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



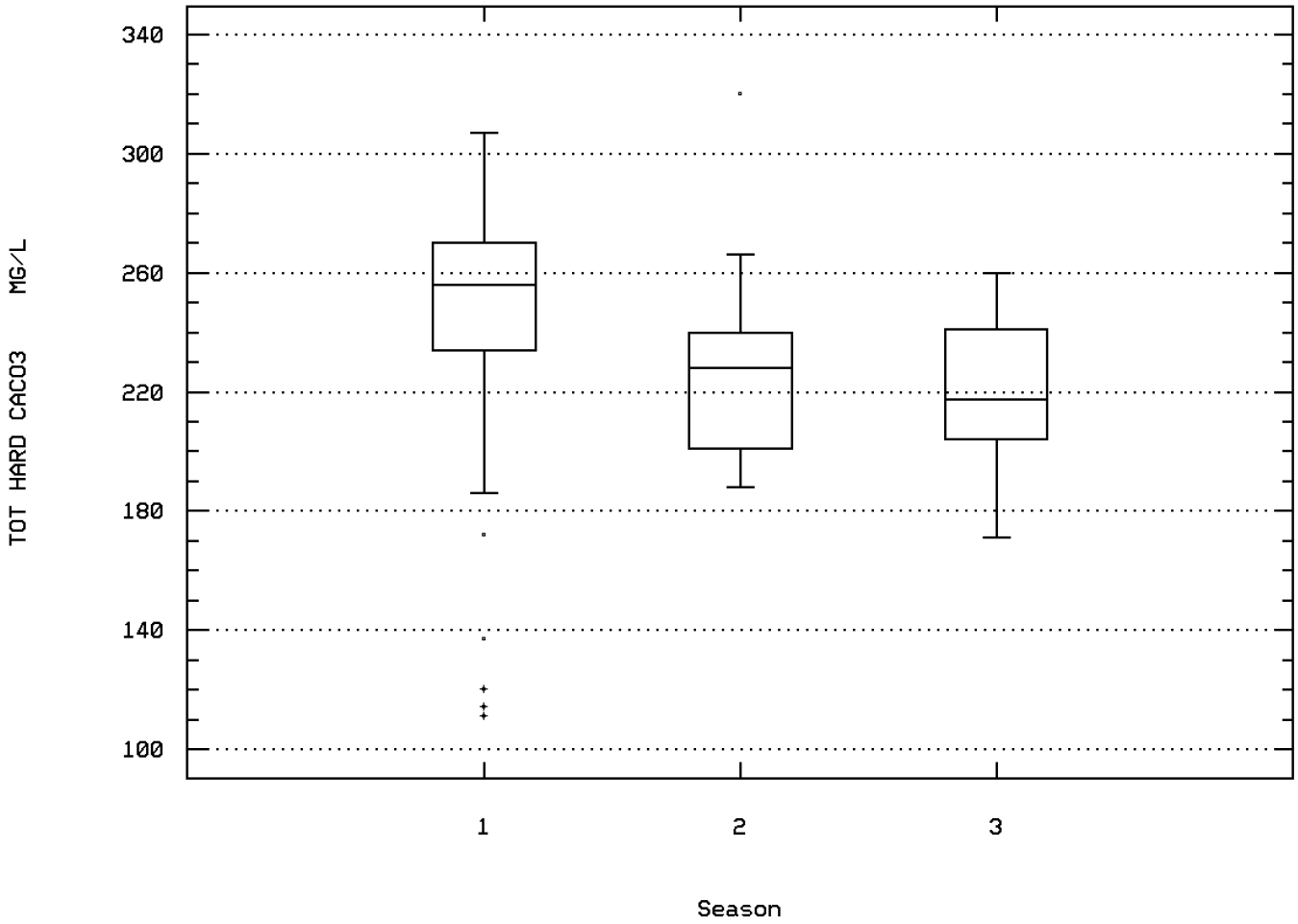
N FK VIRGIN R JUST AB CNFL W/E FK VIRGI



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00900

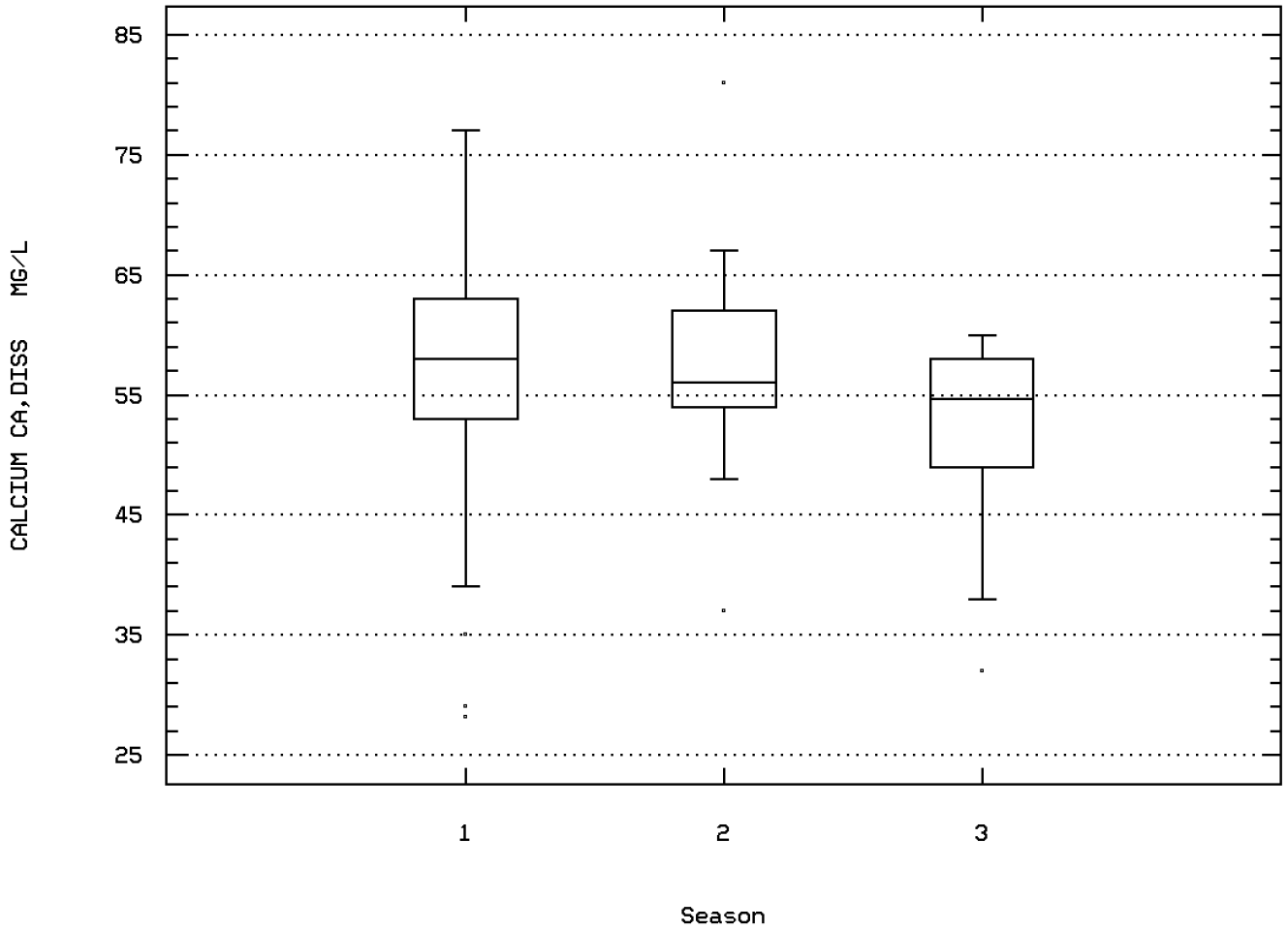
HARDNESS, TOTAL (MG/L AS CACO3)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00915

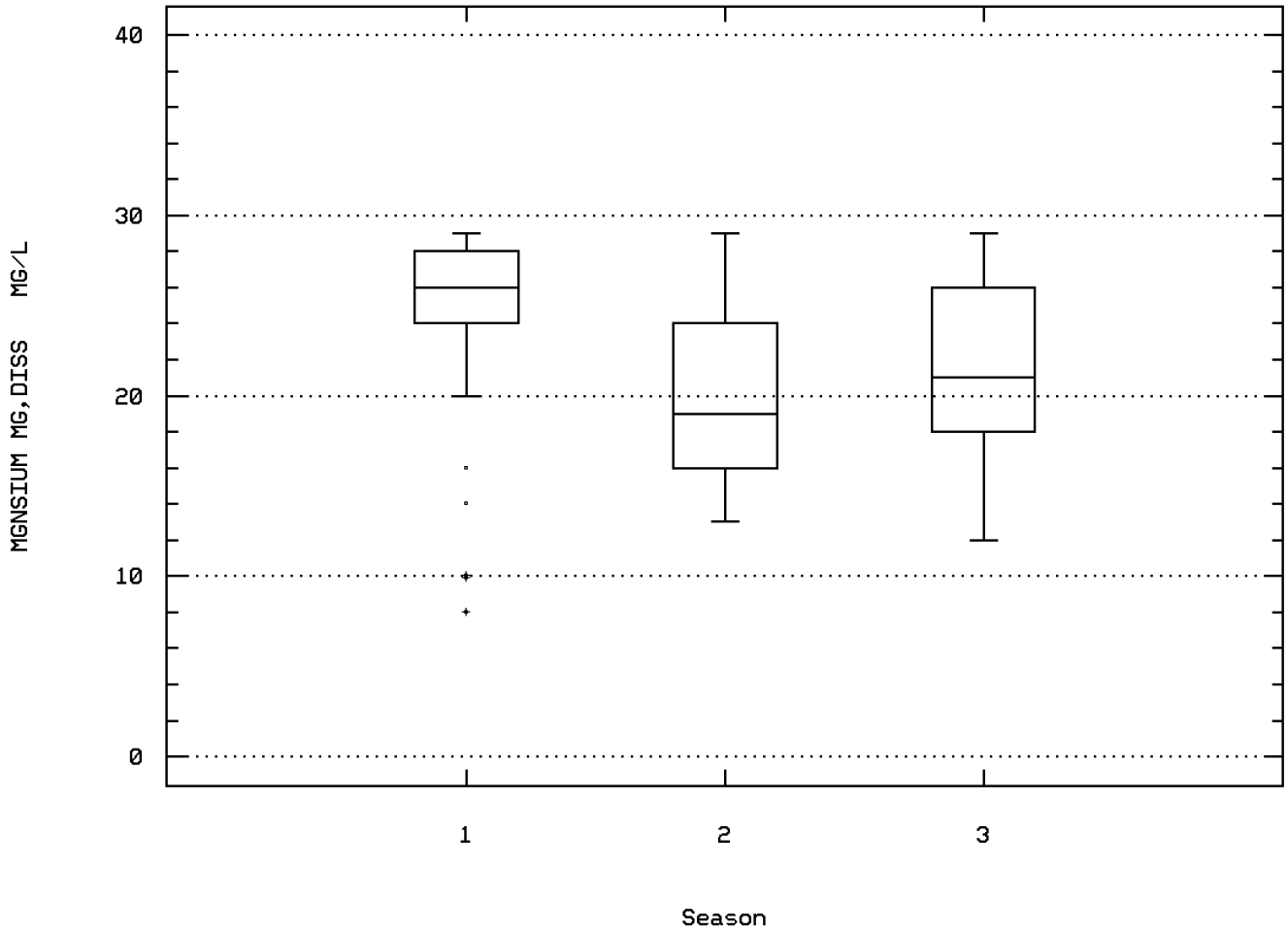
CALCIUM, DISSOLVED (MG/L AS CA)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00925

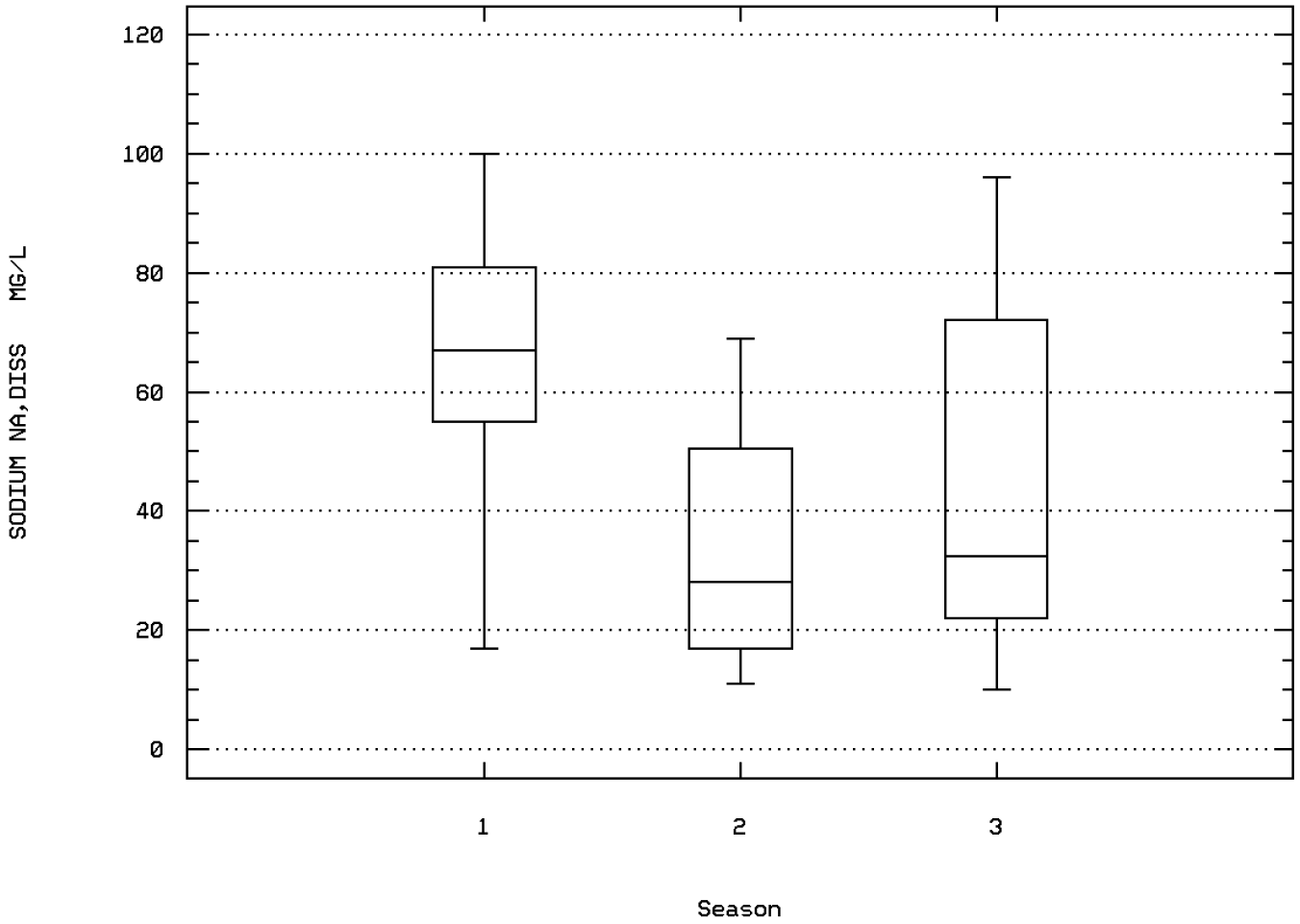
MAGNESIUM, DISSOLVED (MG/L AS MG)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00930

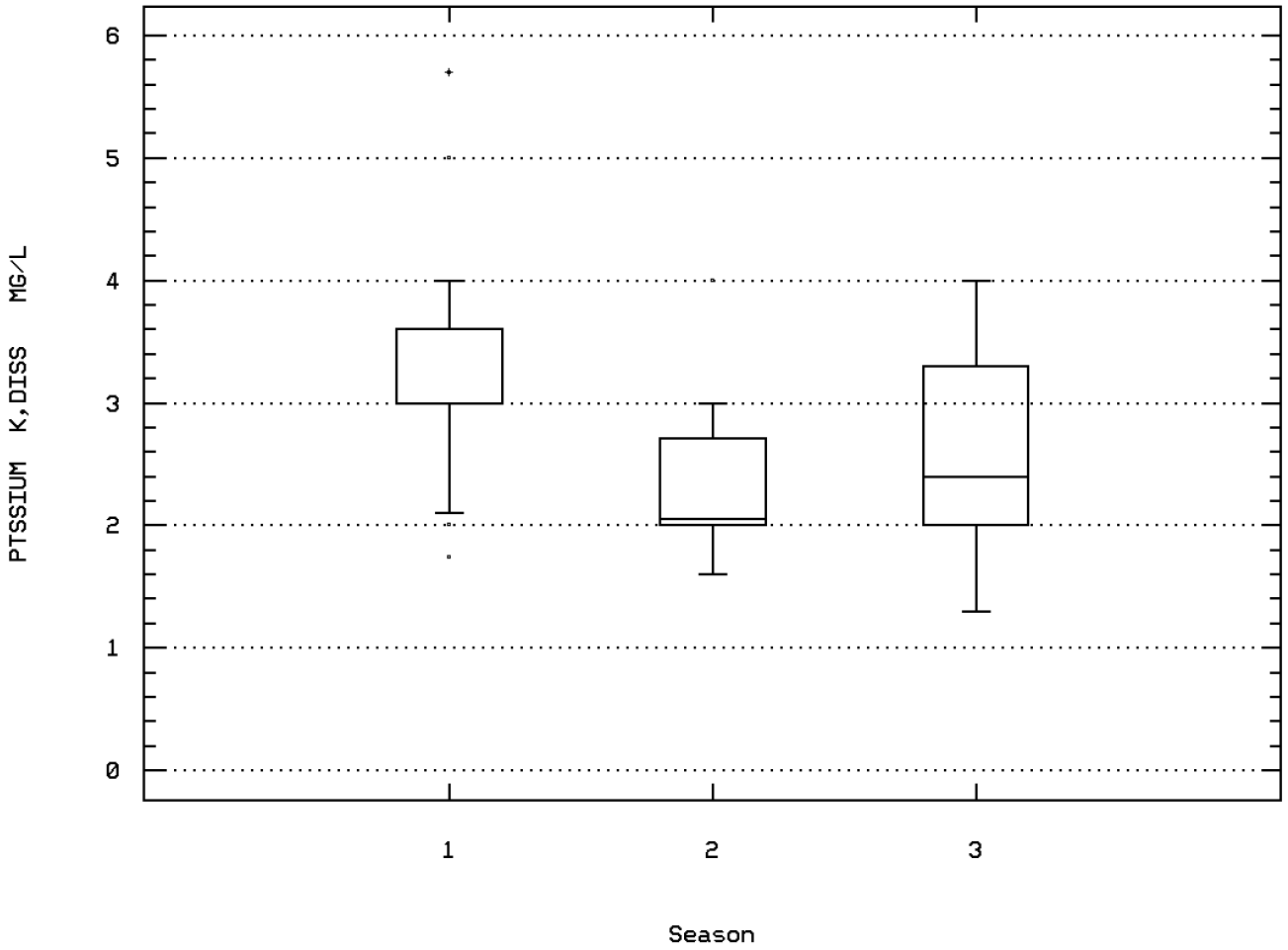
SODIUM, DISSOLVED (MG/L AS NA)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00935

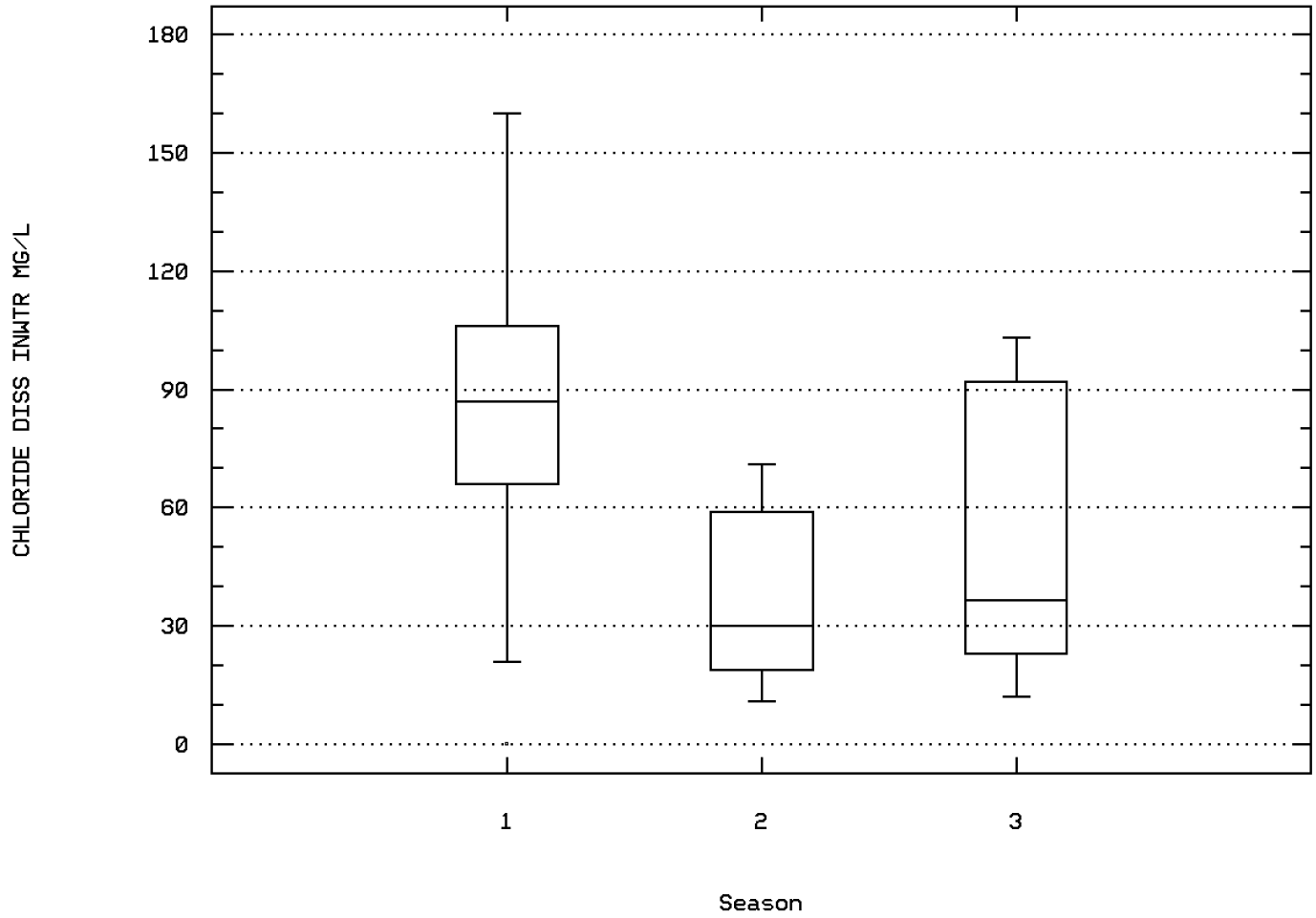
POTASSIUM, DISSOLVED (MG/L AS K)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00941

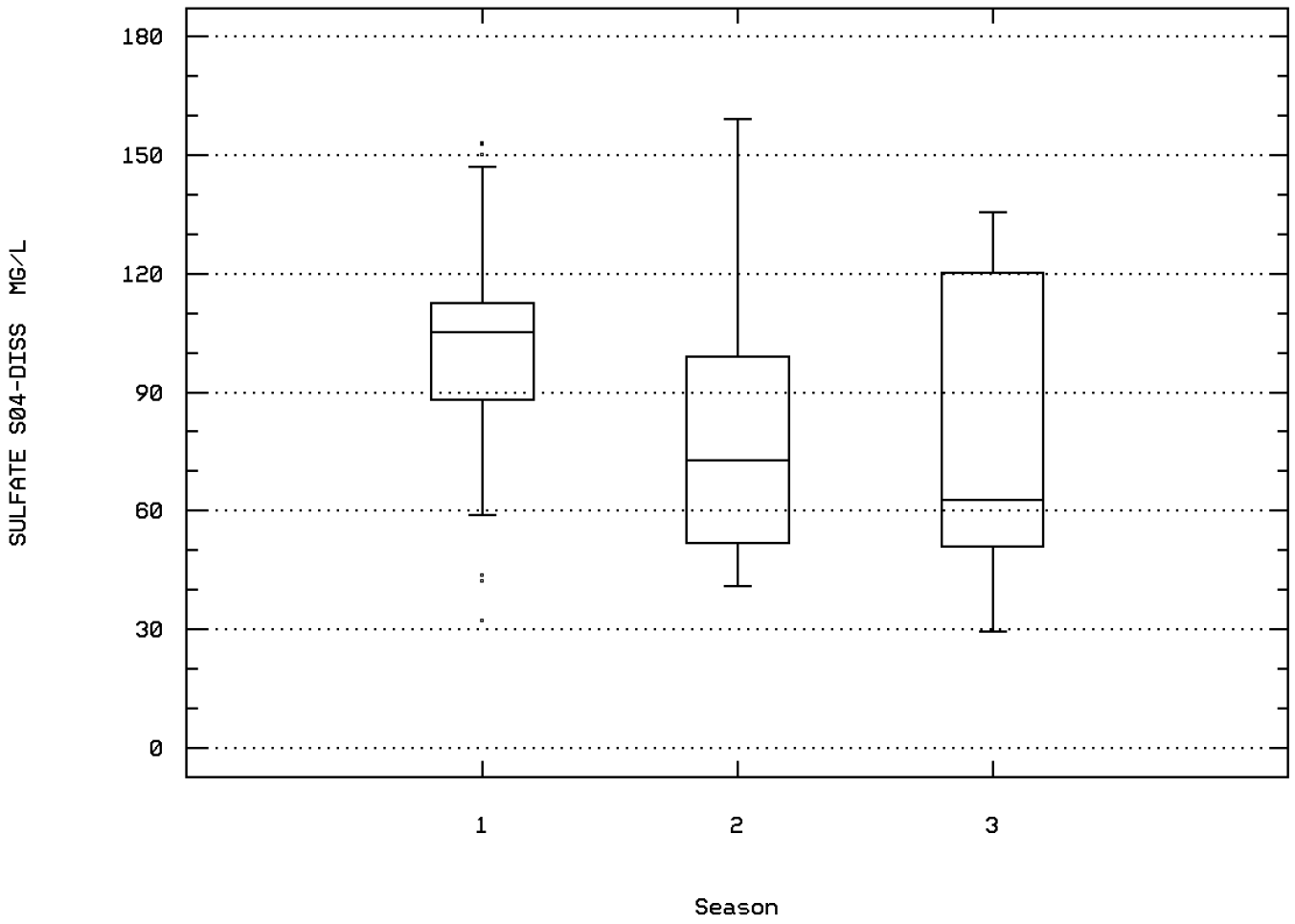
CHLORIDE, DISSOLVED IN WATER



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 00946

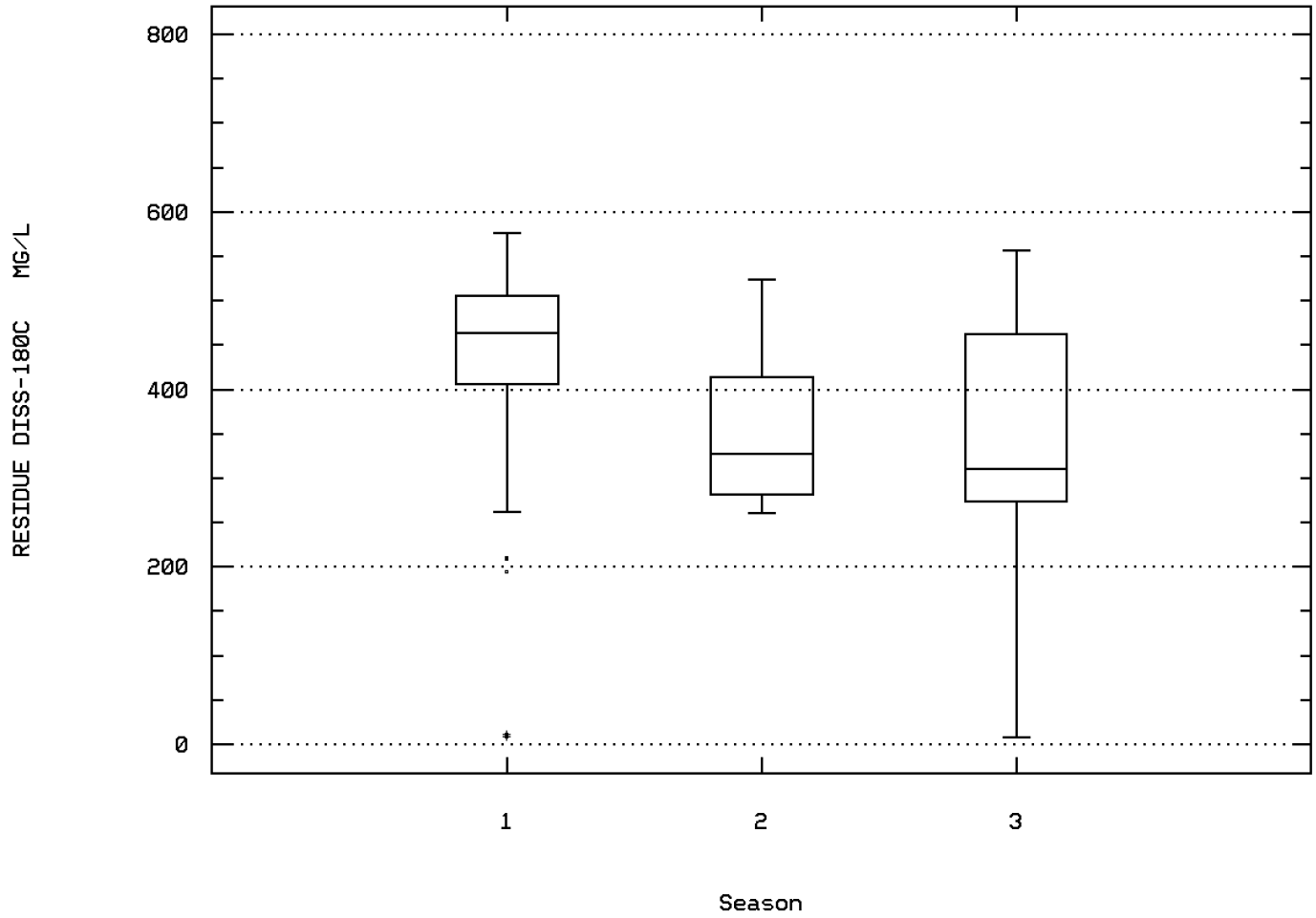
SULFATE, DISSOLVED (MG/L AS SO4)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 70300

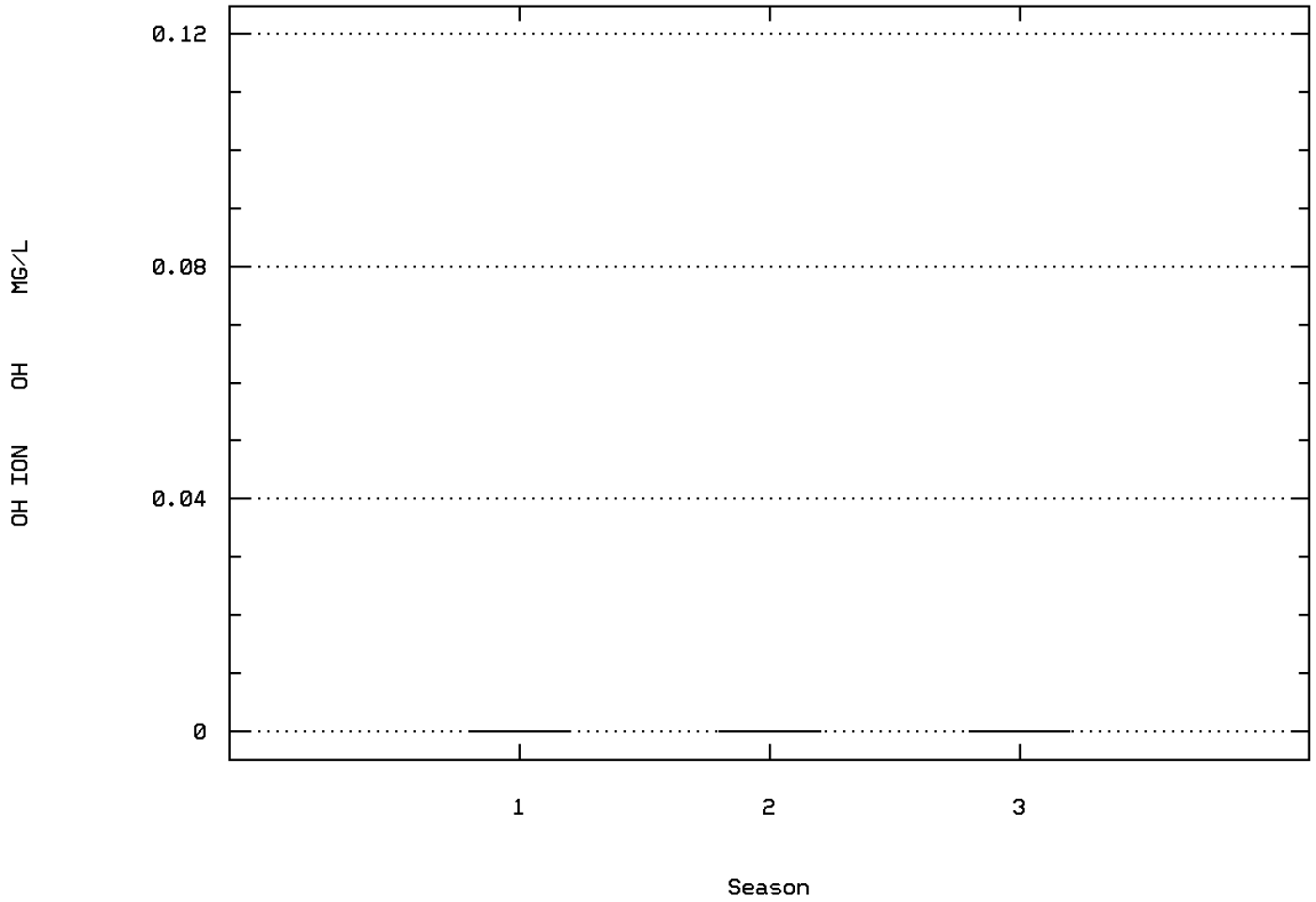
RESIDUE,TOTAL FILTRABLE (DRIED AT 180C)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station: ZION0192 Parameter Code: 71830

HYDROXIDE ION (MG/L AS OH)



N FK VIRGIN R JUST AB CNFL W/E FK VIRGI

Station Inventory for Station: ZION0193

NPS Station ID: ZION0193 LAT/LON: 37.163281/-113.013059 Agency: 11NPSWRD Date Created: 08/02/97
Location: NORTH FORK OF THE VIRGIN RIVER ABOVE CONFLUENCE FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_UTDNR_39
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3780 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE WEST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK OF THE VIRGIN RIVER ABOVE THE CONFLUENCE OF THE NORTH AND EAST FORKS. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUAD BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT SPRINGDALE UT 84767 PH(801)772-0213. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0193

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	5	8.5	13.1	24.5	2.5	88.8	9.423	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	5	720.	636.	820.	340.	40680.	201.693	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	5	9.8	9.22	11.9	7.2	3.937	1.984	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	5	8.3	8.26	8.4	8.	0.028	0.167	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	5	8.3	8.232	8.4	8.	0.029	0.17	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	5	0.005	0.006	0.01	0.004	0.	0.003	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	167.	161.4	200.	130.	759.8	27.564	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	5	0.1	0.099	0.2	0.045	0.004	0.062	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/20/81-08/23/82	4	0.02	0.019	0.03	0.005	0.	0.01	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	5	250.	228.	260.	160.	1870.	43.243	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	59.	67.6	110.	27.	1150.3	33.916	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	5	59.	57.6	63.	47.	38.8	6.229	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	5	26.	20.92	26.	9.6	55.232	7.432	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	5	65.	49.2	71.	8.	735.2	27.115	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	5	1.9	1.48	2.1	0.3	0.592	0.769	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	5	3.6	3.3	4.	1.6	0.94	0.97	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	5	89.	68.	100.	18.	1370.5	37.02	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	5	100.	86.2	110.	22.	1363.2	36.922	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	5	0.2	0.16	0.2	0.1	0.003	0.055	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	5	9.5	9.42	11.	7.1	2.807	1.675	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0193

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	5	50.	42.	50.	20.	170.	13.038	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	1	700.	700.	700.	700.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	1500.	1500.	1500.	1500.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	3.176	3.176	3.176	3.176	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			1500.								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	1	1800.	1800.	1800.	1800.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/24/81-08/24/81	1	3.255	3.255	3.255	3.255	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			1800.								
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	5	461.	392.2	486.	192.	15320.2	123.775	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0193

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
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									
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00	1	0	0.00									
		Drinking Water	6.	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: ZION0193

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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: ZION0194

NPS Station ID: ZION0194
LAT/LON: 37.466892/-113.013892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA514R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_24 /5075817
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0194

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/80-07/15/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/80-07/15/80	1	430.	430.	430.	430.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/80-07/15/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/80-07/15/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/80-07/15/80	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/80-07/15/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/80-07/15/80	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/80-07/15/80	1	12.02	12.02	12.02	12.02	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/80-07/15/80	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/15/80-07/15/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/15/80-07/15/80	1	1.286	1.286	1.286	1.286	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/15/80-07/15/80	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/15/80-07/15/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/15/80-07/15/80	1	5700.	5700.	5700.	5700.	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: ZION0194

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0195

NPS Station ID: ZION0195 LAT/LON: 37.161670/-113.014616 Agency: 11NPSWRD Date Created: 08/02/97
Location: E FORK VIRGIN R ABOVE CONFLUENCE WITH N FORK FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_EPA_VR5
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3780 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE WEST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE EAST FORK VIRGIN RIVER ABOVE CONFLUENCE WITH NORTH FORK VIRGIN RIVER. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0195

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	2	1.25	1.25	1.5	1.	0.125	0.354	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/14/76	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	2	57.5	57.5	62.	53.	40.5	6.364	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	2	625.	625.	630.	620.	50.	7.071	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	2	11.4	11.4	11.5	11.3	0.02	0.141	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	2	7.85	7.85	7.9	7.8	0.005	0.071	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/14/76	2	7.847	7.847	7.9	7.8	0.005	0.071	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/14/76	2	0.014	0.014	0.016	0.013	0.	0.002	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	2	110.5	110.5	139.	82.	1624.5	40.305	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	2	23.	23.	24.	22.	2.	1.414	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	2	100.	100.	105.	95.	50.	7.071	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	2	0.28	0.28	0.28	0.28	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	2	2750.	2750.	2900.	2600.	45000.	212.132	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	1	66.	66.	66.	66.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	2	105.	105.	115.	95.	200.	14.142	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	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: ZION0195

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	1	2180.	2180.	2180.	2180.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	1 ##	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	2	419.	419.	422.	416.	18.	4.243	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	2	1.4	1.4	2.5	0.3	2.42	1.556	**	**	**	**
75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0195

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	2	1.00	2	2	1.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	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.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	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.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	1	0.50	2	1	0.50									
		Drinking Water	2.	2	1	0.50	2	1	0.50									

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

Station Inventory for Station: ZION0196

NPS Station ID: ZION0196 LAT/LON: 37.162476/-113.015198 Agency: 11NPSWRD Date Created: 08/02/97
Location: N FORK VIRGIN R ABOVE CONFLUENCE WITH E FORK FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_EPA_NFVR1
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3780 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE WEST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE NORTH FORK VIRGIN RIVER ABOVE CONFLUENCE WITH EAST FORK VIRGIN RIVER. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0196

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	3	1.	1.	2.	0.	1.	1.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	3	110.	86.333	115.	34.	2060.333	45.391	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	3	900.	916.667	950.	900.	833.333	28.868	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	3	11.4	11.567	11.9	11.4	0.083	0.289	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	3	8.	7.983	8.05	7.9	0.006	0.076	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/15/76	3	8.	7.979	8.05	7.9	0.006	0.077	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/15/76	3	0.01	0.011	0.013	0.009	0.	0.002	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	3	226.	176.333	234.	69.	8656.333	93.039	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	3	83.	79.333	86.	69.	82.333	9.074	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	3	98.	100.333	110.	93.	76.333	8.737	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	3	0.18	0.183	0.19	0.18	0.	0.006	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	3	4200.	3366.667	4400.	1500.	2623333.333	1619.671	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	1	64.	64.	64.	64.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	3	110.	95.	120.	55.	1225.	35.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	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: ZION0196

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	1	1940.	1940.	1940.	1940.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	1 ##	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	3	518.	476.	528.	382.	6652.	81.56	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	3	2.6	2.433	4.4	0.3	4.223	2.055	**	**	**	**
75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0196

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	2	0.67	3	2	0.67									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	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.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	2	0.67	3	2	0.67									
		Drinking Water	2.	3	2	0.67	3	2	0.67									

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

Station Inventory for Station: ZION0197

NPS Station ID: ZION0197
LAT/LON: 37.160615/-113.016116
Agency: 11NPSWRD
Date Created: 08/02/97
Location: VIRGIN RIVER BELOW CONFLUENCE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_38
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3760
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE SPRINGDALE WEST UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE VIRGIN RIVER BELOW THE CONFLUENCE OF THE NORTH AND EAST FORKS DOWNSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR BASIN NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUAD BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0197

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	5	9.5	13.14	26.2	4.	74.848	8.651	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	5	670.	631.	740.	355.	25455.	159.546	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	5	9.7	9.36	11.4	7.	2.913	1.707	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	5	8.3	8.34	8.5	8.2	0.013	0.114	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	5	8.3	8.328	8.5	8.2	0.013	0.115	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	5	0.005	0.005	0.006	0.003	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	168.	165.6	190.	130.	526.8	22.952	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	5	0.3	0.3	0.4	0.2	0.01	0.1	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	5 ##	0.005	0.011	0.02	0.005	0.	0.008	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	5	260.	244.	280.	160.	2280.	47.749	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	93.	77.6	100.	27.	943.3	30.713	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	5	60.	57.4	62.	47.	35.8	5.983	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	5	27.	24.32	30.	9.6	69.212	8.319	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	5	48.	40.8	52.	9.	319.7	17.88	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	5	1.4	1.2	1.5	0.3	0.255	0.505	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	5	3.6	3.42	4.6	1.6	1.272	1.128	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	5	54.	46.2	66.	13.	424.7	20.608	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	5	110.	96.6	130.	13.	2352.8	48.506	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	5	0.2	0.2	0.3	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	5	11.	9.84	11.	6.7	3.503	1.872	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	5	50.	46.	60.	20.	280.	16.733	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	5	418.	379.6	457.	179.	12849.8	113.357	**	**	**	**

** - Less than 9 observations ## - 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: ZION0197

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	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: ZION0198

NPS Station ID: ZION0198
LAT/LON: 37.444698/-113.019310
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD005R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_16 /5083892
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0198

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	1	390.	390.	390.	390.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/80-06/28/80	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	1	175.	175.	175.	175.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	1	8.69	8.69	8.69	8.69	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	1	54.	54.	54.	54.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	1	218.	218.	218.	218.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	1	1.039	1.039	1.039	1.039	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/28/80-06/28/80	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/28/80-06/28/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	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: ZION0198

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0199

NPS Station ID: ZION0199
LAT/LON: 37.386670/-113.021948
Agency: 112WRD
Date Created: 02/28/78
Location: (C-39-10)30CDB-S2
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372312113011901
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 12.30
On/Off RF1:
RF3 Index: 15010008002516.91
RF3 Mile Point: 20.16
Distance from RF3: 0.24
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0199

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/03/70-09/03/70	1	309.	309.	309.	309.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/03/70-09/03/70	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/03/70-09/03/70	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/03/70-09/03/70	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/03/70-09/03/70	1	169.	169.	169.	169.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/03/70-09/03/70	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/03/70-09/03/70	1	161.	161.	161.	161.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	09/03/70-09/03/70	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/03/70-09/03/70	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/03/70-09/03/70	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/03/70-09/03/70	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/03/70-09/03/70	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/03/70-09/03/70	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	09/03/70-09/03/70	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/03/70-09/03/70	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/03/70-09/03/70	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/03/70-09/03/70	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/03/70-09/03/70	1	300.	300.	300.	300.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/03/70-09/03/70	1	196.	196.	196.	196.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	09/03/70-09/03/70	1	197.	197.	197.	197.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/03/70-09/03/70	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	09/03/70-09/03/70	1	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0199

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0199

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0200

NPS Station ID: ZION0200
LAT/LON: 37.490504/-113.024809
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD001R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_25 /5083889
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0200

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/80-06/28/80	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	1	8.38	8.38	8.38	8.38	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	1	135.	135.	135.	135.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	1	0.472	0.472	0.472	0.472	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/28/80-06/28/80	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/28/80-06/28/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	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: ZION0200

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0201

NPS Station ID: ZION0201 LAT/LON: 37.151254/-113.024726 Agency: 21UTDHDW Date Created: 05/26/90
Location: ROCKVILLE PIPELINE CO - RIMROCK SPRING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701401 /UT4900377001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.60 On/Off RF1:
RF3 Index: 15010008002223.75 RF3 Mile Point: 23.92 Distance from RF3: 0.12 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-PRIVATELY OWNED SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-106

Parameter Inventory for Station: ZION0201

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/17/78-11/12/89	4	0.65	0.95	2.3	0.2	0.937	0.968	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/17/78-11/12/89	4	599.5	593.5	610.	565.	445.667	21.111	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/17/78-11/12/89	4	8.15	8.175	8.5	7.9	0.062	0.25	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/17/78-11/12/89	4	8.147	8.125	8.5	7.9	0.066	0.257	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/17/78-11/12/89	4	0.007	0.008	0.013	0.003	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/10/80-11/12/89	3	3.	2.667	3.	2.	0.333	0.577	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/17/78-11/12/89	4	285.5	286.5	314.	261.	517.667	22.752	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/17/78-11/12/89	4	344.5	345.5	383.	310.	1029.667	32.088	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/17/78-11/10/80	2 ##	2.25	2.25	4.	0.5	6.125	2.475	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/10/80-11/12/89	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/17/78-11/12/89	4 ##	0.015	0.015	0.025	0.005	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/17/78-11/12/89	4	104.	100.25	113.	80.	224.25	14.975	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/17/78-11/12/89	4	24.	21.5	26.	12.	41.	6.403	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/17/78-11/12/89	4	11.5	11.25	13.	9.	2.917	1.708	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/17/78-11/12/89	4	100.	103.5	115.	99.	59.	7.681	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/17/78-11/12/89	4	4.5	4.5	5.	4.	0.333	0.577	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/17/78-11/12/89	4	18.5	19.75	24.	18.	8.25	2.872	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/17/78-11/12/89	4	16.5	17.75	24.	14.	22.917	4.787	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/17/78-11/12/89	4	0.565	0.568	0.62	0.52	0.002	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/17/78-11/12/89	4	12.	12.	13.	11.	0.667	0.816	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	11/10/80-11/12/89	3	1.	1.5	2.5	1.	0.75	0.866	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/17/78-04/17/78	1	170.	170.	170.	170.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	11/10/80-11/12/89	3	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/17/78-11/10/80	3	275.	296.667	340.	275.	1408.333	37.528	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	11/10/80-11/12/89	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/17/78-11/12/89	4 ##	2.5	2.	2.5	0.5	1.	1.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	11/10/80-11/12/89	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/17/78-04/17/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0201

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01042	COPPER, TOTAL (UG/L AS CU)	11/10/80-11/12/89	3 ##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/17/78-04/17/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/10/80-11/12/89	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	11/10/80-11/12/89	3	55.	52.333	57.	45.	41.333	6.429	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/17/78-04/17/78	1	57.	57.	57.	57.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	11/10/80-11/10/80	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	11/10/80-11/12/89	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/17/78-04/17/78	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	11/10/80-11/12/89	3 ##	5.	5.833	10.	2.5	14.583	3.819	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/17/78-04/17/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	11/10/80-11/12/89	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	06/18/81-06/09/87	5	15.	20.2	49.	9.	272.7	16.514	**	**	**	**
03501	BETA, TOTAL	09/13/83-09/13/83	1	15.	15.	15.	15.	0.	0.	**	**	**	**
09501	RADIUM 226, TOTAL	06/18/81-06/09/87	8	4.5	4.125	6.	2.	1.839	1.356	**	**	**	**
11501	RADIUM 228, TOTAL	09/16/81-09/01/87	2	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/17/78-04/17/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/17/78-11/12/89	4	351.	355.75	395.	326.	856.25	29.262	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/17/78-04/17/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/17/78-11/12/89	4 ##	0.075	0.075	0.1	0.05	0.001	0.029	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/17/78-11/12/89	4 ##	0.128	0.179	0.45	0.01	0.043	0.207	**	**	**	**

** - Less than 9 observations ## - 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: ZION0201

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	3	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	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									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00				1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	3	0	0.00	3	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	3	0	0.00	3	0	0.00									
		Drinking Water	5.	3	0	0.00	3	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00				1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	3	0	0.00	3	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00				1	0	0.00						
		Drinking Water	1300.	1	0	0.00				1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	3	0	0.00	3	0	0.00									
		Drinking Water	1300.	3	0	0.00	3	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00				1	0	0.00						
		Drinking Water	15.	1	0	0.00				1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0201

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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						
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00				1	0	0.00						
		Drinking Water	5000.	1	0	0.00				1	0	0.00						
01092	ZINC, TOTAL	Fresh Acute	120.	3	0	0.00	3	0	0.00									
		Drinking Water	5000.	3	0	0.00	3	0	0.00									
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.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
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: ZION0202

NPS Station ID: ZION0202
LAT/LON: 37.149726/-113.025005
Agency: 112WRD
Date Created: 06/29/78
Location: (C-42-10) 7BDD- 1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370859113013001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 20.20
On/Off RF1:
RF3 Index: 15010008071300.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0202

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/28/75-12/28/75	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/28/75-12/28/75	1	625.	625.	625.	625.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/28/75-12/28/75	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/28/75-12/28/75	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/28/75-12/28/75	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	12/28/75-12/28/75	1	94.	94.	94.	94.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/28/75-12/28/75	1	303.	303.	303.	303.	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	12/28/75-12/28/75	1	302.	302.	302.	302.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/28/75-12/28/75	1	369.	369.	369.	369.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/28/75-12/28/75	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/28/75-12/28/75	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/28/75-12/28/75	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/28/75-12/28/75	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/28/75-12/28/75	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/28/75-12/28/75	1	114.	114.	114.	114.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/28/75-12/28/75	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	12/28/75-12/28/75	1	66.	66.	66.	66.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/28/75-12/28/75	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/28/75-12/28/75	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/28/75-12/28/75	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/28/75-12/28/75	1	0.68	0.68	0.68	0.68	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/28/75-12/28/75	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	12/28/75-12/28/75	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/28/75-12/28/75	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/28/75-12/28/75	1	170.	170.	170.	170.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	12/28/75-12/28/75	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/28/75-12/28/75	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/28/75-12/28/75	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	12/28/75-12/28/75	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/28/75-12/28/75	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	12/28/75-12/28/75	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/28/75-12/28/75	1	75.	75.	75.	75.	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: ZION0202

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	12/28/75-12/28/75	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	12/28/75-12/28/75	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/28/75-12/28/75	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	12/28/75-12/28/75	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/28/75-12/28/75	1	368.	368.	368.	368.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/28/75-12/28/75	1	394.	394.	394.	394.	0.	0.	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	12/28/75-12/28/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	12/28/75-12/28/75	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: ZION0202

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
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									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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									
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									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	1	0	0.00	1	0	0.00									
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: ZION0203

NPS Station ID: ZION0203
LAT/LON: 37.145003/-113.035004
Agency: 112WRD
Date Created: 12/02/81
Location: VIRGIN R. BELOW CONFLUENCE, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370842113020601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 20.40
On/Off RF1:
RF3 Index: 15010008035000.00
RF3 Mile Point: 0.79
Distance from RF3: 0.26
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0203

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	4	13.25	15.425	26.2	9.	64.989	8.062	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-09/01/82	4	24.75	22.75	28.	13.5	41.417	6.436	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	5	667.	666.4	671.	661.	13.8	3.715	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-09/01/82	4	86.5	248.25	750.	70.	111978.917	334.633	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	4	692.5	620.	740.	355.	33216.667	182.254	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	4	9.05	8.85	10.3	7.	2.15	1.466	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-09/01/82	4	8.35	8.375	8.5	8.3	0.009	0.096	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-09/01/82	4	8.347	8.367	8.5	8.3	0.009	0.096	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	4	0.004	0.004	0.005	0.003	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	4	8.2	8.25	8.4	8.2	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	4	8.2	8.242	8.4	8.2	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	4	0.006	0.006	0.006	0.004	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	4	0.25	0.275	0.4	0.2	0.009	0.096	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/04/82	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	4 ##	0.013	0.013	0.02	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	4	260.	240.	280.	160.	2933.333	54.16	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	4	60.	57.25	62.	47.	47.583	6.898	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	4	27.	23.4	30.	9.6	86.64	9.308	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	4	47.5	39.05	52.	9.2	400.677	20.017	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	4	1.4	1.15	1.5	0.3	0.323	0.569	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-09/01/82	4	28.	23.75	28.	11.	72.25	8.5	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	4	3.8	3.45	4.6	1.6	1.69	1.3	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-09/01/82	4	47.5	41.25	57.	13.	402.917	20.073	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-09/01/82	4	120.	95.75	130.	13.	3132.25	55.967	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	4	0.2	0.175	0.2	0.1	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	4	11.	9.925	11.	6.7	4.623	2.15	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	4	50.	45.	60.	20.	366.667	19.149	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	4	416.5	367.25	457.	179.	16116.25	126.95	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-09/01/82	4	102.3	161.375	362.	78.9	18118.269	134.604	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-09/01/82	4	0.565	0.498	0.62	0.24	0.03	0.174	**	**	**	**

** - Less than 9 observations ## - 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: ZION0203

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0204

NPS Station ID: ZION0204
LAT/LON: 37.463948/-113.036504
Agency: 11NPSWRD
Date Created: 08/02/97
Location: KOLOB CREEK ABOVE RESERVOIR
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_46
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 8220
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE KOLOB RESERVOIR UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON KOLOB CREEK ABOVE RESERVOIR UPSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0204

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-08/17/81	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/17/81-08/17/81	1	460.	460.	460.	460.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/17/81-08/17/81	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-08/17/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-08/17/81	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-08/17/81	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/17/81-08/17/81	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-08/17/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-08/17/81	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-08/17/81	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/17/81-08/17/81	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-08/17/81	1	82.	82.	82.	82.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-08/17/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-08/17/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-08/17/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-08/17/81	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/17/81-08/17/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/17/81-08/17/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-08/17/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-08/17/81	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-08/17/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	1	281.	281.	281.	281.	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: ZION0204

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0205

NPS Station ID: ZION0205
LAT/LON: 37.159170/-113.036670
Agency: 21UTAH
Date Created: 02/23/80
Location: VIRGIN R AT CO ROAD XING IN ROCKVILLE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495090
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO R-VIRGIN R DRAINAGE
ECO Region:
RF1 Index: 15010008006
RF1 Mile Point: 9.870
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008002424.17
RF3 Mile Point: 24.16
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0205

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/19/79-04/14/82	18	12.4	12.044	19.5	4.6	22.937	4.789	4.69	7.8	15.525	19.23
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/18/79-04/14/82	11	125.	268.927	1000.	10.2	139294.938	373.222	10.36	34.	330.	1000.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/19/79-04/14/82	18	672.	663.444	940.	480.	13425.556	115.869	484.5	616.25	711.75	805.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/18/79-04/14/82	11	655.	661.818	985.	510.	17516.364	132.349	515.	550.	710.	938.
00300	OXYGEN, DISSOLVED MG/L	04/19/79-04/14/82	18	9.3	9.111	11.	6.9	1.575	1.255	6.9	8.1	10.4	10.64
00310	BOD, 5 DAY, 20 DEG C MG/L	04/19/79-06/19/79	2	2.25	2.25	3.	1.5	1.125	1.061	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	04/19/79-04/14/82	11	15.	36.909	200.	7.5	3560.791	59.672	7.5	7.5	21.	179.
00400	PH (STANDARD UNITS)	04/19/79-04/14/82	18	8.3	8.294	8.8	7.6	0.083	0.288	7.96	8.1	8.425	8.8
00400	CONVERTED PH (STANDARD UNITS)	04/19/79-04/14/82	18	8.3	8.198	8.8	7.6	0.093	0.304	7.96	8.1	8.425	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/19/79-04/14/82	18	0.005	0.006	0.025	0.002	0.	0.005	0.002	0.004	0.008	0.012
00403	PH, LAB, STANDARD UNITS SU	04/18/79-06/19/79	3	8.3	8.367	8.5	8.3	0.013	0.115	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/18/79-06/19/79	3	8.3	8.357	8.5	8.3	0.013	0.116	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/18/79-06/19/79	3	0.005	0.004	0.005	0.003	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/18/79-04/14/82	11	2.	1.818	3.	1.	0.364	0.603	1.	1.	2.	2.8
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/18/79-04/14/82	11	180.	174.455	212.	107.	692.873	26.322	118.	166.	190.	207.6
00440	BICARBONATE ION (MG/L AS HCO3)	04/18/79-04/14/82	11	220.	211.091	258.	130.	1055.491	32.488	142.8	198.	232.	252.8
00445	CARBONATE ION (MG/L AS CO3)	04/18/79-04/14/82	11	0.	0.909	6.	0.	4.291	2.071	0.	0.	0.	5.6
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	04/19/79-04/14/82	7	306.	1016.143	4440.	2.	2561916.81	1600.599	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/19/79-04/14/82	7	306.	1016.	4440.	2.	2562207.667	1600.69	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/19/79-04/14/82	11	0.1	0.091	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.18
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/18/79-04/14/81	9 ##	0.025	0.025	0.025	0.025	0.	0.	0.025	0.025	0.025	0.025
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/18/79-04/14/81	9 ##	0.025	0.025	0.025	0.025	0.	0.	0.025	0.025	0.025	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/18/79-04/14/81	9	0.6	0.644	0.85	0.4	0.027	0.165	0.4	0.5	0.825	0.85
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/18/79-04/14/81	9	0.6	0.644	0.85	0.4	0.027	0.165	0.4	0.5	0.825	0.85
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/19/79-04/14/82	11	0.4	2.055	18.	0.1	28.057	5.297	0.1	0.2	0.9	14.6
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/19/79-04/14/82	11	0.5	0.511	0.9	0.025	0.076	0.276	0.07	0.3	0.8	0.89
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/19/79-04/14/82	11	0.1	0.5	3.65	0.025	1.143	1.069	0.026	0.03	0.55	3.06
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/18/79-04/14/81	9 ##	0.01	0.012	0.03	0.01	0.	0.007	0.01	0.01	0.01	0.03
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/20/80-04/14/82	9	13.9	13.211	30.2	0.5	109.241	10.452	0.5	2.1	22.	30.2
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/18/79-04/14/82	11	254.	516.727	3000.	208.	680968.218	825.208	212.8	244.	302.	2480.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/18/79-04/14/82	11	61.	64.727	98.	48.	186.818	13.668	49.	58.	75.	93.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/18/79-04/14/82	11	23.	26.364	38.	18.	47.855	6.918	18.4	21.	30.	38.
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/18/79-04/14/82	11	37.	36.909	66.	18.	221.291	14.876	19.	25.	46.	63.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/18/79-04/14/82	11	3.	3.364	6.	2.	1.655	1.286	2.	2.	4.	5.8
00940	CHLORIDE,TOTAL IN WATER MG/L	04/18/79-04/14/82	11	33.	34.636	67.	16.	269.455	16.415	16.	18.	48.	63.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/18/79-04/14/82	11	33.	34.636	67.	16.	269.455	16.415	16.	18.	48.	63.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/18/79-04/14/82	11	100.	118.553	267.	0.08	6392.777	79.955	12.864	83.	142.	265.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/18/79-04/14/81	9	0.23	12.527	111.	0.14	1363.644	36.928	0.14	0.155	0.305	111.

** - Less than 9 observations ## - 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: ZION0205

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/18/79-04/14/81	9	10.	9.667	11.	7.	1.5	1.225	7.	9.	10.5	11.
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/79-04/14/82	11 ##	0.5	0.773	2.	0.5	0.218	0.467	0.5	0.5	1.	1.8
01007	BARIUM, TOTAL (UG/L AS BA)	04/18/79-04/14/82	11 ##	0.025	0.065	0.2	0.025	0.003	0.056	0.025	0.025	0.1	0.18
01020	BORON, DISSOLVED (UG/L AS B)	04/18/79-04/14/81	9	95.	100.556	145.	45.	1059.028	32.543	45.	80.	132.5	145.
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/79-04/14/82	11 ##	0.5	0.909	3.	0.5	0.691	0.831	0.5	0.5	1.	2.8
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/18/79-04/14/81	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/18/79-04/14/82	11 ##	2.5	7.	40.	2.5	123.5	11.113	2.5	2.5	7.	33.5
01042	COPPER, TOTAL (UG/L AS CU)	04/18/79-04/14/82	11 ##	5.	8.364	30.	2.5	67.005	8.186	2.5	5.	11.	27.2
01051	LEAD, TOTAL (UG/L AS PB)	04/18/79-04/14/82	11 ##	5.	5.182	10.	2.5	7.864	2.804	2.5	2.5	7.	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/18/79-04/14/82	11	40.	133.318	780.	2.5	49566.114	222.634	7.	25.	135.	665.
01067	NICKEL, TOTAL (UG/L AS NI)	04/18/79-04/14/82	11 ##	10.	10.182	25.	5.	39.114	6.254	5.	5.	12.5	23.
01077	SILVER, TOTAL (UG/L AS AG)	04/18/79-04/14/82	11 ##	1.	1.636	5.	1.	1.605	1.267	1.	1.	2.5	4.5
01092	ZINC, TOTAL (UG/L AS ZN)	04/18/79-04/14/82	11	23.	28.545	60.	5.	366.873	19.154	6.	15.	48.	60.
01147	SELENIUM, TOTAL (UG/L AS SE)	04/18/79-04/14/82	11 ##	0.5	0.477	0.5	0.25	0.006	0.075	0.3	0.5	0.5	0.5
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-04/19/79	1	4300.	4300.	4300.	4300.	0.	0.	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	04/19/79-04/19/79	1	3.633	3.633	3.633	3.633	0.	0.	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			4300.								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-04/19/79	1	40.	40.	40.	40.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	04/19/79-04/19/79	1	1.602	1.602	1.602	1.602	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			40.								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/18/79-06/19/79	2 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/18/79-04/14/82	16	362.	311.438	660.	7.	39515.996	198.786	7.7	82.	426.5	557.8
71830	HYDROXIDE ION (MG/L AS OH)	04/18/79-04/14/82	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	04/18/79-04/14/81	9 ##	0.01	0.012	0.03	0.01	0.	0.007	0.01	0.01	0.01	0.03
71900	MERCURY, TOTAL (UG/L AS HG)	04/18/79-04/14/82	11 ##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	04/18/79-04/14/82	11	1.1	1.315	4.37	0.015	1.87	1.367	0.02	0.29	1.97	4.116

** - Less than 9 observations ## - 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: ZION0205

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	7	0.64	5	3	0.60	4	4	1.00	2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	18	0	0.00	10	0	0.00	4	0	0.00	4	0	0.00			
00400	PH	Other-Hi Lim.	9.	18	0	0.00	10	0	0.00	4	0	0.00	4	0	0.00			
		Other-Lo Lim.	6.5	18	0	0.00	10	0	0.00	4	0	0.00	4	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00				2	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00				2	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	250.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	250.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	11	2	0.18	5	1	0.20	4	1	0.25	2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	9	1	0.11	4	1	0.25	3	0	0.00	2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	50.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	5.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	100.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	11	1	0.09	5	1	0.20	4	0	0.00	2	0	0.00			
		Drinking Water	1300.	11	0	0.00	5	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: ZION0205

Parameter				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------n/a----------		
		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01051	LEAD, TOTAL	Fresh Acute	82.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	15.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	100.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	10 &	0	0.00	4	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	100.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	5000.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	50.	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	1	1	1.00				1	1	1.00						
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	1	0	0.00				1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	11	0	0.00	5	0	0.00	4	0	0.00	2	0	0.00			
		Drinking Water	2.	11	0	0.00	5	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

Station Inventory for Station: ZION0206

NPS Station ID: ZION0206
LAT/LON: 37.406670/-113.036948
Agency: 21UTAH
Date Created: 03/08/80
Location: KOLOB CK BL KOLOB RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495130
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN DRAINAGE
ECO Region:
RF1 Index: 15010008019
RF1 Mile Point: 20.204
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002520.45
RF3 Mile Point: 20.85
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0206

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/28/79	2	11.2	11.2	14.	8.4	15.68	3.96	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/22/79-08/28/79	2	38.5	38.5	70.	7.	1984.5	44.548	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/28/79	2	11.75	11.75	19.	4.5	105.125	10.253	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/28/79	2	237.5	237.5	255.	220.	612.5	24.749	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	2	287.5	287.5	305.	270.	612.5	24.749	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/28/79	2	8.7	8.7	10.	7.4	3.38	1.838	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/28/79	2 ##	11.5	11.5	18.	5.	84.5	9.192	**	**	**	**
00400	PH (STANDARD UNITS)	05/22/79-08/28/79	2	8.25	8.25	8.3	8.2	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/28/79	2	8.247	8.247	8.3	8.2	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/28/79	2	0.006	0.006	0.006	0.005	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/28/79	2	8.55	8.55	8.9	8.2	0.245	0.495	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/22/79-08/28/79	2	8.422	8.422	8.9	8.2	0.278	0.527	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/28/79	2	0.004	0.004	0.006	0.001	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/28/79	2	0.5	0.5	1.	0.	0.5	0.707	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	2	140.	140.	162.	118.	968.	31.113	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/28/79	2	163.	163.	182.	144.	722.	26.87	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/28/79	2	4.	4.	8.	0.	32.	5.657	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/28/79	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/28/79	2 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	2 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/28/79	2	0.675	0.675	0.75	0.6	0.011	0.106	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	2	0.675	0.675	0.75	0.6	0.011	0.106	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/28/79	2	0.75	0.75	0.9	0.6	0.045	0.212	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/28/79	2	0.135	0.135	0.18	0.09	0.004	0.064	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/28/79	2	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	2	150.	150.	168.	132.	648.	25.456	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/28/79	2	47.	47.	54.	40.	98.	9.899	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/28/79	2	8.	8.	8.	8.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/28/79	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/28/79	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/28/79	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/28/79	2	15.5	15.5	16.	15.	0.5	0.707	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	2	0.12	0.12	0.14	0.1	0.001	0.028	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/28/79	2	8.	8.	11.	5.	18.	4.243	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/28/79	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/28/79	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

Parameter Inventory for Station: ZION0206

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	2	90.	90.	105.	75.	450.	21.213	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/28/79	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/28/79	2 ##	13.25	13.25	25.	1.5	276.125	16.617	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/28/79	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/28/79	2 ##	8.75	8.75	12.5	5.	28.125	5.303	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/28/79	2	180.	180.	190.	170.	200.	14.142	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/28/79	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/28/79	2	90.	90.	160.	20.	9800.	98.995	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/28/79	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	2	1615.	1615.	2300.	930.	938450.	968.736	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	2	3.165	3.165	3.362	2.968	0.077	0.278	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			1462.532								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	2	217.	217.	430.	4.	90738.	301.227	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	2	1.618	1.618	2.633	0.602	2.063	1.436	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			41.473								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/28/79	2	172.5	172.5	193.	152.	840.5	28.991	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/28/79	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	2	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/28/79	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/28/79	2	1.135	1.135	1.73	0.54	0.708	0.841	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0206

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	2	0	0.00	1	0	0.00				1	0	0.00			
00615	NITRITE NITROGEN, TOTAL 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			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 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			
00941	CHLORIDE, DISSOLVED 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			
00946	SULFATE, DISSOLVED (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			
01002	ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	1	0	0.00				1	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			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	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			
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
01042	COPPER, TOTAL	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			
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			
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			

& - 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: ZION0206

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01077	SILVER, TOTAL	Fresh Acute	4.1	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.	2	1	0.50	1	1	1.00				1	0	0.00			
		Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	1	0.50	1	1	1.00				1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	1	0.50	1	1	1.00				1	0	0.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0207

NPS Station ID: ZION0207
LAT/LON: 37.276615/-113.037810
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA510R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_12 /5075813
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Guardian Angels UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0207

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/80-07/13/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/80-07/13/80	1	750.	750.	750.	750.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/13/80-07/13/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/13/80-07/13/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/80-07/13/80	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/80-07/13/80	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/80-07/13/80	1	40.1	40.1	40.1	40.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/80-07/13/80	1	19.39	19.39	19.39	19.39	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/13/80-07/13/80	1	53.	53.	53.	53.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/13/80-07/13/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/13/80-07/13/80	1	1.632	1.632	1.632	1.632	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/13/80-07/13/80	1	24.	24.	24.	24.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/13/80-07/13/80	1	82.8	82.8	82.8	82.8	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/13/80-07/13/80	1	17000.	17000.	17000.	17000.	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: ZION0207

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0208

NPS Station ID: ZION0208
LAT/LON: 37.424003/-113.038392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD007R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_15 /5083894
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0208

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/29/80-06/29/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/29/80-06/29/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/29/80-06/29/80	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	1	64.	64.	64.	64.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	1	234.	234.	234.	234.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	1	0.363	0.363	0.363	0.363	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/29/80-06/29/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/29/80-06/29/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/29/80-06/29/80	1	15.6	15.6	15.6	15.6	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	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: ZION0208

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0209

NPS Station ID: ZION0209
LAT/LON: 37.478809/-113.041004
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD002R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_23 /5083890
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0209

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/80-06/28/80	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	1	8.66	8.66	8.66	8.66	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	1	77.	77.	77.	77.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	1	271.	271.	271.	271.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	1	0.566	0.566	0.566	0.566	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/28/80-06/28/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/28/80-06/28/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	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: ZION0209

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0210

NPS Station ID: ZION0210
LAT/LON: 37.131670/-113.041392
Agency: 112WRD
Date Created: 04/14/78
Location: (C-42-11) 1DCB- 1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370754113022901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 5.90
On/Off RF1:
RF3 Index: 15010008021200.00
RF3 Mile Point: 0.79
Distance from RF3: 0.34
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0210

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/09/77-12/09/77	1	16.5	16.5	16.5	16.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/09/77-12/09/77	1	2400.	2400.	2400.	2400.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/09/77-12/09/77	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/09/77-12/09/77	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/09/77-12/09/77	1	1300.	1300.	1300.	1300.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/09/77-12/09/77	1	1100.	1100.	1100.	1100.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/09/77-12/09/77	1	360.	360.	360.	360.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/09/77-12/09/77	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/09/77-12/09/77	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/09/77-12/09/77	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	12/09/77-12/09/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/09/77-12/09/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/09/77-12/09/77	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/09/77-12/09/77	1	1100.	1100.	1100.	1100.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/09/77-12/09/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/09/77-12/09/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/09/77-12/09/77	1	220.	220.	220.	220.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/09/77-12/09/77	1	2000.	2000.	2000.	2000.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/09/77-12/09/77	1	2.72	2.72	2.72	2.72	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: ZION0210

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0211

NPS Station ID: ZION0211
LAT/LON: 37.445392/-113.042892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD003R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_02 /5083891
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0211

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/80-06/28/80	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/80-06/28/80	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/28/80-06/28/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/80-06/28/80	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/80-06/28/80	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/28/80-06/28/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/28/80-06/28/80	1	9.11	9.11	9.11	9.11	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/28/80-06/28/80	1	89.	89.	89.	89.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/28/80-06/28/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/28/80-06/28/80	1	126.	126.	126.	126.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/28/80-06/28/80	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/28/80-06/28/80	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/28/80-06/28/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/28/80-06/28/80	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: ZION0211

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0212

NPS Station ID: ZION0212
LAT/LON: 37.445559/-113.043616
Agency: 21UTAH
Date Created: 03/08/80
Location: KOLOB CK AB KOLOB RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495135
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN DRAINAGE
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008003803.23
RF3 Mile Point: 9.60
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0212

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	9	13.8	13.367	18.	6.5	13.028	3.609	6.5	11.2	16.15	18.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/22/79-08/09/95	9	3.	9.778	50.	1.	246.694	15.707	1.	1.5	11.	50.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/28/79	2	88.1	88.1	175.	1.2	15103.22	122.895	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	9	355.	347.556	460.	177.	8530.028	92.358	177.	280.	427.5	460.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	2	302.5	302.5	310.	295.	112.5	10.607	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	9	7.9	7.778	8.9	6.5	0.777	0.881	6.5	6.9	8.65	8.9
00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	4 ##	7.	17.25	50.	5.	477.583	21.854	**	**	**	**
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.2	8.367	9.2	7.1	0.39	0.624	7.1	8.15	8.9	9.2
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.2	7.902	9.2	7.1	0.633	0.796	7.1	8.15	8.9	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	9	0.006	0.013	0.079	0.001	0.001	0.025	0.001	0.001	0.007	0.079
00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/28/79	2	8.65	8.65	8.7	8.6	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/22/79-08/28/79	2	8.647	8.647	8.7	8.6	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/28/79	2	0.002	0.002	0.003	0.002	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/28/79	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	2	141.	141.	146.	136.	50.	7.071	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/28/79	2	166.	166.	174.	158.	128.	11.314	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/28/79	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/91-08/09/95	5	16.	20.6	48.	6.	255.8	15.994	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	10 ##	0.025	0.046	0.2	0.003	0.003	0.056	0.005	0.025	0.053	0.186
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	4 ##	0.015	0.015	0.025	0.005	0.	0.012	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	2 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	4	0.18	0.354	1.05	0.005	0.242	0.491	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	2	0.7	0.7	1.05	0.35	0.245	0.495	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	6	0.18	0.71	2.9	0.1	1.225	1.107	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	2	0.375	0.375	0.6	0.15	0.101	0.318	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	6	0.04	0.067	0.2	0.01	0.005	0.069	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	10	0.019	0.048	0.29	0.006	0.007	0.086	0.006	0.012	0.04	0.265
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/03/89	4 ##	0.006	0.009	0.02	0.003	0.	0.008	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	2	6.9	6.9	11.5	2.3	42.32	6.505	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/28/79	2	160.	160.	160.	160.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/28/79	2	47.	47.	54.	40.	98.	9.899	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/28/79	2	10.5	10.5	15.	6.	40.5	6.364	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/28/79	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/28/79	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	2	2.	2.	3.	1.	2.	1.414	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/28/79	2	2.	2.	3.	1.	2.	1.414	**	**	**	**

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Parameter Inventory for Station: ZION0212

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/28/79	2	24.	24.	33.	15.	162.	12.728	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	2	0.11	0.11	0.13	0.09	0.001	0.028	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/28/79	2	5.5	5.5	6.	5.	0.5	0.707	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/28/79	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/28/79	2 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	2	120.	120.	165.	75.	4050.	63.64	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/28/79	2 ##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/28/79	2 ##	4.5	4.5	7.5	1.5	18.	4.243	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/28/79	2	10.	10.	15.	5.	50.	7.071	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/28/79	2 ##	11.25	11.25	12.5	10.	3.125	1.768	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/28/79	2	160.	160.	280.	40.	28800.	169.706	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	2 ##	11.	11.	12.	10.	2.	1.414	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/28/79	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/28/79	2	75.5	75.5	106.	45.	1860.5	43.134	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/28/79	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	2	1365.	1365.	2300.	430.	1748450.	1322.29	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	2	2.998	2.998	3.362	2.633	0.265	0.515	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			994.485								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-05/29/91	1 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/29/91-05/29/91	1 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	2	219.5	219.5	430.	9.	88620.5	297.692	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	2	1.794	1.794	2.633	0.954	1.41	1.187	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			62.209								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	2 ##	147.	147.	292.	2.	42050.	205.061	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/29/91-08/14/91	2 ##	1.383	1.383	2.465	0.301	2.342	1.53	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			24.166								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	8	109.5	113.	238.	4.	10962.571	104.702	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/29/91-08/09/95	6	4.	4.333	8.	2.	5.467	2.338	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/28/79	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	2 ##	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/28/79	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/28/79	2	1.38	1.38	2.52	0.24	2.599	1.612	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0212

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	1	0.50	1	0	0.00				1	1	1.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	9	0	0.00	4	0	0.00				5	0	0.00			
00400	PH	Other-Hi Lim.	9.	9	2	0.22	4	1	0.25				5	1	0.20			
		Other-Lo Lim.	6.5	9	0	0.00	4	0	0.00				5	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	4	0	0.00	2	0	0.00				2	0	0.00			
00615	NITRITE NITROGEN, TOTAL 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.	4	0	0.00	2	0	0.00				2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	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.	6	0	0.00	3	0	0.00				3	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			
00941	CHLORIDE, DISSOLVED 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			
00946	SULFATE, DISSOLVED (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			

& - 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: ZION0212

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01002	ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	1	0	0.00				1	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			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	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			
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
01042	COPPER, TOTAL	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			
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			
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			
01077	SILVER, TOTAL	Fresh Acute	4.1	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.	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			
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	1	0.50	1	1	1.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	1	0.50	1	1	1.00				1	0	0.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0213

NPS Station ID: ZION0213
LAT/LON: 37.449170/-113.043893
Agency: 112WRD
Date Created: 12/19/81
Location: KOLOB CREEK ABOVE RESERVOIR, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372657113023801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002522.52
RF3 Mile Point: 23.15
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0213

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-08/17/81	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-08/17/81	1	28.5	28.5	28.5	28.5	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-08/17/81	1	568.	568.	568.	568.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-08/17/81	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/17/81-08/17/81	1	460.	460.	460.	460.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/17/81-08/17/81	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-08/17/81	1	8.35	8.35	8.35	8.35	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-08/17/81	1	8.35	8.35	8.35	8.35	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-08/17/81	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-08/17/81	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-08/17/81	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-08/17/81	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-08/17/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-08/17/81	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-08/17/81	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-08/17/81	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-08/17/81	1	82.	82.	82.	82.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-08/17/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-08/17/81	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-08/17/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-08/17/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-08/17/81	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-08/17/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-08/17/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-08/17/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-08/17/81	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-08/17/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	1	281.	281.	281.	281.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-08/17/81	1	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-08/17/81	1	0.38	0.38	0.38	0.38	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: ZION0213

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0214

NPS Station ID: ZION0214
LAT/LON: 37.512004/-113.043893
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD010R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_28 /5083850
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0214

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	8.01	8.01	8.01	8.01	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	235.	235.	235.	235.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	0.087	0.087	0.087	0.087	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0214

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0215

NPS Station ID: ZION0215
LAT/LON: 37.432226/-113.046949
Agency: 21UTAH
Date Created: 03/21/81
Location: KOLOB RES AB DAM 01
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495132
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN DRAINAGE
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008000500.00
RF3 Mile Point: 1.98
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0215

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	37	12.5	12.759	19.9	3.5	25.715	5.071	5.32	8.1	17.7	19.32
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	4	25.	25.	25.	25.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/22/79-08/09/95	13	2.	3.731	17.	0.3	22.106	4.702	0.34	0.9	5.65	13.4
00078	TRANSPARENCY, SECCHI DISC (METERS)	08/28/79-08/09/95	10	3.25	3.41	6.5	1.4	2.963	1.721	1.42	1.675	5.	6.35
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	37	300.	284.973	380.	45.	3771.749	61.415	212.	268.5	317.	352.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/22/79-08/28/79	6	275.	290.	400.	240.	3350.	57.879	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	37	6.6	5.711	10.3	0.2	8.914	2.986	0.82	3.1	8.1	9.22
00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	14 ##	7.	8.143	15.	5.	14.593	3.82	5.	5.	9.	15.
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	37	8.2	8.046	8.8	7.	0.201	0.448	7.38	7.7	8.45	8.5
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	37	8.2	7.801	8.8	7.	0.262	0.512	7.38	7.7	8.45	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	37	0.006	0.016	0.1	0.002	0.	0.02	0.003	0.004	0.02	0.042
00403	PH, LAB, STANDARD UNITS SU	05/22/79-08/14/91	10	8.4	8.38	8.9	7.8	0.155	0.394	7.82	8.	8.8	8.89
00403	CONVERTED PH, LAB, STANDARD UNITS	05/22/79-08/14/91	10	8.389	8.23	8.9	7.8	0.18	0.424	7.82	8.	8.8	8.89
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/14/91	10	0.004	0.006	0.016	0.001	0.	0.005	0.001	0.002	0.01	0.015
00405	CARBON DIOXIDE (MG/L AS CO2)	05/22/79-08/14/91	10	1.5	1.3	3.	0.	1.122	1.059	0.	0.	2.	2.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/79-08/09/95	13	133.	142.538	184.	108.	408.936	20.222	116.8	131.	156.	178.4
00440	BICARBONATE ION (MG/L AS HCO3)	05/22/79-08/14/91	10	161.5	161.6	224.	124.	660.489	25.7	126.2	146.	167.	218.6
00445	CARBONATE ION (MG/L AS CO3)	05/22/79-08/14/91	10	2.	2.8	8.	0.	9.956	3.155	0.	0.	6.	7.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/14/91-08/09/95	5 ##	2.	2.6	4.	1.5	1.675	1.294	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	37 ##	0.025	0.121	1.085	0.003	0.046	0.214	0.021	0.025	0.105	0.329
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	14 ##	0.005	0.014	0.025	0.005	0.	0.01	0.005	0.005	0.025	0.025
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	6 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/22/79-08/03/89	14	0.05	0.253	0.95	0.005	0.124	0.352	0.005	0.005	0.575	0.925
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/22/79-08/28/79	6	0.6	0.567	0.95	0.15	0.115	0.339	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	22	0.4	0.455	1.2	0.	0.077	0.278	0.23	0.3	0.525	1.023
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/28/79	6	0.1	0.167	0.4	0.05	0.018	0.133	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	23	0.02	0.077	0.3	0.01	0.01	0.1	0.01	0.01	0.1	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	37	0.016	0.037	0.196	0.003	0.003	0.051	0.005	0.005	0.036	0.126
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	23 ##	0.005	0.016	0.17	0.005	0.001	0.036	0.005	0.005	0.005	0.044
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/22/79-08/03/89	14	0.014	0.028	0.15	0.003	0.002	0.043	0.003	0.003	0.028	0.121
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	8	3.55	4.	6.3	3.	1.566	1.251	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/22/79-08/09/95	14	163.	159.214	204.	120.	393.412	19.835	128.	146.	165.25	191.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/22/79-08/09/95	14	47.	47.857	62.	37.	38.901	6.237	39.5	43.75	51.	59.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/22/79-08/09/95	14	9.65	9.707	12.	7.	2.85	1.688	7.5	8.	11.25	12.
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/22/79-08/09/95	13	2.	2.146	3.	1.6	0.153	0.391	1.64	1.9	2.45	2.8
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/22/79-08/09/95	13	1.5	1.485	2.	1.	0.166	0.408	1.	1.	1.9	2.
00940	CHLORIDE,TOTAL IN WATER MG/L	05/22/79-08/28/79	6	1.	1.333	2.	1.	0.267	0.516	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/22/79-08/09/95	13	1.	1.865	6.	0.25	2.527	1.59	0.35	0.75	3.	4.8

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

Parameter Inventory for Station: ZION0215

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/79-08/09/95	13	17.	17.715	26.4	5.	40.281	6.347	7.52	13.15	23.65	26.24
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/22/79-08/28/79	6	0.085	0.08	0.1	0.05	0.	0.018	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/79-08/14/91	10	2.8	3.31	7.	1.1	3.585	1.894	1.18	1.975	4.5	6.9
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/01/93-08/09/95	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/22/79-08/14/91	10 ##	0.5	1.15	2.5	0.5	0.892	0.944	0.5	0.5	2.5	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	05/22/79-08/14/91	10 ##	0.058	12.022	40.	0.025	283.872	16.848	0.025	0.025	25.	40.
01020	BORON, DISSOLVED (UG/L AS B)	05/22/79-08/28/79	6	65.	76.333	115.	55.	630.667	25.113	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/01/93-08/09/95	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/79-08/14/91	10 ##	0.5	0.75	3.	0.5	0.625	0.791	0.5	0.5	0.5	2.75
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/22/79-08/28/79	6 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/22/79-08/14/91	10 ##	2.5	5.45	25.	1.5	52.469	7.244	1.5	1.5	7.5	23.25
01040	COPPER, DISSOLVED (UG/L AS CU)	09/01/93-08/09/95	2 ##	8.	8.	10.	6.	8.	2.828	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/79-08/14/91	10 ##	7.5	6.75	10.	2.5	12.569	3.545	2.5	2.5	10.	10.
01049	LEAD, DISSOLVED (UG/L AS PB)	09/01/93-08/09/95	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/79-08/14/91	10 ##	2.5	3.5	12.5	2.5	10.	3.162	2.5	2.5	2.5	11.5
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/79-08/14/91	10	160.	307.5	890.	15.	100623.611	317.212	17.	46.25	610.	874.
01067	NICKEL, TOTAL (UG/L AS NI)	05/22/79-08/28/79	6 ##	7.5	7.5	10.	5.	7.5	2.739	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/22/79-08/14/91	10 ##	2.5	1.9	2.5	1.	0.6	0.775	1.	1.	2.5	2.5
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/79-08/14/91	10 ##	10.	9.	20.	2.5	30.833	5.553	2.5	4.375	11.25	19.5
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/01/93-08/09/95	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/22/79-08/14/91	10 ##	0.5	1.1	2.5	0.5	0.933	0.966	0.5	0.5	2.5	2.5
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/29/91-08/14/91	2 ##	7.	7.	12.	2.	50.	7.071	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/29/91-08/14/91	2 ##	0.69	0.69	1.079	0.301	0.303	0.55	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			4.899								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	6	41.5	55.167	150.	11.5	2715.667	52.112	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/28/79	6	1.618	1.568	2.176	1.061	0.197	0.444	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			36.984								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-08/14/91	2 ##	3.	3.	4.	2.	2.	1.414	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/29/91-08/14/91	2 ##	0.452	0.452	0.602	0.301	0.045	0.213	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.828								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	4	0.	2.875	11.5	0.	33.063	5.75	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-08/28/79	4	0.	0.265	1.061	0.	0.281	0.53	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1.842								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/29/91-08/14/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			2.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/02/89-08/09/95	7	4.7	6.543	14.8	1.7	26.11	5.11	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/22/79-05/22/79	3 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	12	148.	114.708	228.	1.5	7468.794	86.422	1.5	1.875	174.75	217.2
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/29/91-08/09/95	6	2.	2.833	8.	1.	6.567	2.563	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	05/22/79-08/14/91	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/79-08/28/79	6	0.02	0.047	0.15	0.02	0.003	0.052	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/01/93-08/09/95	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/79-08/14/91	10 ##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	37	6.	6.559	17.	0.	28.166	5.307	0.	0.	10.5	14.24
74010	IRON, TOTAL (MG/L AS FE)	05/22/79-08/14/91	10	0.15	0.229	0.61	0.03	0.047	0.216	0.03	0.038	0.428	0.603
80110	SPECIFIC GRAVITY WATER-UNITY AT 4C	08/28/79-08/28/79	1	6.5	6.5	6.5	6.5	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: ZION0215

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	13	0	0.00	7	0	0.00				6	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	37	10	0.27	19	7	0.37				18	3	0.17			
00400	PH	Other-Hi Lim.	9.	37	0	0.00	19	0	0.00				18	0	0.00			
		Other-Lo Lim.	6.5	37	0	0.00	19	0	0.00				18	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	10	0	0.00	5	0	0.00				5	0	0.00			
		Other-Lo Lim.	6.5	10	0	0.00	5	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

EPA Water Quality Criteria Analysis for Station: ZION0215

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	14	0	0.00	7	0	0.00				7	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	6	0	0.00	3	0	0.00				3	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	14	0	0.00	7	0	0.00				7	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	6	0	0.00	3	0	0.00				3	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	3	0	0.00				3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	23	0	0.00	12	0	0.00				11	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	3	0	0.00				3	0	0.00			
		Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	13	0	0.00	7	0	0.00				6	0	0.00			
		Drinking Water	250.	13	0	0.00	7	0	0.00				6	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	13	0	0.00	7	0	0.00				6	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	50.	10	0	0.00	5	0	0.00				5	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	10	0	0.00	5	0	0.00				5	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	2	0	0.00									
		Drinking Water	5.	2	0	0.00	2	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	5.	10	0	0.00	5	0	0.00				5	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	6	0	0.00	3	0	0.00				3	0	0.00			
		Drinking Water	100.	6	0	0.00	3	0	0.00				3	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	10	0	0.00	5	0	0.00				5	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									
01042	COPPER, TOTAL	Fresh Acute	18.	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	1300.	10	0	0.00	5	0	0.00				5	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	15.	10	0	0.00	5	0	0.00				5	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	6	0	0.00	3	0	0.00				3	0	0.00			
		Drinking Water	100.	6	0	0.00	3	0	0.00				3	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	100.	10	0	0.00	5	0	0.00				5	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	5000.	10	0	0.00	5	0	0.00				5	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	50.	10	0	0.00	5	0	0.00				5	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	6	0	0.00	3	0	0.00				3	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	1	0	0.00				1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	4	0	0.00	1	0	0.00				3	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	10	0	0.00	5	0	0.00				5	0	0.00			
		Drinking Water	2.	10	0	0.00	5	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 3/19 - Station ZION0215

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	19	17.6	15.958	19.9	8.	16.104	4.013	8.1	12.5	18.9	19.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	19	303.	275.053	363.	45.	6313.83	79.46	180.	242.	334.	357.
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	19	6.	4.689	9.	0.2	9.322	3.053	0.3	0.9	7.	8.2
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	19	8.1	7.926	8.5	7.	0.23	0.479	7.2	7.5	8.3	8.4
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	19	8.1	7.665	8.5	7.	0.302	0.549	7.2	7.5	8.3	8.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	19	0.008	0.022	0.1	0.003	0.001	0.026	0.004	0.005	0.032	0.063
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	19 ##	0.025	0.117	0.7	0.003	0.031	0.177	0.003	0.025	0.163	0.368
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	19	0.02	0.051	0.196	0.005	0.004	0.064	0.005	0.005	0.09	0.19
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	19	6.	6.474	17.	0.	27.814	5.274	0.	0.	10.4	14.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0215

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	18	9.1	9.383	16.7	3.5	13.903	3.729	3.95	6.375	12.55	14.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	18	290.	295.444	380.	235.	1075.908	32.801	266.5	271.	309.75	341.3
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	18	7.25	6.789	10.3	2.	6.61	2.571	2.9	4.475	9.2	10.21
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	18	8.2	8.172	8.8	7.6	0.149	0.386	7.6	7.775	8.5	8.53
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	18	8.2	8.015	8.8	7.6	0.176	0.419	7.6	7.775	8.5	8.53
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	18	0.006	0.01	0.025	0.002	0.	0.008	0.003	0.003	0.017	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	18 ##	0.025	0.126	1.085	0.025	0.064	0.252	0.025	0.025	0.1	0.396
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	18	0.014	0.022	0.12	0.003	0.001	0.028	0.003	0.009	0.021	0.057
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	18	7.	6.65	15.	0.	30.179	5.494	0.	0.	10.95	14.82

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

Station Inventory for Station: ZION0216

NPS Station ID: ZION0216
LAT/LON: 37.547392/-113.047198
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD009R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_30 /5083849
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0216

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	89.	89.	89.	89.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	0.066	0.066	0.066	0.066	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/19/80-06/19/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0216

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0217

NPS Station ID: ZION0217
LAT/LON: 37.440003/-113.048059
Agency: 21UTAH
Date Created: 03/21/81
Location: KOLOB RES MIDWAY UP LAKE 02
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495133
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN DRAINAGE
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 20.10
On/Off RF1:
RF3 Index: 15010008003806.49
RF3 Mile Point: 10.73
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0217

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	18	14.4	14.344	20.1	5.7	20.048	4.478	7.5	11.25	18.375	19.56
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/14/91-08/14/91	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	05/31/89-08/09/95	8	2.35	2.575	4.	1.1	1.405	1.185	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	18	300.5	287.389	358.	170.	2164.605	46.525	233.	248.5	322.5	340.
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	18	7.8	7.456	10.5	0.7	5.584	2.363	3.85	6.825	9.125	10.05
00335	COD, .025N K2CR2O7 MG/L	05/22/79-08/03/89	6 ##	7.	8.333	17.	5.	18.667	4.32	**	**	**	**
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	18	8.35	8.322	8.7	7.5	0.088	0.296	7.77	8.2	8.5	8.61
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	18	8.347	8.195	8.7	7.5	0.105	0.324	7.77	8.2	8.5	8.61
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	18	0.004	0.006	0.032	0.002	0.	0.007	0.002	0.003	0.006	0.017
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/22/79-08/23/79	2 ##	0.575	0.575	1.	0.15	0.361	0.601	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/22/79-08/09/95	6 ##	1.75	2.083	4.	0.	2.642	1.625	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	18 ##	0.025	0.04	0.118	0.003	0.001	0.034	0.003	0.025	0.055	0.103
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/31/89-08/03/89	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/31/89-08/03/89	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/79-08/14/91	10	0.42	0.403	0.6	0.2	0.018	0.133	0.2	0.275	0.5	0.59
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/79-08/23/79	2 ##	0.163	0.163	0.3	0.025	0.038	0.194	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/29/91-08/09/95	12	0.015	0.052	0.2	0.01	0.004	0.061	0.01	0.01	0.1	0.17
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	18	0.019	0.021	0.06	0.003	0.	0.017	0.003	0.009	0.028	0.051
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/29/91-08/09/95	12 ##	0.005	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.014	0.019
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/31/89-08/03/89	4 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/31/89-08/03/89	4	3.15	2.95	3.4	2.1	0.337	0.58	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/29/91-08/14/91	2 ##	3.	3.	4.	2.	2.	1.414	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/29/91-08/14/91	2 ##	0.452	0.452	0.602	0.301	0.045	0.213	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			2.828								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/23/79	2 ##	52.25	52.25	93.	11.5	3321.125	57.629	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/22/79-08/23/79	2 ##	1.515	1.515	1.968	1.061	0.412	0.642	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			32.703								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/29/91-08/14/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/29/91-08/14/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-05/22/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/22/79-05/22/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/29/91-08/14/91	2 ##	13.	13.	24.	2.	242.	15.556	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/29/91-08/14/91	2 ##	0.841	0.841	1.38	0.301	0.582	0.763	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			6.928								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/03/89-08/09/95	7	4.3	6.286	13.8	1.8	26.035	5.102	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/22/79-08/09/95	5 ##	1.5	30.3	144.	1.5	4040.325	63.564	**	**	**	**

** - Less than 9 observations ## - 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: ZION0217

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	4	2.	2.	3.	1.	0.667	0.816	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	18	0.	2.778	10.	0.	12.485	3.533	0.	0.	5.875	8.2

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

EPA Water Quality Criteria Analysis for Station: ZION0217

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	18	1	0.06	9	1	0.11				9	0	0.00			
00400	PH	Other-Hi Lim.	9.	18	0	0.00	9	0	0.00				9	0	0.00			
		Other-Lo Lim.	6.5	18	0	0.00	9	0	0.00				9	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	4	0	0.00	2	0	0.00				2	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	4	0	0.00	2	0	0.00				2	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	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.	12	0	0.00	6	0	0.00				6	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	1	0	0.00				1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			

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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0217

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	9	18.2	17.744	20.1	11.3	6.943	2.635	11.3	17.25	19.45	20.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	9	303.	289.444	358.	170.	3664.528	60.535	170.	240.5	336.	358.
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	9	7.2	6.711	9.1	0.7	5.656	2.378	0.7	6.75	7.8	9.1
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.5	8.322	8.6	7.5	0.112	0.335	7.5	8.25	8.5	8.6
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.5	8.154	8.6	7.5	0.144	0.379	7.5	8.25	8.5	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	9	0.003	0.007	0.032	0.003	0.	0.009	0.003	0.003	0.006	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	9 ##	0.025	0.033	0.118	0.003	0.001	0.035	0.003	0.014	0.038	0.118
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	9	0.019	0.024	0.06	0.005	0.	0.019	0.005	0.008	0.037	0.06
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	9	0.	2.6	8.	0.	10.743	3.278	0.	0.	5.6	8.

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0217

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/79-08/09/95	9	12.2	10.944	14.7	5.7	9.65	3.106	5.7	7.85	13.3	14.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/22/79-08/09/95	9	290.	285.333	333.	240.	925.75	30.426	240.	257.	308.5	333.
00300	OXYGEN, DISSOLVED MG/L	05/22/79-08/09/95	9	9.	8.2	10.5	4.2	4.963	2.228	4.2	6.5	9.8	10.5
00400	PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.3	8.322	8.7	7.8	0.074	0.273	7.8	8.15	8.55	8.7
00400	CONVERTED PH (STANDARD UNITS)	05/22/79-08/09/95	9	8.3	8.24	8.7	7.8	0.082	0.286	7.8	8.15	8.55	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/79-08/09/95	9	0.005	0.006	0.016	0.002	0.	0.004	0.002	0.003	0.007	0.016
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/79-08/09/95	9 ##	0.025	0.047	0.101	0.025	0.001	0.034	0.025	0.025	0.085	0.101
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/22/79-08/09/95	9	0.015	0.018	0.05	0.003	0.	0.015	0.003	0.006	0.027	0.05
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	05/22/79-08/09/95	9	0.	2.956	10.	0.	15.718	3.965	0.	0.	6.8	10.

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

Station Inventory for Station: ZION0218

NPS Station ID: ZION0218
LAT/LON: 37.530503/-113.050115
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD502R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_29 /5075723
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0218

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	9.53	9.53	9.53	9.53	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	1	85.	85.	85.	85.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	132.	132.	132.	132.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	0.335	0.335	0.335	0.335	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/19/80-06/19/80	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0218

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0219

NPS Station ID: ZION0219
LAT/LON: 37.301615/-113.050115
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA511R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_11 /5075814
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Guardian Angels UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0219

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/80-07/13/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/80-07/13/80	1	740.	740.	740.	740.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/13/80-07/13/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/13/80-07/13/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/80-07/13/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/13/80-07/13/80	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/13/80-07/13/80	1	38.3	38.3	38.3	38.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/13/80-07/13/80	1	62.38	62.38	62.38	62.38	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/13/80-07/13/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/13/80-07/13/80	1	4.13	4.13	4.13	4.13	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/13/80-07/13/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/13/80-07/13/80	1	21.	21.	21.	21.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/13/80-07/13/80	1	163.3	163.3	163.3	163.3	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/13/80-07/13/80	1	5900.	5900.	5900.	5900.	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: ZION0219

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0220

NPS Station ID: ZION0220
LAT/LON: 37.435198/-113.061616
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD006R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_14 /5083893
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0220

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	1	260.	260.	260.	260.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/29/80-06/29/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/29/80-06/29/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/29/80-06/29/80	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	1	105.	105.	105.	105.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	1	461.	461.	461.	461.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	1	0.488	0.488	0.488	0.488	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/29/80-06/29/80	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/29/80-06/29/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	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: ZION0220

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0221

NPS Station ID: ZION0221
LAT/LON: 37.378198/-113.067309
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD010R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_13 /5083895
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0221

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/29/80-06/29/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/29/80-06/29/80	1	285.	285.	285.	285.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/29/80-06/29/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/29/80-06/29/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/29/80-06/29/80	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/29/80-06/29/80	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/29/80-06/29/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/29/80-06/29/80	1	11.12	11.12	11.12	11.12	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/29/80-06/29/80	1	110.	110.	110.	110.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/29/80-06/29/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/29/80-06/29/80	1	159.	159.	159.	159.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/29/80-06/29/80	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/29/80-06/29/80	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/29/80-06/29/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/29/80-06/29/80	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: ZION0221

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0222

NPS Station ID: ZION0222
LAT/LON: 37.499310/-113.067503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD021R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_21 /5083897
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0222

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/80-07/10/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/80-07/10/80	1	550.	550.	550.	550.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/10/80-07/10/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/10/80-07/10/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/10/80-07/10/80	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/10/80-07/10/80	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/10/80-07/10/80	1	18.2	18.2	18.2	18.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/10/80-07/10/80	1	22.86	22.86	22.86	22.86	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/10/80-07/10/80	1	73.	73.	73.	73.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/10/80-07/10/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/10/80-07/10/80	1	215.	215.	215.	215.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/10/80-07/10/80	1	1.813	1.813	1.813	1.813	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/10/80-07/10/80	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/10/80-07/10/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/10/80-07/10/80	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: ZION0222

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0223

NPS Station ID: ZION0223
LAT/LON: 37.073616/-113.082781
Agency: 112WRD
Date Created: 12/02/81
Location: SANTA CLARA RIVER AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370425113045801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008028300.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0223

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-08/23/82	4	22.25	22.125	28.	16.	33.396	5.779	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-08/23/82	4	28.75	27.625	34.	19.	44.229	6.651	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-08/23/82	5	684.	687.6	704.	679.	101.3	10.065	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-08/23/82	4	5.	6.25	10.	5.	6.25	2.5	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-08/23/82	4	1925.	1907.5	2180.	1600.	57291.667	239.357	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/81-08/23/82	4	9.65	9.625	11.3	7.9	1.943	1.394	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-08/23/82	4	7.9	7.9	8.	7.8	0.007	0.082	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-08/23/82	4	7.9	7.894	8.	7.8	0.007	0.082	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-08/23/82	4	0.013	0.013	0.016	0.01	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-08/23/82	4	7.75	7.8	8.1	7.6	0.047	0.216	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-08/23/82	4	7.747	7.764	8.1	7.6	0.048	0.22	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-08/23/82	4	0.018	0.017	0.025	0.008	0.	0.007	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-08/23/82	4	0.4	0.575	1.2	0.3	0.176	0.419	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-08/23/82	4	0.06	0.06	0.09	0.03	0.001	0.035	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-08/23/82	4	0.02	0.02	0.03	0.01	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-08/23/82	4	930.	930.	1100.	760.	19266.667	138.804	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-08/23/82	4	258.	257.75	300.	215.	1206.917	34.741	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-08/23/82	4	69.	71.75	94.	55.	264.25	16.256	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-08/23/82	4	104.5	102.75	130.	72.	584.917	24.185	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-08/23/82	4	1.6	1.525	1.7	1.2	0.056	0.236	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-08/23/82	4	19.5	19.	20.	17.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-08/23/82	4	7.85	8.375	11.	6.8	3.389	1.841	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-08/23/82	4	58.5	62.25	81.	51.	176.917	13.301	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-08/23/82	4	745.	760.	990.	560.	31133.333	176.446	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-08/23/82	4	0.4	0.4	0.5	0.3	0.007	0.082	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-08/23/82	4	34.	33.5	37.	29.	13.667	3.697	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/23/82-08/23/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-08/23/82	4	370.	367.5	460.	270.	6025.	77.621	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/23/82-08/23/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/23/82-08/23/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/23/82-08/23/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/23/82-08/23/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	08/23/82-08/23/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/23/82-08/23/82	1	420.	420.	420.	420.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/23/82-08/23/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/23/82-08/23/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	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: ZION0223

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/18/81-08/18/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/81-08/18/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/18/81-08/18/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-08/23/82	4	1425.	1450.	1800.	1150.	71266.667	266.958	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-08/23/82	4	22.45	23.125	30.1	17.5	30.749	5.545	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-08/23/82	4	1.935	1.97	2.45	1.56	0.134	0.366	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	08/23/82-08/23/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/18/81-08/18/81	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

EPA Water Quality Criteria Analysis for Station: ZION0223

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	4	1.00	3	3	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
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									
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: ZION0224

NPS Station ID: ZION0224
LAT/LON: 37.516115/-113.094892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD503R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_26 /5075724
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0224

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	1100.	1100.	1100.	1100.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	1	25.5	25.5	25.5	25.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	18.66	18.66	18.66	18.66	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	1	276.	276.	276.	276.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	284.	284.	284.	284.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	1.169	1.169	1.169	1.169	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/19/80-06/19/80	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	6.	6.	6.	6.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0224

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0225

NPS Station ID: ZION0225
LAT/LON: 37.356115/-113.094892
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA512R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_09 /5075815
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Guardian Angels UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is inside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0225

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/80-07/14/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	680.	680.	680.	680.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/14/80-07/14/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/14/80-07/14/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	29.6	29.6	29.6	29.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	57.04	57.04	57.04	57.04	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/14/80-07/14/80	1	98.	98.	98.	98.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/14/80-07/14/80	1	13.	13.	13.	13.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/14/80-07/14/80	1	4.88	4.88	4.88	4.88	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/14/80-07/14/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/14/80-07/14/80	1	559.6	559.6	559.6	559.6	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/14/80-07/14/80	1	6600.	6600.	6600.	6600.	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: ZION0225

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0226

NPS Station ID: ZION0226
LAT/LON: 37.495698/-113.102503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA513R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_22 /5075816
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Reservoir UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0226

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/15/80-07/15/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/15/80-07/15/80	1	580.	580.	580.	580.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/15/80-07/15/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/15/80-07/15/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/15/80-07/15/80	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/15/80-07/15/80	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/15/80-07/15/80	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/15/80-07/15/80	1	23.76	23.76	23.76	23.76	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/15/80-07/15/80	1	93.	93.	93.	93.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/15/80-07/15/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/15/80-07/15/80	1	1.315	1.315	1.315	1.315	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/15/80-07/15/80	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/15/80-07/15/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/15/80-07/15/80	1	6600.	6600.	6600.	6600.	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: ZION0226

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0227

NPS Station ID: ZION0227
LAT/LON: 37.541309/-113.102503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD504R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_27 /5075725
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0227

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	460.	460.	460.	460.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	14.37	14.37	14.37	14.37	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/19/80-06/19/80	1	136.	136.	136.	136.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	160.	160.	160.	160.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	0.619	0.619	0.619	0.619	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/19/80-06/19/80	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/19/80-06/19/80	1	21.8	21.8	21.8	21.8	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0227

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0228

NPS Station ID: ZION0228
LAT/LON: 37.526893/-113.109615
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD013R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_20 /5083851
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Cedar Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0228

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/80-06/19/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/19/80-06/19/80	1	410.	410.	410.	410.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/19/80-06/19/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/80-06/19/80	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/19/80-06/19/80	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/19/80-06/19/80	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/19/80-06/19/80	1	10.14	10.14	10.14	10.14	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/19/80-06/19/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/19/80-06/19/80	1	285.	285.	285.	285.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/19/80-06/19/80	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/19/80-06/19/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/19/80-06/19/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/19/80-06/19/80	1	23.5	23.5	23.5	23.5	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/19/80-06/19/80	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: ZION0228

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0229

NPS Station ID: ZION0229
LAT/LON: 37.258337/-113.121949
Agency: 112WRD
Date Created: 08/30/76
Location: (- -) -
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371530113071900
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.80
On/Off RF1:
RF3 Index: 15010008072400.00
RF3 Mile Point: 0.06
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0229

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	1	20.3	20.3	20.3	20.3	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	1	349.	349.	349.	349.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-05/24/72	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-05/24/72	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-05/24/72	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	139.	139.	139.	139.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	1	169.	169.	169.	169.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/24/72-05/24/72	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	1	211.	211.	211.	211.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	1	0.57	0.57	0.57	0.57	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	1	0.29	0.29	0.29	0.29	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: ZION0229

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0230

NPS Station ID: ZION0230
LAT/LON: 37.304392/-113.125503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD013R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_10 /5083896
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Smith Mesa UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0230

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/80-07/06/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/80-07/06/80	1	1900.	1900.	1900.	1900.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/80-07/06/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/80-07/06/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/80-07/06/80	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/80-07/06/80	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/80-07/06/80	1	58.7	58.7	58.7	58.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/80-07/06/80	1	175.15	175.15	175.15	175.15	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/06/80-07/06/80	1	180.	180.	180.	180.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/06/80-07/06/80	1	34.	34.	34.	34.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/06/80-07/06/80	1	429.	429.	429.	429.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/06/80-07/06/80	1	40.245	40.245	40.245	40.245	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/06/80-07/06/80	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/06/80-07/06/80	1	77.	77.	77.	77.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/06/80-07/06/80	1	183.7	183.7	183.7	183.7	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/06/80-07/06/80	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: ZION0230

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	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: ZION0231

NPS Station ID: ZION0231
LAT/LON: 37.113615/-113.141393
Agency: 112WRD
Date Created: 04/14/78
Location: (C-42-11)19CCC- 2
FIPS State/County: 49049 UTAH/UTAH
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370649113082902
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 13.30
On/Off RF1:
RF3 Index: 15010008038000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0231

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/18/77-11/18/77	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/18/77-11/18/77	1	1350.	1350.	1350.	1350.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/18/77-11/18/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/18/77-11/18/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/18/77-11/18/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/18/77-11/18/77	1	56.	56.	56.	56.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/18/77-11/18/77	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/18/77-11/18/77	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/18/77-11/18/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/18/77-11/18/77	1	800.	800.	800.	800.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/18/77-11/18/77	1	620.	620.	620.	620.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/18/77-11/18/77	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/18/77-11/18/77	1	73.	73.	73.	73.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/18/77-11/18/77	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/18/77-11/18/77	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/18/77-11/18/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/18/77-11/18/77	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/18/77-11/18/77	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/18/77-11/18/77	1	600.	600.	600.	600.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/18/77-11/18/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/18/77-11/18/77	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/18/77-11/18/77	1	130.	130.	130.	130.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/18/77-11/18/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/18/77-11/18/77	1	240.	240.	240.	240.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/18/77-11/18/77	1	1080.	1080.	1080.	1080.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/18/77-11/18/77	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0231

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0231

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0232

NPS Station ID: ZION0232 LAT/LON: 37.239726/-113.149449 Agency: 21UTDHDW Date Created: 06/09/90
Location: VIRGIN - NORTH CREEK FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/AMBNT/STREAM/SUPPLY STORET Station ID(s): 2702003 /UT4900450003
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.60 On/Off RF1:
RF3 Index: 15010008001200.99 RF3 Mile Point: 1.66 Distance from RF3: 0.18 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1122

Parameter Inventory for Station: ZION0232

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/22/84-09/06/88	2	0.35	0.35	0.6	0.1	0.125	0.354	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/06/88-09/06/88	1	812.	812.	812.	812.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/22/84-09/06/88	2	8.25	8.25	8.4	8.1	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/22/84-09/06/88	2	8.225	8.225	8.4	8.1	0.046	0.215	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/84-09/06/88	2	0.006	0.006	0.008	0.004	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/06/88-09/06/88	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/06/88-09/06/88	1	148.	148.	148.	148.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/06/88-09/06/88	1	181.	181.	181.	181.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/06/88-09/06/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/06/88-09/06/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/22/84-09/06/88	2	0.65	0.65	1.	0.3	0.245	0.495	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/06/88-09/06/88	1	369.	369.	369.	369.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/06/88-09/06/88	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/06/88-09/06/88	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/06/88-09/06/88	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/06/88-09/06/88	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/22/84-09/06/88	2	41.5	41.5	62.	21.	840.5	28.991	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/22/84-09/06/88	2	258.	258.	260.	256.	8.	2.828	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/84-09/06/88	2	0.15	0.15	0.17	0.13	0.001	0.028	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/06/88-09/06/88	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/22/84-09/06/88	2 ##	2.75	2.75	5.	0.5	10.125	3.182	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/22/84-09/06/88	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/22/84-09/06/88	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/06/88-09/06/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/22/84-09/06/88	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/22/84-09/06/88	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/22/84-09/06/88	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/22/84-09/06/88	2 ##	11.25	11.25	20.	2.5	153.125	12.374	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/22/84-09/06/88	2 ##	4.	4.	7.	1.	18.	4.243	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/22/84-09/06/88	2 ##	17.5	17.5	25.	10.	112.5	10.607	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/22/84-09/06/88	2 ##	1.375	1.375	2.5	0.25	2.531	1.591	**	**	**	**

** - Less than 9 observations ## - 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: ZION0232

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01501	ALPHA, TOTAL	09/06/88-09/06/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/22/84-09/06/88	2	603.	603.	658.	548.	6050.	77.782	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/22/84-09/06/88	2 ##	0.3	0.3	0.5	0.1	0.08	0.283	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/22/84-09/06/88	2 ##	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - 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: ZION0232

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00941	CHLORIDE, DISSOLVED 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			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	2	1.00	1	1	1.00				1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	1	0	0.00				1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	1	0	0.00				1	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			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
01042	COPPER, TOTAL	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			
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			
01077	SILVER, TOTAL	Fresh Acute	4.1	2	1	0.50	1	0	0.00				1	1	1.00			
		Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
01092	ZINC, TOTAL	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			
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0233

NPS Station ID: ZION0233
LAT/LON: 37.237226/-113.150282
Agency: 112WRD
Date Created: 02/04/89
Location: NORTH CREEK NEAR VIRGIN, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09405900
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.60
On/Off RF1:
RF3 Index: 15010008002204.46
RF3 Mile Point: 4.84
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0233

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/87-07/15/91	28	13.25	12.8	25.5	0.5	52.916	7.274	2.35	5.75	18.375	22.55
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/87-01/09/91	23	18.	17.587	31.	-3.	85.765	9.261	7.6	9.5	26.5	29.
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/87-07/15/91	29	3.	5.142	43.	0.02	65.132	8.07	0.7	2.	5.	12.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/87-07/15/91	28	695.	733.429	1820.	362.	66115.217	257.129	487.5	605.	817.25	931.

** - Less than 9 observations ## - 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: ZION0234

NPS Station ID: ZION0234
LAT/LON: 37.237226/-113.153060
Agency: 112WRD
Date Created: 08/30/76
Location: (- -) -
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371414113091100
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.78
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0234

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	1	552.	552.	552.	552.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-05/24/72	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-05/24/72	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-05/24/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	147.	147.	147.	147.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	1	179.	179.	179.	179.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	1	90.	90.	90.	90.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/24/72-05/24/72	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	1	348.	348.	348.	348.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	1	0.94	0.94	0.94	0.94	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0234

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0235

NPS Station ID: ZION0235 LAT/LON: 37.537781/-113.158059 Agency: 21UTDHDW Date Created: 05/26/90
Location: KANARRAVILLE WATER SYSTEM - KANARRAVILLE SP FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 1100601 /UT4900231001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008078503.30 RF3 Mile Point: 4.71 Distance from RF3: 0.50 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-230 GS NUMBER FOR THIS SITE IS: 373215113092201

Parameter Inventory for Station: ZION0235

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/07/88-03/07/88	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/88-03/07/88	1	665.	665.	665.	665.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/07/88-03/07/88	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/07/88-03/07/88	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/07/88-03/07/88	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	03/07/88-03/07/88	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/07/88-03/07/88	1	195.	195.	195.	195.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/07/88-03/07/88	1	238.	238.	238.	238.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/07/88-03/07/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/07/88-03/07/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/07/88-03/07/88	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/07/88-03/07/88	1	345.	345.	345.	345.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/07/88-03/07/88	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/07/88-03/07/88	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/07/88-03/07/88	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/07/88-03/07/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/07/88-03/07/88	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/07/88-03/07/88	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/07/88-03/07/88	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/07/88-03/07/88	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/07/88-03/07/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	03/07/88-03/07/88	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	03/07/88-03/07/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	03/07/88-03/07/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	03/07/88-03/07/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	03/07/88-03/07/88	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/07/88-03/07/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/07/88-03/07/88	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	03/07/88-03/07/88	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	03/07/88-03/07/88	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/07/88-03/07/88	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

Parameter Inventory for Station: ZION0235

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01501	ALPHA, TOTAL	11/18/81-03/07/88	2	5.	5.	7.	3.	8.	2.828	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/07/88-03/07/88	1	420.	420.	420.	420.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	03/07/88-03/07/88	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/07/88-03/07/88	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	03/07/88-03/07/88	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0235

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
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									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0236

NPS Station ID: ZION0236
LAT/LON: 37.126392/-113.160004
Agency: 112WRD
Date Created: 02/28/78
Location: HUNTINGTON SP
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370735113093601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.30
On/Off RF1:
RF3 Index: 15010008002905.28
RF3 Mile Point: 5.52
Distance from RF3: 0.29
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0236

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/74-01/18/74	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	01/18/74-01/18/74	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/74-01/18/74	1	1550.	1550.	1550.	1550.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/18/74-01/18/74	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/18/74-01/18/74	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/74-01/18/74	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	01/18/74-01/18/74	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/74-01/18/74	1	204.	204.	204.	204.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	01/18/74-01/18/74	1	249.	249.	249.	249.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	01/18/74-01/18/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/18/74-01/18/74	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	01/18/74-01/18/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/18/74-01/18/74	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/18/74-01/18/74	1	380.	380.	380.	380.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	01/18/74-01/18/74	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/18/74-01/18/74	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/74-01/18/74	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/74-01/18/74	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	01/18/74-01/18/74	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	01/18/74-01/18/74	1	51.	51.	51.	51.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/18/74-01/18/74	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	01/18/74-01/18/74	1	96.	96.	96.	96.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	01/18/74-01/18/74	1	460.	460.	460.	460.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/18/74-01/18/74	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	01/18/74-01/18/74	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	01/18/74-01/18/74	1	550.	550.	550.	550.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	01/18/74-01/18/74	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/74-01/18/74	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	01/18/74-01/18/74	1	1050.	1050.	1050.	1050.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	01/18/74-01/18/74	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	01/18/74-01/18/74	1	1.43	1.43	1.43	1.43	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: ZION0236

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0237

NPS Station ID: ZION0237
LAT/LON: 37.161115/-113.162782
Agency: 21UTDHDW
Date Created: 05/26/90
Location: VIRGIN - 3 MI SO OF TOWN
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 2702001 /UT4900450001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.40
On/Off RF1:
RF3 Index: 15010008002506.40
RF3 Mile Point: 6.40
Distance from RF3: 0.06
On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * *
NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV
SERVICE AREA TYPE: RESIDENTIAL AREA
GS NUMBER FOR THIS SITE IS: 370939113094101

Parameter Inventory for Station: ZION0237

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/14/78-06/14/78	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/14/78-06/14/78	1	810.	810.	810.	810.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/14/78-06/14/78	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/14/78-06/14/78	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/14/78-06/14/78	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/78-06/14/78	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/14/78-06/14/78	1	305.	305.	305.	305.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/14/78-06/14/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/78-06/14/78	1	420.	420.	420.	420.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/14/78-06/14/78	1	124.	124.	124.	124.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/14/78-06/14/78	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/14/78-06/14/78	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/14/78-06/14/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/14/78-06/14/78	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/78-06/14/78	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/78-06/14/78	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/14/78-06/14/78	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/14/78-06/14/78	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/14/78-06/14/78	1	150.	150.	150.	150.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/78-06/14/78	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/14/78-06/14/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/78-06/14/78	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/78-06/14/78	1	568.	568.	568.	568.	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: ZION0237

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/14/78-06/14/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	06/16/81-11/19/81	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	06/14/78-06/14/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/78-06/14/78	1	528.	528.	528.	528.	0.	0.	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	06/14/78-06/14/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/14/78-06/14/78	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/14/78-06/14/78	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: ZION0237

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
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			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00							1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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	1	1.00							1	1	1.00			
		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			
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: ZION0238

NPS Station ID: ZION0238
LAT/LON: 37.341948/-113.166948
Agency: 112WRD
Date Created: 04/14/78
Location: (C-40-12) 2ADB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372031113100101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.00
On/Off RF1:
RF3 Index: 15010008066800.00
RF3 Mile Point: 0.11
Distance from RF3: 0.09
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0238

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/10/77-12/10/77	1	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/10/77-12/10/77	1	950.	950.	950.	950.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/10/77-12/10/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/10/77-12/10/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/10/77-12/10/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	12/10/77-12/10/77	1	79.	79.	79.	79.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/10/77-12/10/77	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/10/77-12/10/77	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/10/77-12/10/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/10/77-12/10/77	1	450.	450.	450.	450.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/10/77-12/10/77	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/10/77-12/10/77	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/10/77-12/10/77	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/10/77-12/10/77	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/10/77-12/10/77	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	12/10/77-12/10/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/10/77-12/10/77	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/10/77-12/10/77	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/10/77-12/10/77	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/10/77-12/10/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/10/77-12/10/77	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/10/77-12/10/77	1	240.	240.	240.	240.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	12/10/77-12/10/77	1	620.	620.	620.	620.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/10/77-12/10/77	1	0.84	0.84	0.84	0.84	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: ZION0238

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0238

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0239

NPS Station ID: ZION0239
LAT/LON: 37.538060/-113.167781
Agency: 112WRD
Date Created: / /
Location: KANARRA CR. AT KANARRAVILLE, UT
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09406300
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 27.50
On/Off RF1:
RF3 Index: 15010008004502.92
RF3 Mile Point: 4.80
Distance from RF3: 0.12
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	99	8.	8.985	27.	0.	35.166	5.93	1.	4.5	13.	18.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-05/11/82	2	15.75	15.75	19.5	12.	28.125	5.303	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/11/82	2	616.5	616.5	621.	612.	40.5	6.364	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/21/71-08/21/74	24	3.	5.	50.	1.	94.261	9.709	2.	2.	3.	7.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	78	3.	5.026	33.	1.	34.831	5.902	2.	2.	4.	9.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	101	450.	451.238	625.	315.	3761.703	61.333	380.	410.	487.5	518.
00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/11/82	2	8.8	8.8	9.4	8.2	0.72	0.849	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-05/11/82	2	8.225	8.225	8.45	8.	0.101	0.318	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-05/11/82	2	8.169	8.169	8.45	8.	0.107	0.328	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/11/82	2	0.007	0.007	0.01	0.004	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/11/82	2	8.35	8.35	8.4	8.3	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-05/11/82	2	8.347	8.347	8.4	8.3	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/11/82	2	0.004	0.004	0.005	0.004	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/11/82	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/11/82	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/11/82	2	0.025	0.025	0.03	0.02	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/11/82	2	220.	220.	230.	210.	200.	14.142	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/11/82	2	61.	61.	66.	56.	50.	7.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/11/82	2	16.5	16.5	17.	16.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/11/82	2	8.15	8.15	9.1	7.2	1.805	1.344	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-05/11/82	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-05/11/82	2	7.5	7.5	9.	6.	4.5	2.121	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/11/82	2	1.5	1.5	1.7	1.3	0.08	0.283	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/11/82	2	6.5	6.5	7.	6.	0.5	0.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/11/82	2	73.5	73.5	83.	64.	180.5	13.435	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/11/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/11/82	2	19.	19.	24.	14.	50.	7.071	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/11/82	2	20.	20.	20.	20.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-05/11/82	2	281.	281.	284.	278.	18.	4.243	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-05/11/82	2	3.68	3.68	5.4	1.96	5.917	2.432	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-05/11/82	2	0.385	0.385	0.39	0.38	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

EPA Water Quality Criteria Analysis for Station: ZION0239

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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 1971 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	2	5.25	5.25	8.	2.5	15.125	3.889	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	2	380.	380.	380.	380.	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 1972 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	9	11.5	9.444	19.	1.	37.278	6.106	1.	2.5	13.	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	8	422.5	413.125	460.	320.	2535.268	50.351	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	7	7.	10.214	23.	0.	61.821	7.863	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	7	520.	509.286	575.	460.	1520.238	38.99	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	8	9.5	9.	15.	0.5	20.929	4.575	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	8	445.	450.625	510.	400.	1374.554	37.075	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	8	5.5	6.688	19.5	0.	45.424	6.74	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	8	3.5	5.75	18.	2.	30.5	5.523	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	8	467.5	471.875	625.	315.	8792.411	93.768	**	**	**	**

** - 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 box-and-whisker plot

Annual Analysis for 1976 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	10	3.5	6.65	27.	0.	67.947	8.243	0.05	0.875	10.	25.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	10	2.5	2.6	4.	2.	0.489	0.699	2.	2.	3.	3.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	10	400.	424.	500.	380.	2276.667	47.714	380.	387.5	470.	500.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	7	9.	8.071	13.	1.	24.702	4.97	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	7	2.	2.286	5.	1.	1.571	1.254	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	7	390.	380.	410.	330.	733.333	27.08	**	**	**	**

** - 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

Annual Analysis for 1978 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	8	7.75	7.125	13.	1.	21.696	4.658	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	8	3.	6.125	19.	2.	34.411	5.866	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	8	450.	443.75	570.	320.	5969.643	77.263	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	8	9.25	9.063	15.	0.5	25.603	5.06	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	10	3.	8.6	33.	2.	140.711	11.862	2.	2.75	10.25	32.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	10	470.	468.	500.	430.	595.556	24.404	431.	443.75	487.5	499.5

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

Annual Analysis for 1980 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	11	8.	9.409	20.	3.	33.241	5.765	3.2	5.	16.	19.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	11	4.	5.455	22.	3.	31.473	5.61	3.	3.	4.	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	11	495.	515.455	620.	450.	3102.273	55.698	452.	480.	580.	614.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	12	12.25	11.917	20.	4.	31.992	5.656	4.15	5.5	17.25	19.55
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	12	3.	3.833	10.	2.	4.697	2.167	2.	3.	4.75	8.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	12	440.	446.667	485.	400.	965.152	31.067	403.	418.75	478.75	485.

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

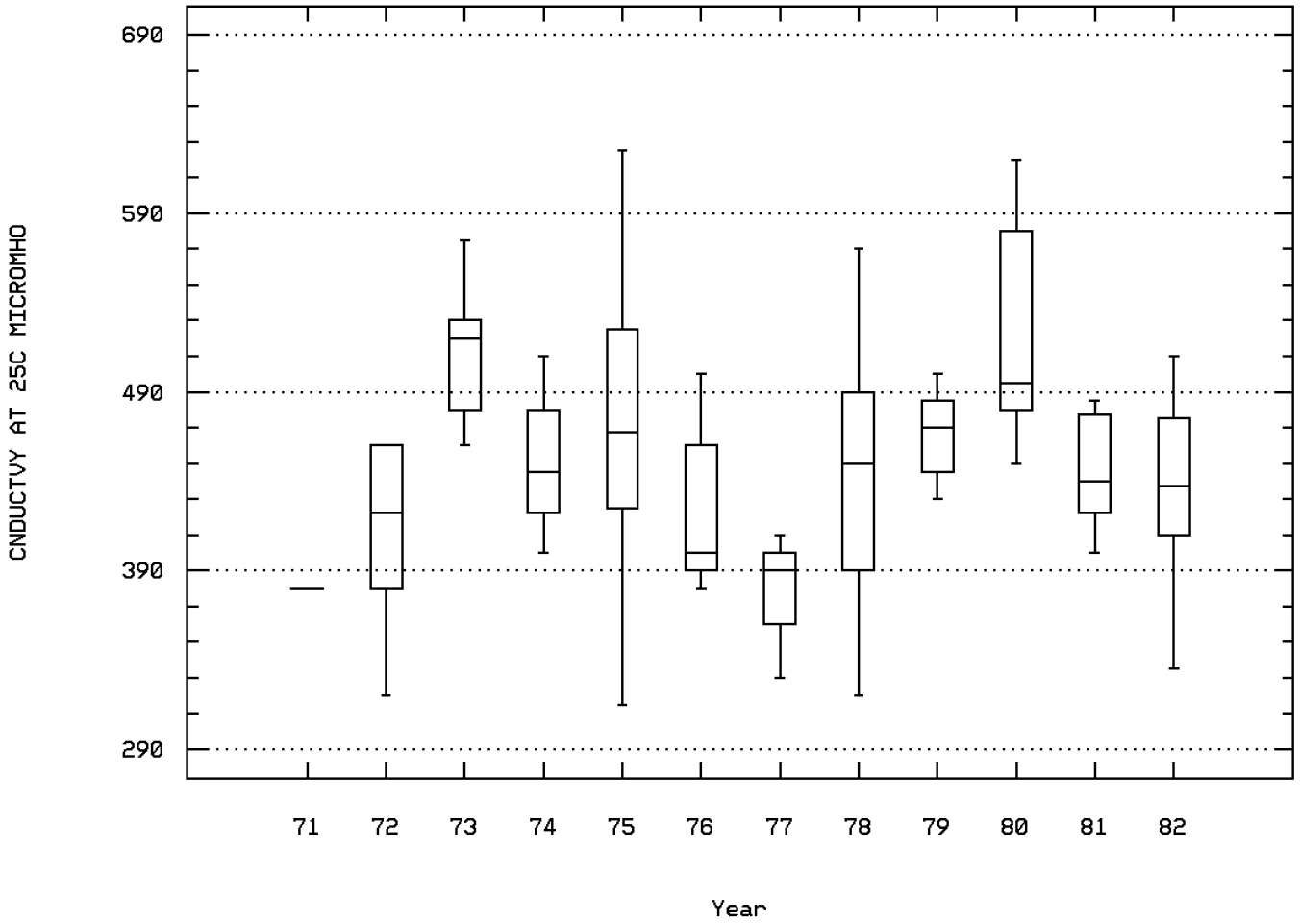
Annual Analysis for 1982 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	9	12.5	10.889	18.	2.5	26.736	5.171	2.5	7.	15.25	18.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	10	3.5	5.9	21.	2.	31.433	5.607	2.1	3.	7.	19.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	10	437.5	440.5	510.	335.	2524.722	50.247	342.5	410.	480.	508.5

** - 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: ZION0239 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



KANARRA CR. AT KANARRAVILLE, UT

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	68	7.25	8.618	27.	0.	41.098	6.411	0.95	3.25	12.875	18.1
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	52	3.	3.058	21.	1.	6.918	2.63	2.	2.	3.	4.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	70	435.	438.643	580.	320.	2945.595	54.273	380.	398.75	480.	500.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	15	8.	7.7	14.5	1.	21.85	4.674	1.	3.5	12.5	13.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	13	5.	8.231	29.	2.	66.359	8.146	2.	3.5	9.5	26.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	15	495.	501.	625.	390.	4540.	67.38	402.	460.	550.	622.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0239

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/21/71-09/15/82	16	12.	11.75	18.5	6.	15.367	3.92	6.35	8.625	14.625	18.15
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/15/82	13	7.	9.692	33.	2.	76.231	8.731	2.4	4.	13.5	27.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/21/71-09/15/82	16	462.5	459.688	590.	315.	3998.229	63.232	367.5	421.25	498.75	548.

** - Less than 9 observations ## - Computed 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: ZION0240

NPS Station ID: ZION0240
LAT/LON: 37.159726/-113.168060
Agency: 112WRD
Date Created: 04/14/78
Location: (C-42-12) 2DCD- 1
FIPS State/County: 49049 UTAH/UTAH
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370935113100501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.40
On/Off RF1:
RF3 Index: 15010008046000.00
RF3 Mile Point: 0.38
Distance from RF3: 0.10
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0240

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/17/77-11/17/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/17/77-11/17/77	1	850.	850.	850.	850.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/17/77-11/17/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/17/77-11/17/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/17/77-11/17/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/17/77-11/17/77	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/17/77-11/17/77	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/17/77-11/17/77	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/17/77-11/17/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/17/77-11/17/77	1	450.	450.	450.	450.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/17/77-11/17/77	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/17/77-11/17/77	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/17/77-11/17/77	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/17/77-11/17/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/17/77-11/17/77	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/17/77-11/17/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/17/77-11/17/77	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/17/77-11/17/77	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/17/77-11/17/77	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/17/77-11/17/77	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/17/77-11/17/77	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/17/77-11/17/77	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/17/77-11/17/77	1	1900.	1900.	1900.	1900.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/17/77-11/17/77	1	350.	350.	350.	350.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/17/77-11/17/77	1	559.	559.	559.	559.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/17/77-11/17/77	1	0.76	0.76	0.76	0.76	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: ZION0240

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0240

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0241

NPS Station ID: ZION0241
LAT/LON: 37.202781/-113.174448
Agency: 21UTAH
Date Created: 10/26/96
Location: NORTH CK AB CNFL/ VIRGIN R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495089
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0241

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/03/96-12/11/96	11	19.5	18.718	27.9	6.7	36.702	6.058	7.42	15.7	23.1	26.96
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/03/96-12/11/96	11	3.	10.855	90.	0.3	697.649	26.413	0.3	0.3	5.	74.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/96-12/11/96	11	1.9	11.864	98.7	0.8	842.773	29.031	0.82	1.1	7.1	81.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/03/96-12/11/96	11	1479.	1534.364	2695.	201.	385368.455	620.781	402.2	1298.	1937.	2563.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/03/96-12/11/96	11	1500.	1461.091	2549.	204.	507430.691	712.342	216.	1275.	1891.	2468.4
00300	OXYGEN, DISSOLVED MG/L	04/03/96-12/11/96	11	10.1	9.173	11.2	4.6	3.824	1.956	5.12	7.8	10.3	11.14
00400	PH (STANDARD UNITS)	04/03/96-12/11/96	11	8.	7.957	8.58	7.4	0.169	0.411	7.4	7.67	8.32	8.556
00400	CONVERTED PH (STANDARD UNITS)	04/03/96-12/11/96	11	8.	7.796	8.58	7.4	0.198	0.445	7.4	7.67	8.32	8.556
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/03/96-12/11/96	11	0.01	0.016	0.04	0.003	0.	0.014	0.003	0.005	0.021	0.04
00403	PH, LAB, STANDARD UNITS SU	04/03/96-12/11/96	11	8.	8.055	8.4	7.7	0.051	0.225	7.7	8.	8.3	8.38
00403	CONVERTED PH, LAB, STANDARD UNITS	04/03/96-12/11/96	11	8.	8.001	8.4	7.7	0.054	0.232	7.7	8.	8.3	8.38
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/03/96-12/11/96	11	0.01	0.01	0.02	0.004	0.	0.005	0.004	0.005	0.01	0.02
00405	CARBON DIOXIDE (MG/L AS CO2)	04/03/96-12/11/96	11	3.	3.818	10.	1.	6.164	2.483	1.2	2.	5.	9.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	11	205.	203.182	287.	44.	4476.364	66.906	69.6	175.	269.	284.8
00440	BICARBONATE ION (MG/L AS HCO3)	04/03/96-12/11/96	11	250.	247.727	350.	53.	6660.818	81.614	84.4	214.	328.	347.2
00445	CARBONATE ION (MG/L AS CO3)	04/03/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/03/96-12/11/96	11	10.	30.636	157.	2.	2170.655	46.59	2.8	7.	30.	140.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/03/96-12/11/96	11 ##	0.025	0.058	0.24	0.025	0.004	0.065	0.025	0.025	0.079	0.208
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/03/96-12/11/96	11	0.4	0.393	0.8	0.06	0.059	0.243	0.06	0.2	0.6	0.78
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/03/96-12/11/96	11	0.01	0.027	0.076	0.005	0.001	0.025	0.006	0.01	0.052	0.073
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/03/96-12/11/96	11 ##	0.005	0.01	0.04	0.005	0.	0.011	0.005	0.005	0.01	0.036
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	11	795.	864.	1422.	74.	142993.4	378.145	183.2	660.	1166.	1407.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/03/96-12/11/96	11	215.	240.1	392.	21.1	10187.71	100.934	54.08	192.	324.	385.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/03/96-12/11/96	11	65.9	64.418	112.	5.2	984.696	31.38	11.	47.7	87.	111.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/03/96-12/11/96	11	78.8	72.268	125.	9.95	1096.339	33.111	14.76	57.2	91.5	122.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/03/96-12/11/96	11	8.8	8.297	13.4	1.6	13.338	3.652	2.162	6.2	11.2	13.36
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/96-12/11/96	11	53.	50.727	105.	5.	884.418	29.739	7.6	32.	76.	100.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/96-12/11/96	11	658.1	778.718	1420.	45.1	154832.74	393.488	138.54	570.3	1070.	1405.4
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	3	83.	82.667	120.	45.	1406.333	37.501	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	3 ##	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	3	30.	39.667	67.	22.	576.333	24.007	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	3	31.	58.333	120.	24.	2864.333	53.519	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0241

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	3	4.	4.667	8.	2.	9.333	3.055	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/96-12/11/96	11	1268.	1402.182	2376.	140.	406825.964	637.829	308.8	1028.	1808.	2365.6
71830	HYDROXIDE ION (MG/L AS OH)	04/03/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	3 ##	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: ZION0241

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	1	0.09	5	1	0.20	3	0	0.00	3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00400	PH	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	250.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	11	10	0.91	5	4	0.80	3	3	1.00	3	3	1.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5.	3	0	0.00	2	0	0.00				1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	1300.	3	0	0.00	2	0	0.00				1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	15.	3	0	0.00	2	0	0.00				1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5000.	3	0	0.00	2	0	0.00				1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	2.	3	0	0.00	2	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0242

NPS Station ID: ZION0242
LAT/LON: 37.202504/-113.174727
Agency: 112WRD
Date Created: 01/23/82
Location: NORTH CREEK AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371209113102901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 28.80
On/Off RF1:
RF3 Index: 15010008003807.69
RF3 Mile Point: 8.27
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0242

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	5	16.	18.1	30.5	5.5	102.675	10.133	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/23/82	5	18.5	21.6	33.5	7.5	129.3	11.371	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/23/82	5	670.	666.2	676.	657.	75.7	8.701	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-08/23/82	5	4.	6.78	20.	0.9	59.992	7.745	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	5	1350.	1161.	1415.	500.	146280.	382.466	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/23/82	5	9.	9.6	11.6	8.8	1.34	1.158	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-08/23/82	5	8.2	8.24	8.4	8.1	0.013	0.114	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-08/23/82	5	8.2	8.228	8.4	8.1	0.013	0.115	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	5	0.006	0.006	0.008	0.004	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	5	8.2	8.12	8.3	7.8	0.037	0.192	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	5	8.2	8.082	8.3	7.8	0.039	0.197	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	5	0.006	0.008	0.016	0.005	0.	0.004	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	5	0.2	0.36	0.8	0.1	0.103	0.321	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/05/82	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	5 ##	0.005	0.013	0.03	0.005	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	5	620.	556.	760.	200.	48130.	219.386	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	5	170.	155.4	210.	57.	3775.8	61.448	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	5	47.	40.6	56.	15.	245.3	15.662	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	5	54.	46.6	57.	15.	314.3	17.729	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	5	1.	0.9	1.1	0.5	0.055	0.235	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-08/23/82	5	14.	15.2	18.	14.	3.2	1.789	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	5	5.8	6.04	9.	2.1	7.183	2.68	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/23/82	5	37.	28.8	40.	12.	164.7	12.834	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/23/82	5	530.	456.	640.	120.	40930.	202.312	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	5	0.2	0.16	0.2	0.1	0.003	0.055	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	5	18.	16.6	20.	10.	17.8	4.219	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	5	230.	206.	300.	60.	9030.	95.026	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	5	958.	837.	1110.	291.	105434.	324.706	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/23/82	5	10.	9.42	15.7	2.2	35.997	6.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/23/82	5	1.3	1.14	1.51	0.4	0.194	0.44	**	**	**	**

** - Less than 9 observations ## - 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: ZION0242

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	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: ZION0243

NPS Station ID: ZION0243
LAT/LON: 37.202559/-113.175198
Agency: 11NPSWRD
Date Created: 08/02/97
Location: NORTH CREEK AT HIGHWAY 15 BRIDGE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_EPA_NC1
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3500
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VIRGIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON NORTH CREEK AT HIGHWAY 15 BRIDGE. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE 3/14/76 DATA FOR THIS STATION INCLUDES A 68/1000 CMS RETURN IRRIGATION FLOW. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0243

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	3	1.	1.	2.	0.	1.	1.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	3	1.	24.667	72.	1.	1680.333	40.992	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	3	1050.	1066.667	1200.	950.	15833.333	125.831	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	3	11.4	11.6	12.1	11.3	0.19	0.436	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	3	7.75	7.733	7.8	7.65	0.006	0.076	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/15/76	3	7.75	7.729	7.8	7.65	0.006	0.077	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/15/76	3	0.018	0.019	0.022	0.016	0.	0.003	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	3	18.	76.333	208.	3.	13058.333	114.273	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	3	42.	48.	61.	41.	127.	11.269	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	3	344.	308.	390.	190.	10972.	104.747	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	3	0.17	0.2	0.28	0.15	0.005	0.07	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	3	240.	1403.333	3800.	170.	4309233.333	2075.869	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	3	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	3	70.	106.667	190.	60.	5233.333	72.342	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	3	732.	718.	830.	592.	14308.	119.616	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	3	1.4	1.933	3.9	0.5	3.103	1.762	**	**	**	**

** - Less than 9 observations ## - 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: ZION0243

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	1	0.33	3	1	0.33									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	2	0.67	3	2	0.67									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	1	0.33	3	1	0.33									
		Drinking Water	2.	3	1	0.33	3	1	0.33									

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

Station Inventory for Station: ZION0244

NPS Station ID: ZION0244
LAT/LON: 37.202504/-113.175004
Agency: 21USU
Date Created: / /
Location: NORTH CREEK AT U-15 BRIDGE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000206C
RMI-Indexes: 1101001 005770 01610
Within Park Boundary: No
RMI-Miles: 0038.65 0013.80 000.05
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008006
RF1 Mile Point: 0.140
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:
NORTH CREEK AT U-15 BRIDGE.

Parameter Inventory for Station: ZION0244

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	3	20.	20.167	29.5	11.	85.583	9.251	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	2	1.25	1.25	1.4	1.1	0.045	0.212	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	3	2110.	2038.	2594.	1410.	354352.	595.275	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	3	9.6	9.767	10.4	9.3	0.323	0.569	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	3	1.	1.	1.2	0.8	0.04	0.2	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-05/28/74	2	8.	8.	8.2	7.8	0.08	0.283	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-05/28/74	2	7.955	7.955	8.2	7.8	0.084	0.29	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-05/28/74	2	0.011	0.011	0.016	0.006	0.	0.007	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	15.	15.	27.	3.	288.	16.971	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	179.	165.667	194.	124.	1358.333	36.856	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	2	110.	110.	116.	104.	72.	8.485	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	224.	224.	236.	212.	288.	16.971	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	3	6.	5.333	7.	3.	4.333	2.082	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.079	0.084	0.107	0.067	0.	0.021	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.01	0.012	0.022	0.005	0.	0.009	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.21	0.23	0.34	0.14	0.01	0.101	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	3	0.003	0.003	0.004	0.001	0.	0.002	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	3	0.033	0.029	0.04	0.013	0.	0.014	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	3	6.	5.167	9.	0.5	18.583	4.311	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	3	45.	43.	49.	35.	52.	7.211	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	3	45.	48.	55.	44.	37.	6.083	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	1125.	1100.667	1492.	685.	163256.333	404.05	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	3	324.	292.	360.	192.	7824.	88.453	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	3	77.	90.333	144.	50.	2342.333	48.398	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	3	80.	83.	114.	55.	877.	29.614	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	3	6.	6.667	13.	1.	36.333	6.028	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	3	50.	52.667	72.	36.	329.333	18.148	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	3	1050.	1006.667	1470.	500.	236633.333	486.45	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	0.16	0.16	0.21	0.11	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	12.5	12.5	13.	12.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	3	200.	166.667	270.	30.	15233.333	123.423	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	3	0.	1.333	4.	0.	5.333	2.309	**	**	**	**

** - Less than 9 observations ## - 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: ZION0244

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	3	0.	0.667	2.	0.	1.333	1.155	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	2	70.	70.	140.	0.	9800.	98.995	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	3	10.	13.333	30.	0.	233.333	15.275	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	3	60.	46.667	80.	0.	1733.333	41.633	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	3	8.	8.667	10.	8.	1.333	1.155	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	3	10.	16.667	40.	0.	433.333	20.817	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	3	930.	1193.333	2300.	350.	1002633.333	1001.316	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-07/15/74	3	2.968	2.958	3.362	2.544	0.167	0.409	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			908.015								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	75.	81.	93.	75.	108.	10.392	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	1.875	1.906	1.968	1.875	0.003	0.054	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			80.575								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	3	## 3.655	6.002	10.7	3.65	16.556	4.069	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	3	1800.	1680.	2160.	1080.	302400.	549.909	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0244

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00				1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00				1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	1	0.33	1	1	1.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	1	0.33	1	0	0.00	1	1	1.00	1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0245

NPS Station ID: ZION0245
Location: NORTH CREEK AT U-15 BRIDGE
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes: 1101001 005770
RMI-Miles: 0038.65 0015.19
HUC: 15010008
Major Basin: COLORADO RIVER BASIN
Minor Basin: LOWER COLORADO RIVER
RF1 Index: 15010008006
RF3 Index: 15010008066700.00
Description:
NORTH CREEK AT U-15 BRIDGE.

LAT/LON: 37.202504/-113.175004
Depth of Water: 0
Elevation: 0
RF1 Mile Point: 0.140
RF3 Mile Point: 0.00

Agency: 21USU
FIPS State/County: 49053 UTAH/WASHINGTON
STORET Station ID(s): 00206C
Within Park Boundary: No
Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 16.40
Distance from RF3: 0.07

Date Created: / /
On/Off RF1: OFF
On/Off RF3:

Parameter Inventory for Station: ZION0245

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: ZION0246

NPS Station ID: ZION0246
LAT/LON: 37.407253/-113.175031
Agency: 11NPSWRD
Date Created: 08/02/97
Location: LAVERKIN CREEK AT LEE PASS TRAIL
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_USU_LVC
RMI-Indexes:
Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 5080
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE KOLOB ARCH UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE LAVERKIN CREEK AT LEE PASS TRAIL IN NW ZION NP. DATA FOR THIS SITE ARE FROM THE 1977 REPORT "THE BIOLOGICAL AND CHEMICAL INPUTS TO ZION NATIONAL PARK" BY J. DAIN MADDOX AND GEORGE E. HART OF THE DEPARTMENT OF FORESTRY AND OUTDOOR RECREATION UTAH STATE UNIV. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0246

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/77-09/04/77	3	2.	2.167	3.	1.5	0.583	0.764	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/16/77-09/04/77	3	677.	1000.667	1670.	655.	336126.333	579.764	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/16/77-09/04/77	3	7.8	7.8	8.	7.6	0.04	0.2	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/16/77-09/04/77	3	7.8	7.77	8.	7.6	0.041	0.203	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/16/77-09/04/77	3	0.016	0.017	0.025	0.01	0.	0.008	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	05/16/77-09/04/77	3	152.	160.	180.	148.	304.	17.436	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/16/77-09/04/77	3	185.	195.333	220.	181.	460.333	21.455	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/16/77-09/04/77	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/16/77-09/04/77	3	0.01	0.023	0.05	0.01	0.001	0.023	**	**	**	**
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	05/16/77-09/04/77	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/16/77-09/04/77	3	336.	384.	486.	330.	7812.	88.386	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/16/77-09/04/77	3	84.8	84.	86.4	80.8	8.32	2.884	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/16/77-09/04/77	3	32.2	33.1	64.8	2.3	977.17	31.26	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/16/77-09/04/77	3	17.1	57.343	143.	11.93	5509.481	74.226	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/16/77-09/04/77	3	2.93	3.093	3.7	2.65	0.296	0.544	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/16/77-09/04/77	3	10.	11.333	16.	8.	17.333	4.163	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/16/77-09/04/77	3	202.	325.333	580.	194.	48657.333	220.584	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/16/77-09/04/77	3	0.2	0.25	0.4	0.15	0.018	0.132	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/16/77-09/04/77	3	8.	13.667	26.	7.	114.333	10.693	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/16/77-09/04/77	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/16/77-09/04/77	3	63.	98.333	184.	48.	5560.333	74.568	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/16/77-09/04/77	3	150.	136.667	220.	40.	8233.333	90.738	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/16/77-09/04/77	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/16/77-09/04/77	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/16/77-09/04/77	3	4.	3.667	5.	2.	2.333	1.528	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/16/77-09/04/77	3	44.	61.333	100.	40.	1125.333	33.546	**	**	**	**

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Parameter Inventory for Station: ZION0246

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01049	LEAD, DISSOLVED (UG/L AS PB)	05/16/77-09/04/77	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/16/77-09/04/77	3	7.	12.667	27.	4.	156.333	12.503	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/16/77-09/04/77	3	5.	6.5	14.	0.5	47.25	6.874	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/16/77-09/04/77	3	25.	21.333	33.	6.	192.333	13.868	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/16/77-09/04/77	3	63.	85.	149.	43.	3172.	56.321	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/16/77-09/04/77	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31503	COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35 C	07/26/77-09/03/77	3	1600.	1706.667	2120.	1400.	138133.333	371.663	**	**	**	**
31503	LOG COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,3	07/26/77-09/03/77	3	3.204	3.226	3.326	3.146	0.008	0.092	**	**	**	**
31503	GM COLIFORM,TOT,MEMBR FILTER,DELAYED,M-ENDO MED,35	GEOMETRIC MEAN =			1680.846								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/03/77	3	360.	280.	420.	60.	37200.	192.873	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/26/77-09/03/77	3	2.556	2.319	2.623	1.778	0.221	0.47	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			208.562								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	07/26/77-09/03/77	3	240.	240.	280.	200.	1600.	40.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	07/26/77-09/03/77	3	2.38	2.376	2.447	2.301	0.005	0.073	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			237.757								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/16/77-09/04/77	3	432.	653.	1105.	422.	153253.	391.475	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/16/77-09/04/77	3	0.01	0.138	0.4	0.005	0.051	0.227	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/16/77-09/04/77	3 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/16/77-09/04/77	3	0.1	0.1	0.13	0.07	0.001	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0246

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00	2	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00723	CYANIDE, DISSOLVED STD METHOD	Fresh Acute	22.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	200.	3	0	0.00	2	0	0.00				1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	1	0.33	2	0	0.00				1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00				1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5.	3	0	0.00	2	0	0.00				1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	1300.	3	0	0.00	2	0	0.00				1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	15.	3	0	0.00	2	0	0.00				1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	2	0.67	2	1	0.50				1	1	1.00			
		Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5000.	3	0	0.00	2	0	0.00				1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	3	3	1.00	3	3	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	3	2	0.67	3	2	0.67									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	2	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	2.	3	0	0.00	2	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0247

NPS Station ID: ZION0247
LAT/LON: 37.202504/-113.175004
Agency: 21USU
Date Created: / /
Location: E F VIRGIN RIV ABV CONFL N FORK
FIPS State/County: 49000 UTAH/
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 00206B
RMI-Indexes: 1101001 005770 01610
Within Park Boundary: No
RMI-Miles: 0038.65 0013.80 000.05
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008007
RF1 Mile Point: 0.140
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index:
RF3 Mile Point: 0.00
Distance from RF3: 0.00
On/Off RF3:
Description:
EAST FORK VIRGIN RIVER 0.5 MILES ABOVE CONFLUENCE WITH NORTH FORK AT THE RANCH ROAD BRIDGE.

Parameter Inventory for Station: ZION0247

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: ZION0248

NPS Station ID: ZION0248
LAT/LON: 37.202504/-113.175004
Agency: 21USU
Date Created: / /
Location: E F VIRGIN RIV ABV CONFL N FORK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000206B
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0015.19
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008007
RF1 Mile Point: 0.140
Distance from RF1: 16.40
On/Off RF1: ON
RF3 Index: 15010008066700.00
RF3 Mile Point: 0.00
Distance from RF3: 0.07
On/Off RF3:
Description:
EAST FORK VIRGIN RIVER 0.5 MILES ABOVE CONFLUENCE WITH NORTH FORK AT THE RANCH ROAD BRIDGE.

Parameter Inventory for Station: ZION0248

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/15/74	3	16.5	16.833	24.	10.	49.083	7.006	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	2	7.05	7.05	12.	2.1	49.005	7.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/15/74	3	572.	575.667	585.	570.	66.333	8.145	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/15/74	3	8.7	8.567	9.6	7.4	1.223	1.106	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/15/74	3	1.1	1.133	1.5	0.8	0.123	0.351	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-07/15/74	3	8.3	8.333	8.4	8.3	0.003	0.058	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-07/15/74	3	8.3	8.331	8.4	8.3	0.003	0.058	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-07/15/74	3	0.005	0.005	0.005	0.004	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	4.5	4.5	7.	2.	12.5	3.536	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	148.	147.333	157.	137.	100.333	10.017	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/15/74	3	89.	62.667	94.	5.	2500.333	50.003	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	186.	186.	192.	180.	72.	8.485	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/15/74	3	24.	28.	45.	15.	237.	15.395	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.072	0.082	0.122	0.052	0.001	0.036	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.005	0.005	0.007	0.003	0.	0.002	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/15/74	3	0.72	0.707	0.77	0.63	0.005	0.071	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/15/74	3	0.003	0.003	0.004	0.001	0.	0.002	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/15/74	3	0.02	0.018	0.027	0.006	0.	0.011	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/15/74	3	3.	2.167	3.5	0.	3.583	1.893	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/15/74	3	32.5	30.833	36.	24.	38.083	6.171	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/15/74	3	35.5	33.	39.5	24.	64.75	8.047	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/15/74	3	226.	218.333	234.	195.	424.333	20.599	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/15/74	3	53.	52.667	53.	52.	0.333	0.577	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/15/74	3	23.	21.	25.	15.	28.	5.292	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/15/74	3	26.	28.333	34.	25.	24.333	4.933	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/15/74	3	4.	3.667	5.	2.	2.333	1.528	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/15/74	3	24.	26.	31.	23.	19.	4.359	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/15/74	3	94.	69.	112.	1.	3549.	59.573	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	0.165	0.165	0.21	0.12	0.004	0.064	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/15/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/15/74	3	0.	50.	150.	0.	7500.	86.603	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/15/74	3	0.	0.667	2.	0.	1.333	1.155	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0248

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/15/74	3	0.	1.	3.	0.	3.	1.732	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	2	95.	95.	140.	50.	4050.	63.64	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/15/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/15/74	3	10.	10.	20.	0.	100.	10.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/15/74	3	8.	6.667	12.	0.	37.333	6.11	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/15/74	3	0.	0.667	2.	0.	1.333	1.155	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/15/74	3	0.	10.	30.	0.	300.	17.321	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/15/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/15/74	3	1200.	1176.667	2100.	230.	874633.333	935.218	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-07/15/74	3	3.079	2.921	3.322	2.362	0.249	0.499	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			833.763								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	23.	27.	43.	15.	208.	14.422	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/15/74	3	1.362	1.39	1.633	1.176	0.053	0.23	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			24.571								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/15/74	3 ##	3.655	4.935	7.5	3.65	4.934	2.221	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/15/74	3	340.	340.667	344.	338.	9.333	3.055	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0248

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00				1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	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			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	2	0.67	1	1	1.00	1	1	1.00	1	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0249

NPS Station ID: ZION0249
LAT/LON: 37.202253/-113.175532
Agency: 11NPSWRD
Date Created: 08/02/97
Location: MOUTH OF NORTH CREEK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_33
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3500
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VIRGIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT THE MOUTH OF NORTH CREEK ON THE VIRGIN RIVER DOWNSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUAD BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0249

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-08/23/82	5	16.	18.1	30.5	5.5	102.675	10.133	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-08/23/82	5	1350.	1162.	1420.	500.	146920.	383.301	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-08/23/82	5	9.	9.6	11.6	8.8	1.34	1.158	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/23/82	5	8.2	8.24	8.4	8.1	0.013	0.114	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/23/82	5	8.2	8.228	8.4	8.1	0.013	0.115	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/23/82	5	0.006	0.006	0.008	0.004	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	150.	142.2	170.	99.	780.2	27.932	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/23/82	5	0.2	0.36	0.8	0.1	0.103	0.321	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/23/82	5 ##	0.005	0.013	0.03	0.005	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/23/82	5	620.	556.	760.	200.	48130.	219.386	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-08/23/82	5	470.	414.	620.	110.	39230.	198.066	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/23/82	5	170.	155.4	210.	57.	3775.8	61.448	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/23/82	5	47.	40.6	56.	15.	245.3	15.662	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/23/82	5	54.	46.6	57.	15.	314.3	17.729	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/23/82	5	1.	0.9	1.1	0.5	0.055	0.235	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/23/82	5	5.8	6.04	9.	2.1	7.183	2.68	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-08/23/82	5	37.	28.8	40.	12.	164.7	12.834	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-08/23/82	5	530.	456.	640.	120.	40930.	202.312	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/23/82	5	0.2	0.16	0.2	0.1	0.003	0.055	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/23/82	5	18.	16.6	20.	10.	17.8	4.219	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0249

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/23/82	5	230.	206.	300.	60.	9030.	95.026	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	1	3000.	3000.	3000.	3000.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	1400.	1400.	1400.	1400.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	3.146	3.146	3.146	3.146	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			1400.								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	1	1300.	1300.	1300.	1300.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/24/81-08/24/81	1	3.114	3.114	3.114	3.114	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			1300.								
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/23/82	5	958.	837.	1110.	291.	105434.	324.706	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0249

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
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									
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	0 &	0	0.00												
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00	1	0	0.00									
		Drinking Water	6.	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: ZION0249

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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: ZION0250

NPS Station ID: ZION0250
LAT/LON: 37.201115/-113.176393
Agency: 112WRD
Date Created: 12/02/81
Location: VIRGIN R. ABOVE NORTH CREEK, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371204113103501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 7.560
Distance from RF1: 0.70
On/Off RF1: ON
RF3 Index: 15010008000300.00
RF3 Mile Point: 0.18
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0250

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	4	16.25	18.125	28.5	11.5	53.229	7.296	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-09/01/82	4	22.25	24.375	34.5	18.5	58.063	7.62	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	5	671.	666.4	676.	655.	93.8	9.685	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-09/01/82	4	95.	213.	600.	62.	66956.	258.759	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	4	797.5	725.	880.	425.	41550.	203.838	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	4	8.4	8.5	11.	6.2	3.88	1.97	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-09/01/82	4	8.35	8.338	8.5	8.15	0.022	0.149	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-09/01/82	4	8.347	8.318	8.5	8.15	0.023	0.151	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	4	0.004	0.005	0.007	0.003	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	4	8.15	8.175	8.3	8.1	0.009	0.096	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	4	8.147	8.167	8.3	8.1	0.009	0.096	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	4	0.007	0.007	0.008	0.005	0.	0.001	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/01/82-09/01/82	1 ##	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/01/82-09/01/82	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/24/81-08/24/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	4	0.4	0.375	0.5	0.2	0.016	0.126	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/05/82-09/01/82	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	4 ##	0.013	0.013	0.02	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	4	310.	290.	340.	200.	4066.667	63.77	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	4	75.5	73.75	89.	55.	224.917	14.997	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	4	28.	25.5	32.	14.	63.	7.937	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	4	48.5	39.75	52.	10.	396.25	19.906	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	4	1.3	1.05	1.3	0.3	0.25	0.5	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-09/01/82	4	24.5	21.25	26.	10.	56.917	7.544	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	4	4.25	3.875	5.1	1.9	1.936	1.391	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-09/01/82	4	36.	33.75	53.	10.	381.583	19.534	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-09/01/82	4	165.	152.25	230.	49.	5826.917	76.334	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	4	0.2	0.175	0.2	0.1	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	4	11.	10.5	12.	8.	3.	1.732	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	4	55.	47.5	70.	10.	691.667	26.3	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	4	494.5	446.	556.	239.	20426.	142.92	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-09/01/82	4	128.	183.9	387.	92.6	19097.64	138.194	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-09/01/82	4	0.67	0.607	0.76	0.33	0.037	0.193	**	**	**	**

** - Less than 9 observations ## - 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: ZION0250

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0251

NPS Station ID: ZION0251
LAT/LON: 37.213059/-113.176393
Agency: 112WRD
Date Created: 11/18/75
Location: VIRGIN CANAL 1 MILE NE OF VIRGIN
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371247113103500
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0251

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-05/24/72	1	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	05/24/72-05/24/72	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/72-05/24/72	1	808.	808.	808.	808.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-05/24/72	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-05/24/72	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-05/24/72	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	143.	143.	143.	143.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/24/72-05/24/72	1	174.	174.	174.	174.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/24/72-05/24/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	1	380.	380.	380.	380.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/24/72-05/24/72	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/72-05/24/72	1	110.	110.	110.	110.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/72-05/24/72	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/72-05/24/72	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/24/72-05/24/72	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/24/72-05/24/72	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/72-05/24/72	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/72-05/24/72	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/72-05/24/72	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/72-05/24/72	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/24/72-05/24/72	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/24/72-05/24/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/24/72-05/24/72	1	545.	545.	545.	545.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/24/72-05/24/72	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/24/72-05/24/72	1	0.74	0.74	0.74	0.74	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: ZION0251

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00							1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0252

NPS Station ID: ZION0252
LAT/LON: 37.200226/-113.176698
Agency: 11NPSWRD
Date Created: 08/02/97
Location: VIRGIN RIVER ABOVE NORTH CREEK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_33.1
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3500
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VIRGIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE VIRGIN RIVER ABOVE NORTH CREEK DOWNSTREAM FROM ZION NP. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUAD BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN RESOURCE MANAGEMENT COHAN ZION NP (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0252

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	5	15.5	15.8	28.5	6.5	66.95	8.182	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	5	800.	741.	880.	425.	32455.	180.153	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	5	8.6	9.	11.	6.2	4.16	2.04	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	5	8.4	8.38	8.5	8.2	0.017	0.13	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	5	8.4	8.364	8.5	8.2	0.017	0.132	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	5	0.004	0.004	0.006	0.003	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	170.	169.6	180.	150.	140.8	11.866	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	5	0.4	0.38	0.5	0.2	0.012	0.11	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	5 ##	0.005	0.011	0.02	0.005	0.	0.008	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	5	290.	258.	330.	160.	5470.	73.959	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	110.	97.4	160.	32.	3228.8	56.823	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	5	71.	73.2	89.	55.	170.2	13.046	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	5	29.	26.6	32.	14.	53.3	7.301	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	5	48.	41.4	52.	10.	310.8	17.63	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	5	1.3	1.1	1.3	0.3	0.2	0.447	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	5	4.3	3.96	5.1	1.9	1.488	1.22	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	5	46.	37.	53.	10.	339.	18.412	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	5	150.	151.8	230.	49.	4371.2	66.115	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	5	0.2	0.2	0.3	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	5	11.	10.58	12.	8.	2.832	1.683	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	5	50.	48.	70.	10.	520.	22.804	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	5	469.	450.6	556.	239.	15425.3	124.199	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0252

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	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: ZION0253

NPS Station ID: ZION0253 | LAT/LON: 37.203670/-113.180838 | Agency: 11NPSWRD | Date Created: 08/02/97
Location: VIRGIN RIVER NEAR VIRGIN UT | FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM | STORET Station ID(s): ZION_EPA_VR7
RMI-Indexes: | Within Park Boundary: No
RMI-Miles:
HUC: 15010008 | Depth of Water: 0 | Aquifer:
Major Basin: COLORADO RIVER | Elevation: 3480 | Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER | ECO Region:
RF1 Index: 15010008 | RF1 Mile Point: 0.000 | Distance from RF1: 3.60 | On/Off RF1:
RF3 Index: 15010008039000.00 | RF3 Mile Point: 0.00 | Distance from RF3: 0.01 | On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VIRGIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE VIRGIN RIVER 2/5 KM UPSTREAM FROM VIRGIN UTAH. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0253

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	2	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	2	59.5	59.5	67.	52.	112.5	10.607	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	2	940.	940.	960.	920.	800.	28.284	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	2	11.65	11.65	11.8	11.5	0.045	0.212	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	2	7.85	7.85	7.85	7.85	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/14/76	2	7.85	7.85	7.85	7.85	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/14/76	2	0.014	0.014	0.014	0.014	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	2	119.5	119.5	147.	92.	1512.5	38.891	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	2	76.	76.	80.	72.	32.	5.657	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	2	173.5	173.5	194.	153.	840.5	28.991	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	2	0.225	0.225	0.23	0.22	0.	0.007	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	2	2650.	2650.	3200.	2100.	605000.	777.817	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	2	105.	105.	115.	95.	200.	14.142	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	2	536.	536.	576.	496.	3200.	56.569	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	2	2.1	2.1	3.4	0.8	3.38	1.838	**	**	**	**

** - Less than 9 observations ## - 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: ZION0253

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	2	1.00	2	2	1.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									
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									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	1	0.50	2	1	0.50									
		Drinking Water	2.	2	1	0.50	2	1	0.50									

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

Station Inventory for Station: ZION0254

NPS Station ID: ZION0254
LAT/LON: 37.520615/-113.183503
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD023R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_19 /5083856
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kanarraville UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0254

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/80-06/21/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/80-06/21/80	1	900.	900.	900.	900.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/21/80-06/21/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/21/80-06/21/80	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/80-06/21/80	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/80-06/21/80	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/80-06/21/80	1	34.2	34.2	34.2	34.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/80-06/21/80	1	21.58	21.58	21.58	21.58	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/21/80-06/21/80	1	45.	45.	45.	45.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/21/80-06/21/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/21/80-06/21/80	1	401.	401.	401.	401.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/21/80-06/21/80	1	4.34	4.34	4.34	4.34	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/21/80-06/21/80	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/21/80-06/21/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/21/80-06/21/80	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: ZION0254

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0255

NPS Station ID: ZION0255
LAT/LON: 37.196170/-113.191088
Agency: 11NPSWRD
Date Created: 08/02/97
Location: VIRGIN RIVER AT VIRGIN UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_UTDNR_32
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3480
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE VIRGIN UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE VIRGIN RIVER AT VIRGIN UT LOCATED IN ZION CANYON. DATA FOR THIS SITE ARE FROM THE REPORT "RECONNAISSANCE OF THE QUALITY OF SURFACE WATER IN THE UPPER VIRGIN RIVER BASIN UTAH ARIZONA AND NEVADA 1981-82" TECHNICAL PUBLICATION NO. 83 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 1985. THIS REPORT ALSO CONTAINS SUSPENDED SEDIMENT DATA AND DATA FOR ADDITIONAL SITES WITHIN THE VIRGIN RIVER BASIN NOT UPLOADED. LAT AND LONG DIGITIZED FROM QUAD BASED ON STATION DESCRIPTION IN REPORT. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0255

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-09/01/82	5	15.5	15.6	29.5	5.5	80.8	8.989	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-09/01/82	5	850.	786.	960.	430.	42030.	205.012	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/24/81-09/01/82	5	8.5	8.9	11.4	6.3	3.775	1.943	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	5	8.2	8.22	8.3	8.1	0.007	0.084	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	5	8.2	8.213	8.3	8.1	0.007	0.084	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	5	0.006	0.006	0.008	0.005	0.	0.001	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	150.	158.	180.	140.	270.	16.432	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	5	0.5	0.46	0.6	0.3	0.013	0.114	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	5 ##	0.005	0.015	0.03	0.005	0.	0.014	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-09/01/82	5	340.	322.	380.	190.	6120.	78.23	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/24/81-09/01/82	5	170.	164.2	230.	51.	4823.2	69.449	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-09/01/82	5	81.	83.	106.	55.	363.5	19.066	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-09/01/82	5	31.	28.	35.	13.	77.	8.775	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-09/01/82	5	50.	42.4	53.	10.	331.3	18.202	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-09/01/82	5	1.3	1.08	1.3	0.3	0.192	0.438	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-09/01/82	5	4.5	4.	5.	2.	1.375	1.173	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/24/81-09/01/82	5	57.	47.8	61.	10.	454.7	21.324	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/24/81-09/01/82	5	180.	171.	240.	55.	4955.	70.392	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-09/01/82	5	0.2	0.2	0.3	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-09/01/82	5	10.	9.76	12.	7.2	5.328	2.308	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	08/24/81-08/24/81	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	08/24/81-08/24/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0255

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01015	BISMUTH, DISSOLVED (UG/L AS BI)	08/24/81-08/24/81	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-09/01/82	5	60.	62.	80.	30.	420.	20.494	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/24/81-08/24/81	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	08/24/81-08/24/81	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/24/81-08/24/81	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01080	STRONTIUM, DISSOLVED (UG/L AS SR)	08/24/81-08/24/81	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	08/24/81-08/24/81	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	08/24/81-08/24/81	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01100	TIN, DISSOLVED (UG/L AS SN)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01120	GALLIUM, DISSOLVED (UG/L AS GA)	08/24/81-08/24/81	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01125	GERMANIUM, DISSOLVED (UG/L AS GE)	08/24/81-08/24/81	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01150	TITANIUM, DISSOLVED (UG/L AS TI)	08/24/81-08/24/81	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01160	ZIRCONIUM, DISSOLVED (UG/L AS ZR)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	1300.	1300.	1300.	1300.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/24/81-08/24/81	1	3.114	3.114	3.114	3.114	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			1300.								
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/24/81-08/24/81	1	3700.	3700.	3700.	3700.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/24/81-08/24/81	1	3.568	3.568	3.568	3.568	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =			3700.								
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	5	526.	483.	598.	238.	20424.	142.913	**	**	**	**

** - Less than 9 observations ## - 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: ZION0255

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	1	0	0.00	1	0	0.00									
		Drinking Water	4.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
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									
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									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	1	1	1.00	1	1	1.00									
		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									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00	1	0	0.00									
		Drinking Water	6.	0 &	0	0.00												

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

EPA Water Quality Criteria Analysis for Station: ZION0255

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
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: ZION0256

NPS Station ID: ZION0256
LAT/LON: 37.199449/-113.203337
Agency: 21UTAH
Date Created: 04/10/82
Location: VIRGIN R 1 MI W OF VIRGIN
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495085
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN R DRAINAGE
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 5.840
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 150100080002911.34
RF3 Mile Point: 14.92
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	82	14.3	15.39	29.2	3.	54.802	7.403	6.16	8.575	22.225	26.67
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	4	21.45	21.725	30.	14.	55.969	7.481	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/09/95	41	138.	245.	1000.	30.	50117.	223.868	78.4	91.	345.	506.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	79	44.	169.733	1000.	0.8	70715.122	265.923	4.6	20.	200.	500.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	81	779.	739.963	1240.	305.	22127.586	148.753	526.6	650.	822.5	898.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	79	795.	759.709	1240.	311.	19071.517	138.1	553.	689.	835.	905.
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	77	8.5	8.527	12.7	3.9	2.446	1.564	6.8	7.4	9.55	10.64
00335	COD, .025N K2CR2O7 MG/L	02/24/82-06/13/90	52 ##	7.	10.135	60.	5.	78.354	8.852	5.	5.	12.125	19.7
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	79	8.3	8.267	9.	7.6	0.06	0.245	8.	8.1	8.4	8.6
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	79	8.3	8.201	9.	7.6	0.064	0.253	8.	8.1	8.4	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	79	0.005	0.006	0.025	0.001	0.	0.004	0.003	0.004	0.008	0.01
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	57	8.1	8.104	8.5	7.6	0.036	0.19	7.88	8.	8.2	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	57	8.1	8.062	8.5	7.6	0.038	0.194	7.88	8.	8.2	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	57	0.008	0.009	0.025	0.003	0.	0.004	0.004	0.006	0.01	0.013
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	79	2.	2.203	7.	0.	1.471	1.213	1.	1.	3.	4.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	79	172.	169.228	216.	74.	476.409	21.827	146.	159.	182.	193.
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	79	210.	206.101	264.	91.	716.092	26.76	178.	194.	222.	236.
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	79	0.	0.177	3.	0.	0.378	0.615	0.	0.	0.	1.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/24/82-08/28/84	12	1204.5	1678.583	6965.	15.	4164080.083	2040.608	34.5	123.75	2265.	5967.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	72	134.5	583.035	6965.	1.5	1617116.566	1271.659	16.9	62.	362.75	2072.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	83 ##	0.025	0.039	0.248	0.	0.001	0.031	0.025	0.025	0.05	0.05
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	36 ##	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/03/87-04/19/88	11 ##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	36	0.34	0.392	1.43	0.07	0.074	0.273	0.151	0.273	0.428	0.575
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/03/87-04/19/88	11	0.34	0.371	0.61	0.16	0.023	0.151	0.17	0.27	0.51	0.61
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	68	0.2	0.405	2.72	0.	0.299	0.547	0.05	0.1	0.415	0.9
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-10/29/91	12	0.35	0.318	0.76	0.025	0.033	0.183	0.06	0.2	0.395	0.652
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	30	0.4	0.39	1.1	0.1	0.046	0.216	0.2	0.3	0.4	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	83	0.077	0.161	1.53	0.003	0.06	0.245	0.016	0.031	0.15	0.572
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	31 ##	0.005	0.013	0.187	0.005	0.001	0.033	0.005	0.005	0.01	0.022
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/01/84-06/13/90	42	0.022	0.079	0.67	0.	0.018	0.136	0.003	0.005	0.12	0.157
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/24/82-06/13/90	52	1.85	5.239	34.8	0.25	63.005	7.938	0.9	1.2	4.	20.54
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	79	302.	296.899	505.	114.	3160.964	56.222	225.	269.	323.	356.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	79	72.	72.128	150.	29.8	272.022	16.493	54.	62.	79.	88.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	79	29.7	28.409	47.	9.6	34.513	5.875	20.	25.	32.	34.
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	79	50.	47.057	77.	11.	188.455	13.728	22.	41.	56.	60.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	79	4.	3.804	6.	1.93	0.868	0.932	2.7	3.	4.07	5.
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	46	46.	42.283	70.	7.	258.029	16.063	17.7	28.75	54.25	60.6

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

Parameter Inventory for Station: ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	43	54.	48.465	79.	0.	378.398	19.452	18.	30.	63.	69.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	79	170.	165.495	396.1	47.	3560.895	59.673	94.	130.	183.3	220.
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/21/92-10/30/96	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	56 ##	2.	1.763	5.	0.25	1.233	1.11	0.25	0.625	2.5	3.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/21/92-10/30/96	9	94.	121.111	360.	68.	8171.861	90.398	68.	83.5	105.	360.
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	56	95.	97.871	920.	0.	19912.497	141.112	0.	0.083	120.	153.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/21/92-10/30/96	9 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	56 ##	0.5	0.518	1.	0.5	0.009	0.094	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/21/92-10/30/96	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	56 ##	2.5	4.25	45.	2.5	57.091	7.556	2.5	2.5	2.5	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	05/21/92-10/30/96	9 ##	10.	8.667	10.	6.	4.	2.	6.	6.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	56 ##	10.	11.982	69.	5.	87.472	9.353	5.	10.	10.	20.
01046	IRON, DISSOLVED (UG/L AS FE)	05/21/92-10/30/96	9 ##	10.	21.444	65.	10.	377.028	19.417	10.	10.	34.	65.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/21/92-10/30/96	9 ##	1.5	1.944	2.5	1.5	0.278	0.527	1.5	1.5	2.5	2.5
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	56 ##	2.5	4.295	45.	2.5	36.298	6.025	2.5	2.5	2.5	9.3
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	56	62.	254.964	2925.	5.	364482.471	603.724	23.8	34.25	121.25	589.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/21/92-10/30/96	9	13.	17.111	36.	10.	78.611	8.866	10.	11.	23.5	36.
01067	NICKEL, TOTAL (UG/L AS NI)	02/24/82-06/21/83	10 ##	5.	7.7	15.	5.	14.011	3.743	5.	5.	10.5	14.7
01075	SILVER, DISSOLVED (UG/L AS AG)	05/21/92-10/30/96	9 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	56 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/21/92-10/30/96	9 ##	15.	15.	29.	10.	41.5	6.442	10.	10.	18.	29.
01092	ZINC, TOTAL (UG/L AS ZN)	04/14/82-09/18/91	55 ##	10.	17.182	150.	2.5	476.846	21.837	5.	10.	20.	35.4
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/21/92-10/30/96	9 ##	2.5	1.889	2.5	0.5	0.861	0.928	0.5	0.75	2.5	2.5
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	56 ##	0.25	0.527	2.5	0.25	0.456	0.675	0.25	0.25	0.438	2.15
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	83	504.	468.59	878.	9.	20372.684	142.733	322.4	404.	540.	596.4
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	4	4.	4.25	6.	3.	2.25	1.5	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/21/92-10/30/96	9 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	56 ##	0.1	0.096	1.	0.01	0.016	0.126	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	56	0.51	1.541	19.	0.015	8.062	2.839	0.211	0.343	1.343	4.57
82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	130.	145.	200.	120.	1366.667	36.968	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	1.015	1.833	4.7	0.6	3.792	1.947	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	4.375	10.	2.5	14.063	3.75	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4	74.5	141.25	380.	36.	25916.917	160.987	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	13.5	24.	10.	49.	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0256

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	78 &	36	0.46	54	25	0.46	12	6	0.50	12	5	0.42			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	77	1	0.01	51	0	0.00	12	0	0.00	14	1	0.07			
00400	PH	Other-Hi Lim.	9.	79	1	0.01	53	1	0.02	12	0	0.00	14	0	0.00			
		Other-Lo Lim.	6.5	79	0	0.00	53	0	0.00	12	0	0.00	14	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	57	0	0.00	39	0	0.00	9	0	0.00	9	0	0.00			
		Other-Lo Lim.	6.5	57	0	0.00	39	0	0.00	9	0	0.00	9	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	36	0	0.00	28	0	0.00	3	0	0.00	5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	36	0	0.00	28	0	0.00	3	0	0.00	5	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0256

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	12	0	0.00	8	0	0.00	2	0	0.00	2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	30	0	0.00	19	0	0.00	4	0	0.00	7	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	46	0	0.00	34	0	0.00	6	0	0.00	6	0	0.00			
		Drinking Water	250.	46	0	0.00	34	0	0.00	6	0	0.00	6	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	43	0	0.00	27	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	250.	43	0	0.00	27	0	0.00	8	0	0.00	8	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	79	5	0.06	55	5	0.09	12	0	0.00	12	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	50.	9	0	0.00	7	0	0.00				2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	50.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	9	0	0.00	7	0	0.00				2	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	5.	9	0	0.00	7	0	0.00				2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	5.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	9	0	0.00	7	0	0.00				2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	1300.	9	0	0.00	7	0	0.00				2	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	56	6	0.11	40	6	0.15	8	0	0.00	8	0	0.00			
		Drinking Water	1300.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	15.	9	0	0.00	7	0	0.00				2	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	15.	56	1	0.02	40	1	0.03	8	0	0.00	8	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	6	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	100.	10	0	0.00	6	0	0.00	2	0	0.00	2	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	100.	9	0	0.00	7	0	0.00				2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	100.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	5000.	9	0	0.00	7	0	0.00				2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	55	1	0.02	39	1	0.03	8	0	0.00	8	0	0.00			
		Drinking Water	5000.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	50.	9	0	0.00	7	0	0.00				2	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	50.	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	2.	9	0	0.00	7	0	0.00				2	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	56	0	0.00	40	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	2.	56	0	0.00	40	0	0.00	8	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	56	11.85	14.613	29.2	3.	66.576	8.159	5.7	7.35	22.45	27.43
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/09/95	29	120.	160.414	650.	30.	17717.966	133.109	77.	88.	168.5	344.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	55	44.	185.995	1000.	4.6	83970.509	289.777	14.2	25.	199.	787.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	56	794.5	783.625	1240.	305.	17481.911	132.219	609.7	738.	862.75	904.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	55	815.	800.545	1240.	311.	14507.438	120.447	657.	771.	846.	911.8
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	51	8.6	8.698	12.7	5.4	2.64	1.625	6.8	7.2	9.9	10.96
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	53	8.2	8.217	9.	7.6	0.06	0.245	8.	8.	8.4	8.5
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	53	8.2	8.152	9.	7.6	0.064	0.253	8.	8.	8.4	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	53	0.006	0.007	0.025	0.001	0.	0.004	0.003	0.004	0.01	0.01
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	39	8.1	8.072	8.4	7.6	0.032	0.179	7.8	7.9	8.2	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	39	8.1	8.034	8.4	7.6	0.034	0.183	7.8	7.9	8.2	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	39	0.008	0.009	0.025	0.004	0.	0.004	0.005	0.006	0.013	0.016
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	55	2.	2.291	7.	0.	1.506	1.227	1.	1.	3.	3.4
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	55	173.	168.036	199.	74.	582.739	24.14	136.6	158.	185.	193.4
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	55	212.	204.818	243.	91.	874.189	29.567	167.2	192.	226.	236.
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	55	0.	0.109	3.	0.	0.21	0.458	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	48	143.	651.135	6965.	1.5	2092711.136	1446.621	19.6	72.5	362.75	2493.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	57 ##	0.025	0.038	0.146	0.003	0.	0.022	0.025	0.025	0.05	0.05
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	28 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	28	0.39	0.445	1.43	0.16	0.081	0.284	0.246	0.303	0.463	0.683
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	50	0.3	0.4	2.72	0.	0.292	0.54	0.05	0.1	0.405	0.79
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	57	0.09	0.181	1.53	0.003	0.072	0.269	0.019	0.042	0.17	0.626
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	20 ##	0.005	0.017	0.187	0.005	0.002	0.04	0.005	0.005	0.011	0.022
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	55	318.	311.364	505.	114.	3321.865	57.636	258.	280.	340.	360.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	55	74.	75.644	150.	29.8	320.162	17.893	60.	66.	85.	91.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	55	31.	29.795	47.	9.6	33.21	5.763	24.2	27.	33.	34.16
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	55	51.	50.804	77.	15.7	108.234	10.404	38.6	46.	56.	61.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	55	4.	4.084	6.	1.93	0.685	0.828	3.	4.	4.2	5.6
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	34	50.5	47.647	70.	7.	148.963	12.205	29.5	42.75	55.	61.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	27	58.	51.111	79.	0.	375.41	19.376	20.2	46.	64.	70.2
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	55	174.	183.3	396.1	58.2	3321.561	57.633	130.	153.2	193.1	240.2
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	40	2.	1.813	5.	0.25	1.349	1.161	0.275	1.	2.5	3.
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	40	110.	110.261	920.	0.	26107.677	161.579	0.	0.083	120.	148.
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	40 ##	0.5	0.525	1.	0.5	0.012	0.11	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	40 ##	2.5	3.7	40.	2.5	35.677	5.973	2.5	2.5	2.5	4.75
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	40 ##	10.	13.025	69.	5.	117.051	10.819	5.5	10.	10.	24.5
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	40 ##	2.5	4.163	45.	2.5	47.249	6.874	2.5	2.5	2.5	8.
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	40	53.5	293.25	2925.	10.	494589.526	703.271	28.2	36.75	110.	637.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	40 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	04/14/82-09/18/91	39 ##	10.	17.244	150.	2.5	626.577	25.032	5.	10.	10.	35.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	40 ##	0.25	0.563	2.5	0.25	0.518	0.72	0.25	0.25	0.438	2.45
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	57	520.	505.825	878.	9.	17654.683	132.871	383.6	489.	566.	612.
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	40 ##	0.1	0.103	1.	0.01	0.022	0.148	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	40	0.46	1.448	19.	0.015	9.753	3.123	0.225	0.343	1.1	3.49

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	12	14.6	14.508	19.8	8.	12.848	3.584	8.54	11.95	17.675	19.32
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/09/95	5	439.	644.	1000.	403.	90491.	300.817	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	12	54.5	185.608	820.	2.	61898.968	248.795	2.24	5.625	332.5	694.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	12	597.	624.333	779.	405.	16231.515	127.403	439.5	527.	759.75	775.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	12	595.	633.917	809.	391.	16615.174	128.9	432.7	547.75	765.	799.7
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	12	8.7	8.817	11.6	7.8	1.103	1.05	7.86	8.025	9.075	11.06

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	12	8.475	8.488	8.9	8.2	0.051	0.226	8.2	8.3	8.608	8.87
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	12	8.469	8.438	8.9	8.2	0.054	0.232	8.2	8.3	8.608	8.87
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	12	0.003	0.004	0.006	0.001	0.	0.002	0.001	0.002	0.005	0.006
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	9	8.3	8.233	8.5	7.8	0.053	0.229	7.8	8.05	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	9	8.3	8.175	8.5	7.8	0.056	0.237	7.8	8.05	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	9	0.005	0.007	0.016	0.003	0.	0.004	0.003	0.004	0.009	0.016
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	12	1.	1.833	5.	1.	1.788	1.337	1.	1.	2.	4.7
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	12	174.	174.25	216.	157.	227.841	15.094	157.9	164.5	178.75	204.9
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	12	209.	211.25	264.	192.	358.023	18.921	192.9	197.	217.	250.2
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	12	0.	0.583	3.	0.	1.356	1.165	0.	0.	0.75	3.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	11	115.	763.727	3640.	11.	1296602.818	1138.685	14.6	30.	1260.	3299.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	12 ##	0.025	0.05	0.248	0.	0.004	0.064	0.008	0.025	0.05	0.191
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	3 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	3	0.17	0.15	0.21	0.07	0.005	0.072	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	9	0.5	0.702	2.4	0.05	0.523	0.723	0.05	0.15	0.95	2.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	12	0.099	0.19	0.74	0.01	0.061	0.246	0.012	0.033	0.21	0.713
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	12	254.	255.667	311.	176.	1443.879	37.998	188.3	235.5	290.5	305.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	12	63.	63.125	75.	49.	60.762	7.795	50.5	56.75	69.2	74.25
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	12	23.	23.867	30.	13.	27.042	5.2	15.1	20.	28.95	30.
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	12	28.5	33.125	54.	11.	252.6	15.893	13.1	19.5	48.675	53.73
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	12	3.	2.913	4.	2.	0.436	0.66	2.	2.175	3.435	3.904
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	6	18.	19.	34.	12.	65.6	8.099	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	8	51.	40.875	63.	12.	382.125	19.548	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	12	99.45	112.617	176.	47.	1700.092	41.232	55.1	87.25	155.6	175.43
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	8 ##	2.	1.719	3.	0.25	1.026	1.013	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	8	80.	67.538	180.	0.	4129.934	64.265	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	8 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	8 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	8 ##	10.	10.	15.	5.	7.143	2.673	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	8 ##	3.75	4.875	10.	2.5	9.411	3.068	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	8	120.	224.625	655.	21.	57517.125	239.827	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/14/82-09/18/91	8 ##	10.	18.	40.	10.	140.571	11.856	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	8 ##	0.25	0.313	0.5	0.25	0.013	0.116	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	12	382.	392.833	524.	240.	6337.061	79.606	265.8	342.5	470.	512.
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	8 ##	0.075	0.075	0.1	0.05	0.001	0.027	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	8	1.275	2.274	6.	0.22	5.462	2.337	**	**	**	**

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	14	20.1	19.257	27.5	10.8	29.495	5.431	11.	14.425	23.4	27.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/09/95	7	300.	310.429	510.	78.	18858.619	137.327	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	12	40.5	79.325	450.	0.8	16802.882	129.626	0.92	2.6	73.25	375.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	13	694.	658.615	869.	414.	23077.423	151.913	428.4	530.	799.5	853.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	12	730.	698.333	851.	465.	17691.152	133.008	481.5	568.5	806.	848.6
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	14	7.8	7.657	10.6	3.9	2.203	1.484	5.2	7.1	8.2	9.95
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	14	8.3	8.264	8.48	8.	0.02	0.143	8.05	8.1	8.4	8.44
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	14	8.3	8.242	8.48	8.	0.021	0.145	8.05	8.1	8.4	8.44
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	14	0.005	0.006	0.01	0.003	0.	0.002	0.004	0.004	0.008	0.009
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	9	8.1	8.111	8.3	7.9	0.024	0.154	7.9	7.95	8.25	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	9	8.1	8.087	8.3	7.9	0.024	0.156	7.9	7.95	8.25	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	9	0.008	0.008	0.013	0.005	0.	0.003	0.005	0.006	0.011	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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0256

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	12	2.	2.167	4.	1.	1.061	1.03	1.	1.25	2.75	4.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	12	166.5	169.667	212.	150.	254.788	15.962	151.2	161.75	172.5	203.6
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	12	203.	206.833	259.	183.	390.515	19.761	184.5	196.25	211.	248.8
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	12	0.	0.083	1.	0.	0.083	0.289	0.	0.	0.	0.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	13	112.	178.692	954.	11.	65388.397	255.712	11.8	26.	247.	700.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	14 ##	0.025	0.034	0.074	0.003	0.	0.018	0.014	0.025	0.05	0.062
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	5 ##	0.005	0.008	0.02	0.005	0.	0.007	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	5	0.28	0.242	0.34	0.12	0.012	0.11	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	9	0.1	0.133	0.4	0.05	0.014	0.117	0.05	0.05	0.2	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	14	0.03	0.053	0.159	0.01	0.002	0.048	0.011	0.02	0.087	0.15
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	7 ##	0.005	0.007	0.022	0.005	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	12	278.	271.833	307.	220.	1076.697	32.813	221.5	236.	302.	306.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	12	68.5	65.017	73.9	43.	91.027	9.541	45.7	60.	72.	73.63
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	12	28.5	26.6	31.1	17.	18.976	4.356	18.5	23.	29.925	30.89
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	12	48.	43.817	61.7	18.	258.994	16.093	19.2	28.	59.3	61.4
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	12	4.	3.41	4.65	2.	0.934	0.966	2.	2.25	4.092	4.485
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	6	28.5	35.167	62.	18.	366.567	19.146	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	8	50.5	47.125	67.	18.	398.982	19.975	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	12	150.	136.767	181.3	70.	1708.299	41.332	73.9	95.	176.775	180.91
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	8 ##	2.	1.563	2.5	0.25	1.085	1.042	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	8	80.	66.256	160.	0.	3797.268	61.622	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	8 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	8 ##	2.5	8.75	45.	2.5	221.429	14.88	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	8 ##	10.	8.75	10.	5.	5.357	2.315	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	8 ##	2.5	4.375	10.	2.5	12.054	3.472	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	8	60.5	93.875	320.	5.	11618.696	107.79	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/14/82-09/18/91	8 ##	12.5	16.063	36.	2.5	134.317	11.59	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	8 ##	0.25	0.563	2.5	0.25	0.621	0.788	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	14	454.	381.929	524.	38.	27627.148	166.214	39.5	310.5	510.5	522.
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	8 ##	0.1	0.081	0.1	0.05	0.001	0.026	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	8	0.55	1.273	4.3	0.14	2.801	1.674	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0257

NPS Station ID: ZION0257
LAT/LON: 37.505003/-113.203893
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBD024R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_17 /5083857
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kanarraville UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0257

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/80-06/21/80	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/80-06/21/80	1	900.	900.	900.	900.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/21/80-06/21/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/21/80-06/21/80	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/80-06/21/80	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/80-06/21/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/80-06/21/80	1	34.4	34.4	34.4	34.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/80-06/21/80	1	25.32	25.32	25.32	25.32	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/21/80-06/21/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/21/80-06/21/80	1	2726.	2726.	2726.	2726.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/21/80-06/21/80	1	3.204	3.204	3.204	3.204	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/21/80-06/21/80	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/21/80-06/21/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/21/80-06/21/80	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: ZION0257

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0258

NPS Station ID: ZION0258
LAT/LON: 37.198059/-113.206116
Agency: 112WRD
Date Created: / /
Location: VIRGIN RIVER AT VIRGIN, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09406000
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008086400.00
RF3 Mile Point: 0.00
Distance from RF3: 0.27
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	232	17.	16.447	31.	1.	54.008	7.349	6.7	10.	22.8	25.6
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-07/16/91	39	24.	23.385	36.	4.5	96.374	9.817	9.	17.5	33.5	35.
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-09/01/82	4	665.5	665.75	674.	658.	62.917	7.932	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	171	160.	806.135	9220.	48.	3472242.552	1863.395	90.	110.	526.	1458.
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	101	128.	179.772	1270.	53.	28936.238	170.107	72.2	92.5	188.	372.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	96	805.	779.885	1230.	420.	19300.839	138.927	574.	712.5	860.	933.
00300	OXYGEN, DISSOLVED MG/L	08/24/81-09/01/82	4	8.35	8.275	10.1	6.3	2.429	1.559	**	**	**	**
00400	PH (STANDARD UNITS)	12/06/66-09/01/82	7	8.1	8.086	8.3	7.8	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/06/66-09/01/82	7	8.1	8.039	8.3	7.8	0.047	0.217	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/66-09/01/82	7	0.008	0.009	0.016	0.005	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-09/01/82	4	8.15	8.15	8.4	7.9	0.043	0.208	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-09/01/82	4	8.147	8.113	8.4	7.9	0.045	0.212	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-09/01/82	4	0.007	0.008	0.013	0.004	0.	0.004	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/06/66-12/13/66	3	120.	161.333	248.	116.	5637.333	75.082	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/06/66-12/13/66	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-09/01/82	4	0.45	0.45	0.6	0.3	0.017	0.129	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-05/05/82	2	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-09/01/82	4 ##	0.018	0.018	0.03	0.005	0.	0.014	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/66-09/01/82	7	380.	365.429	456.	190.	7811.619	88.383	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/06/66-12/13/66	3	333.	297.333	358.	201.	7116.333	84.358	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/66-09/01/82	7	94.	100.286	143.	55.	923.238	30.385	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/66-09/01/82	7	28.	28.	42.	13.	86.667	9.309	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/66-09/01/82	7	48.	43.	61.	10.	284.333	16.862	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/06/66-09/01/82	7	1.2	1.	1.3	0.3	0.15	0.387	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-09/01/82	4	22.5	19.75	24.	10.	42.917	6.551	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/13/66-09/01/82	5	4.	3.9	5.	2.	1.3	1.14	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/06/66-09/01/82	7	53.	38.	66.	9.	734.	27.092	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/06/66-09/01/82	7	240.	248.429	402.	55.	15309.286	123.731	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/13/66-09/01/82	5	0.2	0.2	0.3	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/13/66-09/01/82	5	9.	9.56	12.	7.2	5.408	2.326	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/13/66-09/01/82	5	60.	60.	80.	30.	450.	21.213	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/66-12/13/66	3	707.	699.667	709.	683.	209.333	14.468	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-09/01/82	4	526.5	472.25	598.	238.	26461.583	162.67	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	12/06/66-09/01/82	7	354.	3542.33	17650.3	108.	43280731.781	6578.809	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/06/66-09/01/82	7	0.81	0.774	0.96	0.32	0.052	0.228	**	**	**	**
70326	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .002MM	07/31/63-07/31/63	1	5.	5.	5.	5.	0.	0.	**	**	**	**
70327	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .004MM	07/31/63-07/31/63	1	11.	11.	11.	11.	0.	0.	**	**	**	**
70329	SUS SED FALL DIA(NATIVEWATER)% FINER THAN .016MM	07/31/63-07/31/63	1	31.	31.	31.	31.	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: ZION0258

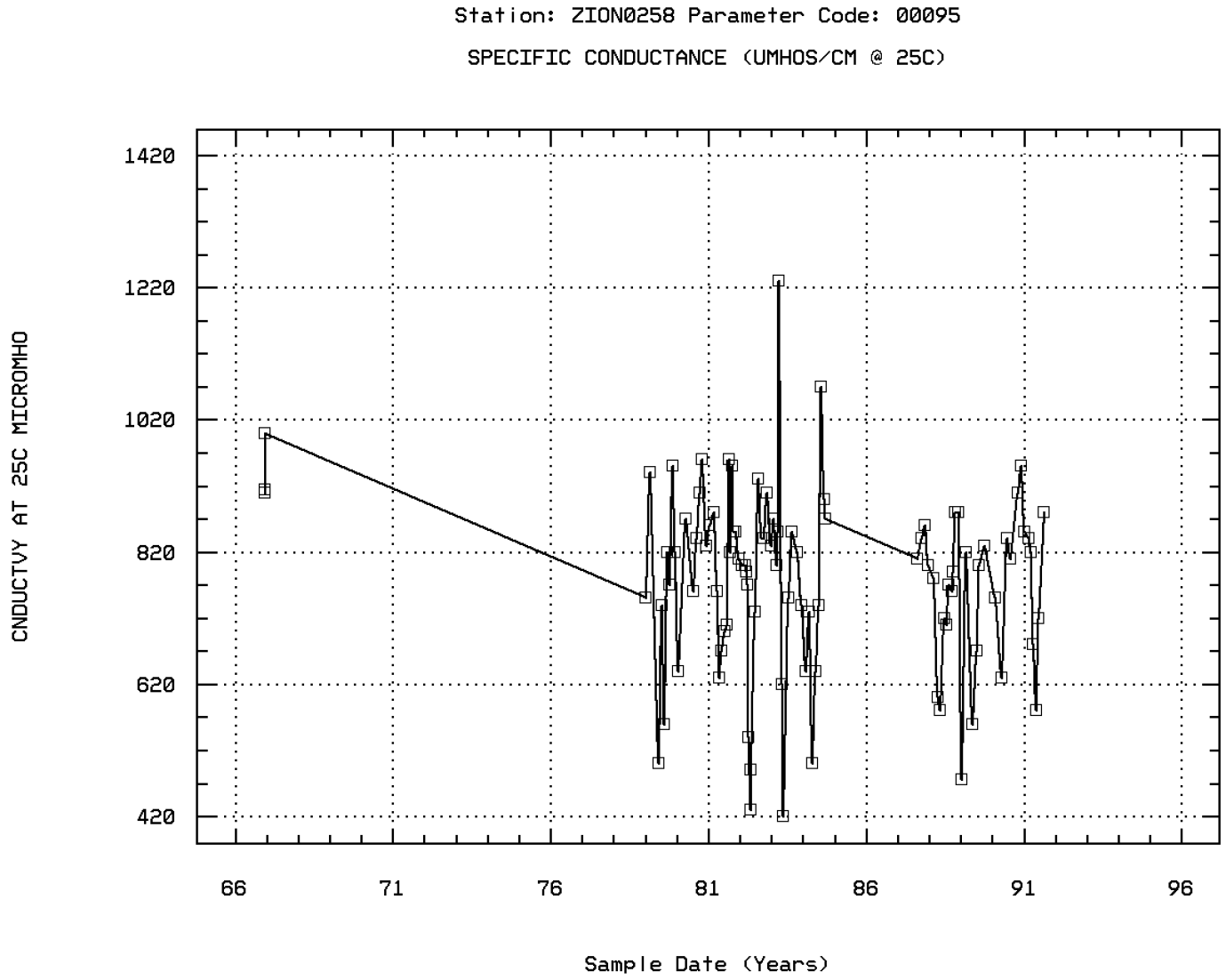
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70331	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	07/31/63-07/31/66	6	90.5	83.167	100.	50.	324.167	18.005	**	**	**	**
70332	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .125MM	07/31/63-08/13/64	5	97.	92.	97.	80.	57.	7.55	**	**	**	**
70333	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .250MM	07/31/63-08/13/64	5	100.	98.8	100.	97.	2.7	1.643	**	**	**	**
70334	SUSPENDED SED SIEVE DIAMETER,% FINER THAN .500MM	08/19/63-08/03/64	2	100.	100.	100.	100.	0.	0.	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	150	23.	27.633	67.	1.	290.569	17.046	8.1	14.	41.	51.9
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	150	28.	33.64	81.	2.	400.581	20.015	11.	17.	49.25	63.
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	128	52.	53.133	97.	8.	629.061	25.081	20.	32.	75.5	90.
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	155	73.	67.806	100.	7.	666.806	25.823	34.2	47.	92.	98.
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	151	90.	83.066	100.	18.	318.716	17.853	55.	72.	97.	99.
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	138	99.	96.855	100.	69.	22.504	4.744	91.	96.	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	92	100.	99.815	100.	89.	1.361	1.167	100.	100.	100.	100.
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	11/08/66-06/12/70	7	100.	98.857	100.	92.	9.143	3.024	**	**	**	**
70347	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 2.00MM	06/12/70-06/12/70	1	98.	98.	98.	98.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/66-12/13/66	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	167	11100.	36824.874	408000.	61.	3509108991.195	59237.733	860.8	1920.	47800.	104400.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	167	5810.	151232.419	4680000.	34.298284420318.908		546154.209	272.	591.	49600.	349600.
80158	BED MATERIAL FALL DIAMETER, % FINER THAN .062MM	11/30/67-05/04/71	10	1.	2.	6.	0.	4.667	2.16	0.	0.75	4.25	5.9
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	11/30/67-05/04/71	15	7.	11.933	52.	0.	204.495	14.3	1.2	3.	12.	40.6
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	11/30/67-05/04/71	15	55.	55.067	85.	6.	437.781	20.923	22.8	43.	72.	83.2
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	11/30/67-05/04/71	15	93.	85.667	100.	43.	254.81	15.963	56.8	73.	95.	99.4
80162	BED MATERIAL FALL DIAMETER, % FINER THAN 1.00MM	11/30/67-09/01/70	12	96.5	89.833	100.	56.	199.97	14.141	60.5	80.75	98.75	100.
80163	BED MATERIAL FALL DIAMETER, % FINER THAN 2.00MM	11/30/67-07/13/70	10	95.5	88.7	99.	59.	196.9	14.032	60.3	76.5	98.25	99.
80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	08/16/67-08/16/67	1	1.	1.	1.	1.	0.	0.	**	**	**	**
80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	08/16/67-08/16/67	1	7.	7.	7.	7.	0.	0.	**	**	**	**
80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	08/16/67-08/16/67	1	34.	34.	34.	34.	0.	0.	**	**	**	**
80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	08/16/67-08/16/67	1	89.	89.	89.	89.	0.	0.	**	**	**	**
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	08/16/67-05/04/71	3	85.	85.333	95.	76.	90.333	9.504	**	**	**	**
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	08/16/67-05/04/71	3	86.	86.667	98.	76.	121.333	11.015	**	**	**	**
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	08/16/67-05/04/71	13	96.	89.538	100.	63.	152.603	12.353	67.4	78.	99.5	100.
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	08/16/67-05/04/71	10	92.5	89.1	100.	72.	101.878	10.093	72.7	79.75	97.5	99.9
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	11/30/67-05/04/71	9	95.	95.222	100.	89.	19.444	4.41	89.	91.	99.5	100.
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	11/30/67-05/04/71	8	100.	100.	100.	100.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0258

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	7	0	0.00	6	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	7	0	0.00	6	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	7	0	0.00	6	0	0.00	1	0	0.00						
		Drinking Water	250.	7	0	0.00	6	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	7	3	0.43	6	3	0.50	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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



VIRGIN RIVER AT VIRGIN, UTAH

Annual Analysis for 1962 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	1	15.6	15.6	15.6	15.6	0.	0.	**	**	**	**
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	1	138.	138.	138.	138.	0.	0.	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	1	46.	46.	46.	46.	0.	0.	**	**	**	**
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	1	59.	59.	59.	59.	0.	0.	**	**	**	**
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	1	80.	80.	80.	80.	0.	0.	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	1	88.	88.	88.	88.	0.	0.	**	**	**	**
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	1	94.	94.	94.	94.	0.	0.	**	**	**	**
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	1	99.	99.	99.	99.	0.	0.	**	**	**	**
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	1	100.	100.	100.	100.	0.	0.	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	1	7950.	7950.	7950.	7950.	0.	0.	**	**	**	**
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	1	2960.	2960.	2960.	2960.	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 1963 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	30	22.8	20.547	28.9	6.7	40.008	6.325	10.	17.475	25.6	26.64
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	30	120.	298.267	2380.	48.	226073.995	475.472	61.7	90.5	264.	882.4
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	29	33.	32.724	62.	5.	253.421	15.919	13.	18.5	47.	50.
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	29	40.	39.931	76.	6.	357.067	18.896	16.	23.5	54.	65.
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	29	59.	56.759	95.	8.	603.047	24.557	22.	39.	78.	89.
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	28	83.	78.214	100.	26.	374.767	19.359	51.2	67.	95.25	99.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	27	95.	91.407	100.	63.	92.251	9.605	76.6	83.	99.	100.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	23	99.	98.304	100.	90.	7.767	2.787	92.6	98.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	12	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	30	24800.	36705.5	141000.	765.	1311938548.879	36220.692	1771.	9602.5	52600.	89960.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	30	8570.	62534.7	906000.	99.31	390944739.734	177174.899	676.3	2375.	24625.	208600.

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

Annual Analysis for 1964 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	24	21.1	19.592	27.2	7.2	30.331	5.507	8.6	17.525	22.65	25.85
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	26	113.	186.769	741.	73.	24282.265	155.828	77.2	100.	232.75	433.5
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	25	33.	36.12	67.	1.	311.86	17.66	16.8	21.5	51.5	61.2
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	25	41.	45.08	81.	2.	407.077	20.176	23.6	30.	62.5	76.
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	23	66.	70.217	97.	41.	303.905	17.433	46.	56.	90.	92.8
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	22	92.	82.955	100.	7.	497.188	22.298	51.3	78.5	97.25	99.4
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	20	96.	88.35	100.	18.	369.292	19.217	59.6	86.25	98.	99.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	19	99.	96.895	100.	71.	48.099	6.935	87.	98.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	12	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	26	9510.	41386.192	268000.	191.	5209195559.682	72174.757	831.2	1972.5	39775.	193100.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	26	3735.	36485.846	302000.	50.	6374395493.735	79839.811	167.3	605.25	12400.	199600.

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Annual Analysis for 1965 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	7	10.6	10.329	14.4	6.7	7.859	2.803	**	**	**	**
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	7	268.	920.143	3900.	90.	1884058.81	1372.61	**	**	**	**

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Annual Analysis for 1965 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	6	12.	13.833	24.	9.	32.167	5.672	**	**	**	**
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	6	15.5	18.167	33.	11.	68.567	8.28	**	**	**	**
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	5	27.	29.4	51.	18.	179.3	13.39	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	6	44.	48.	68.	36.	176.4	13.282	**	**	**	**
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	6	73.5	74.	89.	60.	117.6	10.844	**	**	**	**
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	6	97.	96.833	99.	93.	5.367	2.317	**	**	**	**
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	6	100.	100.	100.	100.	0.	0.	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	7	5380.	18339.714	72800.	678.	727458607.238	26971.441	**	**	**	**
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	7	5450.	129076.	767000.	260.	80990808798.667	284588.842	**	**	**	**

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Annual Analysis for 1966 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	17	20.	17.1	26.7	1.7	55.711	7.464	5.7	11.4	23.6	25.82
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	43	322.	1812.628	9220.	85.	9393559.192	3064.891	98.	130.	1460.	9150.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	3	914.	941.333	1000.	910.	2585.333	50.846	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	33	23.	28.455	59.	6.	233.693	15.287	12.2	17.5	38.5	55.
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	33	27.	33.758	71.	9.	330.939	18.192	14.2	20.	47.5	64.2
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	32	41.5	50.25	97.	17.	558.129	23.625	24.6	32.5	68.5	92.5
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	35	63.	68.057	100.	17.	524.938	22.912	40.4	50.	91.	97.2
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	34	88.	85.471	100.	44.	223.226	14.941	66.5	75.	98.	99.5
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	31	98.	97.516	100.	87.	8.725	2.954	94.	96.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	21	100.	99.81	100.	99.	0.162	0.402	99.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	40	30200.	36632.6	155000.	125.	1487976587.579	38574.3	1187.	3247.5	56300.	86020.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	40	28550.	216412.15	1410000.	44.	151349798390.541	389037.014	441.6	1117.5	160000.	980100.

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

Annual Analysis for 1967 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	12	20.25	18.7	27.8	5.	52.622	7.254	6.17	11.7	24.275	26.96
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	19	186.	456.579	3360.	96.	594706.924	771.172	99.	128.	327.	1450.
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	12	23.	27.417	58.	3.	279.356	16.714	5.4	13.25	39.25	55.3
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	12	27.5	32.917	70.	6.	399.538	19.988	7.8	14.75	47.5	66.1
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	11	48.	53.182	95.	20.	646.764	25.432	20.6	31.	73.	92.
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	19	82.	69.368	98.	17.	734.135	27.095	31.	48.	96.	98.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	19	92.	82.	100.	50.	350.222	18.714	51.	64.	98.	99.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	18	98.	97.222	100.	91.	8.771	2.962	91.	95.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	12	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	19	7750.	29568.789	112000.	555.	1511325087.842	38875.765	792.	1400.	54000.	99900.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	19	4560.	91071.263	1020000.	228.	59259962956.871	243433.693	275.	556.	27100.	391000.

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

Annual Analysis for 1968 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	13	20.	17.462	28.	6.	47.769	6.912	7.6	11.	22.	27.6
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	13	248.	1003.462	5570.	100.	3118111.769	1765.818	110.	134.	654.	5042.
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	13	12.	19.615	51.	3.	273.09	16.525	3.	6.	38.	46.6

** - 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 1968 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	13	16.	25.077	63.	4.	407.077	20.176	4.4	8.5	48.	57.4
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	11	35.	42.818	91.	8.	803.764	28.351	8.4	20.	67.	87.6
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	13	44.	52.462	97.	14.	935.769	30.59	14.8	25.5	83.5	96.2
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	13	68.	70.308	100.	25.	542.731	23.297	33.	55.	93.	99.6
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	12	96.5	94.917	100.	86.	23.72	4.87	87.2	90.25	99.75	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	9	100.	99.889	100.	99.	0.111	0.333	99.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	13	5510.	69037.462	408000.	198.	17597981135.103	132657.383	486.4	1060.	75100.	363600.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	13	5810.	722142.077	4680000.	74.	**********	1711209.922	165.2	379.5	102950.	4596000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	9	14.	14.222	26.	4.	71.194	8.438	4.	6.5	23.	26.
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	12	265.	1052.083	8110.	89.	5056445.902	2248.654	103.7	150.5	842.5	6028.
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	11	24.	25.909	52.	3.	322.891	17.969	3.8	9.	45.	51.4
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	11	34.	30.273	58.	4.	392.818	19.82	5.	11.	52.	57.2
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	10	55.	50.8	84.	18.	631.733	25.134	18.2	20.75	73.5	83.7
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	11	79.	68.364	95.	16.	833.455	28.87	19.8	42.	94.	94.8
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	11	94.	85.455	100.	38.	409.073	20.226	41.6	82.	99.	100.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	9	100.	97.556	100.	84.	28.528	5.341	84.	97.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	3	100.	99.667	100.	99.	0.333	0.577	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	12	3380.	13560.417	60100.	61.	374617768.629	19355.045	325.9	1115.	15800.	55420.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	12	6300.	44338.917	346000.	38.	9709780518.083	98538.219	110.3	371.	32900.	269560.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	17	18.	16.618	27.	6.	48.579	6.97	7.2	9.	22.5	27.
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	17	135.	275.235	1270.	73.	134630.316	366.92	74.6	101.	271.	1206.
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	17	14.	19.118	66.	4.	273.11	16.526	4.	8.5	26.5	46.8
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	17	17.	22.706	71.	5.	296.096	17.207	5.8	12.	31.	51.8
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	3	23.	25.333	41.	12.	214.333	14.64	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	17	48.	51.882	96.	20.	551.235	23.478	20.8	37.5	70.	90.4
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	17	68.	74.706	100.	51.	314.721	17.74	51.8	58.5	93.	99.2
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	16	97.	95.	100.	69.	55.067	7.421	85.1	93.5	99.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	13	100.	99.154	100.	89.	9.308	3.051	93.4	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	17	2520.	43964.471	213000.	124.	5069822014.39	71202.683	349.6	628.	79250.	176200.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	17	579.	71608.235	537000.	34.	23401792520.441	152976.444	109.2	239.5	75650.	398600.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	3	8.	8.167	10.5	6.	5.083	2.255	**	**	**	**
00060p	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	3	147.	166.333	220.	132.	2216.333	47.078	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	3	11.	10.333	16.	4.	36.333	6.028	**	**	**	**
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	3	12.	13.	22.	5.	73.	8.544	**	**	**	**
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	3	20.	21.667	34.	11.	134.333	11.59	**	**	**	**

** - 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	3	37.	34.333	42.	24.	86.333	9.292	**	**	**	**
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	3	54.	60.667	76.	52.	177.333	13.317	**	**	**	**
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	3	93.	91.333	94.	87.	14.333	3.786	**	**	**	**
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	3	100.	100.	100.	100.	0.	0.	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	2	750.5	750.5	1010.	491.	134680.5	366.988	**	**	**	**
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	2	277.5	277.5	360.	195.	13612.5	116.673	**	**	**	**

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

Annual Analysis for 1979 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	9	21.5	17.222	27.	6.	79.694	8.927	6.	8.	25.25	27.
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	9	117.	162.111	481.	76.	16952.611	130.202	76.	88.5	189.	481.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	9	770.	761.111	950.	500.	22986.111	151.612	500.	650.	880.	950.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	7	12.	12.143	20.	1.5	50.893	7.134	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	7	146.	194.	440.	120.	13031.	114.153	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	7	840.	830.	960.	640.	11000.	104.881	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	13	13.	15.269	29.5	3.5	68.192	8.258	3.7	9.25	22.5	28.7
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	14	115.5	123.571	223.	80.	1804.418	42.478	84.	90.	149.	205.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	13	820.	803.846	960.	630.	10742.308	103.645	646.	705.	870.	956.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	14	11.	12.643	25.	5.	39.44	6.28	5.5	8.625	17.25	24.75
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	14	143.5	218.143	620.	82.	27884.44	166.986	87.	105.75	284.5	553.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	13	800.	746.154	930.	430.	25158.974	158.616	454.	635.	840.	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 1983 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	10	9.5	11.85	24.	3.5	46.614	6.827	3.75	6.375	18.125	23.75
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	11	220.	418.182	1270.	142.	126496.964	355.664	142.2	184.	707.	1160.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	10	810.	795.	1230.	420.	41983.333	204.898	440.	710.	855.	1194.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	8	16.75	15.063	22.	4.5	34.246	5.852	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	8	177.5	175.375	345.	102.	6392.268	79.952	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	8	735.	761.25	1070.	500.	32212.5	179.478	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	4	16.	15.25	26.	3.	117.083	10.821	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	4	99.	98.5	127.	69.	1083.667	32.919	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	4	825.	827.5	860.	800.	758.333	27.538	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	11	15.5	15.173	24.	3.	43.608	6.604	3.2	14.5	21.	23.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	11	116.	153.091	379.	86.	8674.291	93.136	86.6	89.	223.	353.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	10	765.	747.	880.	580.	10067.778	100.338	582.	682.5	812.5	880.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	8	15.5	14.638	25.5	1.	50.266	7.09	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	8	95.5	108.125	188.	59.	2100.411	45.83	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	6	735.	692.5	830.	475.	22417.5	149.725	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0258

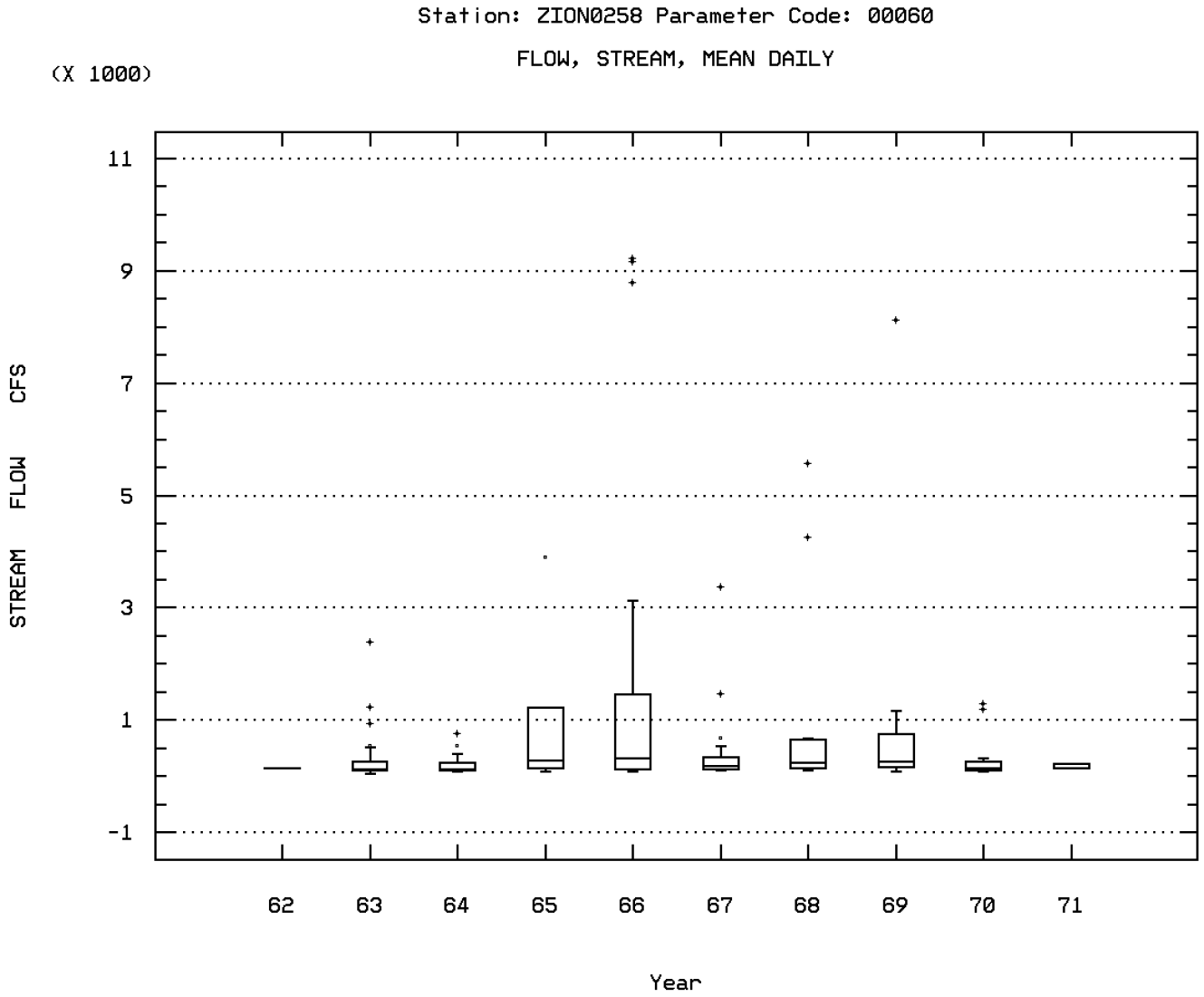
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	7	15.5	17.286	26.	7.5	65.155	8.072	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	7	93.	94.286	174.	53.	1858.238	43.107	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	6	825.	815.	950.	630.	13270.	115.195	**	**	**	**

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

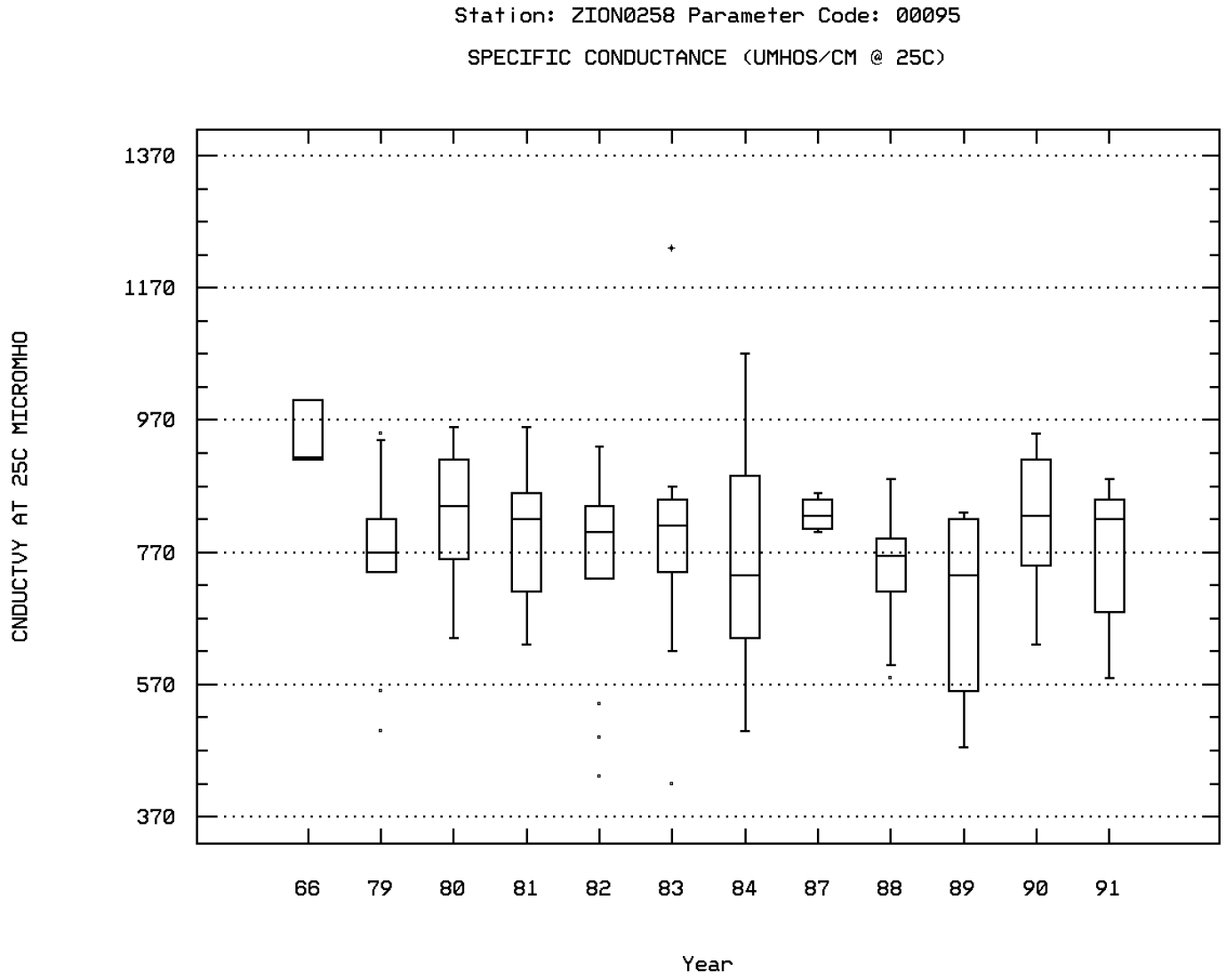
Annual Analysis for 1991 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	8	17.	17.938	31.	7.	102.246	10.112	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	8	118.	118.75	177.	64.	2513.643	50.136	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	7	820.	767.143	880.	580.	12090.476	109.957	**	**	**	**

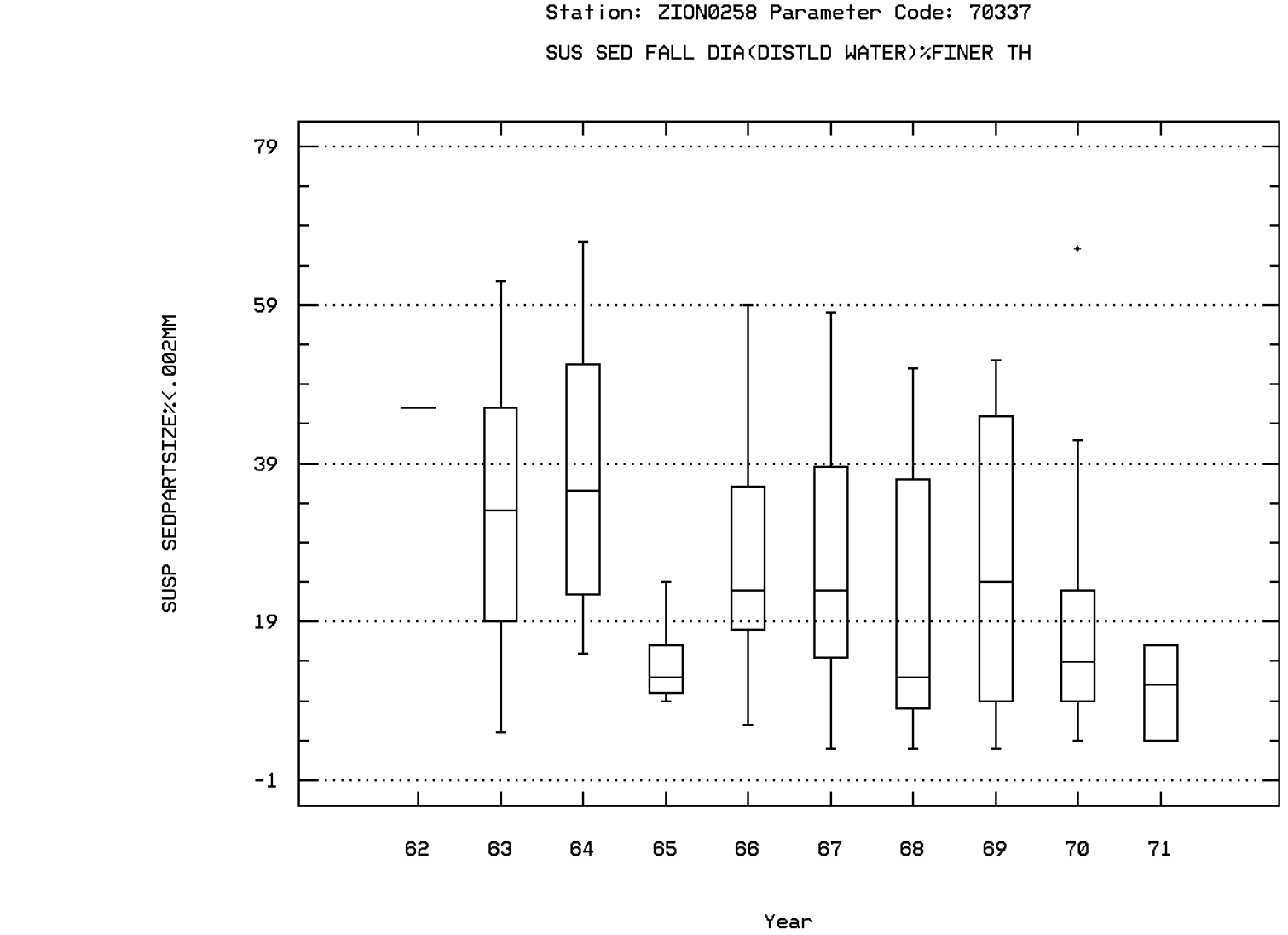
** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot



VIRGIN RIVER AT VIRGIN, UTAH



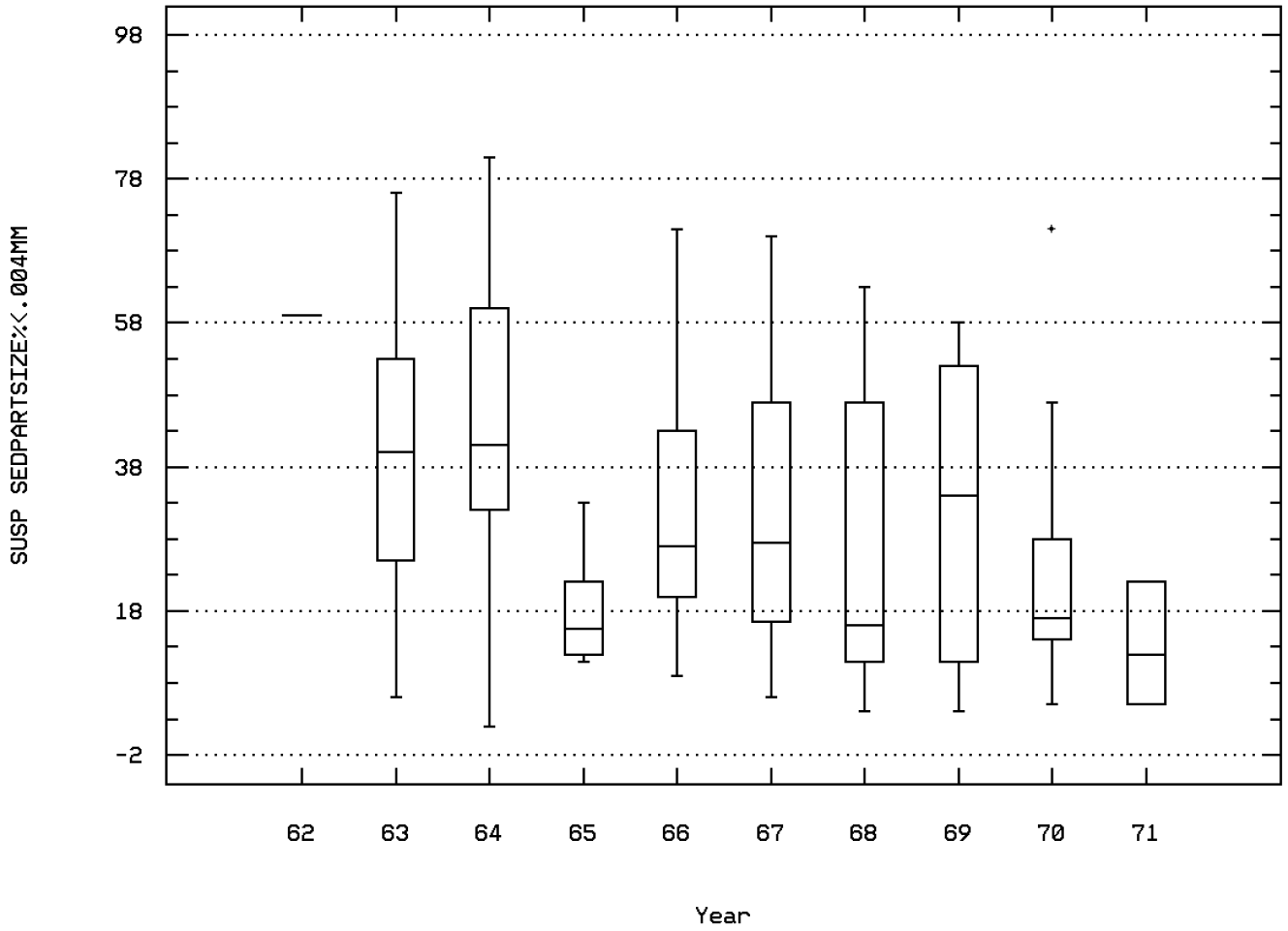
VIRGIN RIVER AT VIRGIN, UTAH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70338

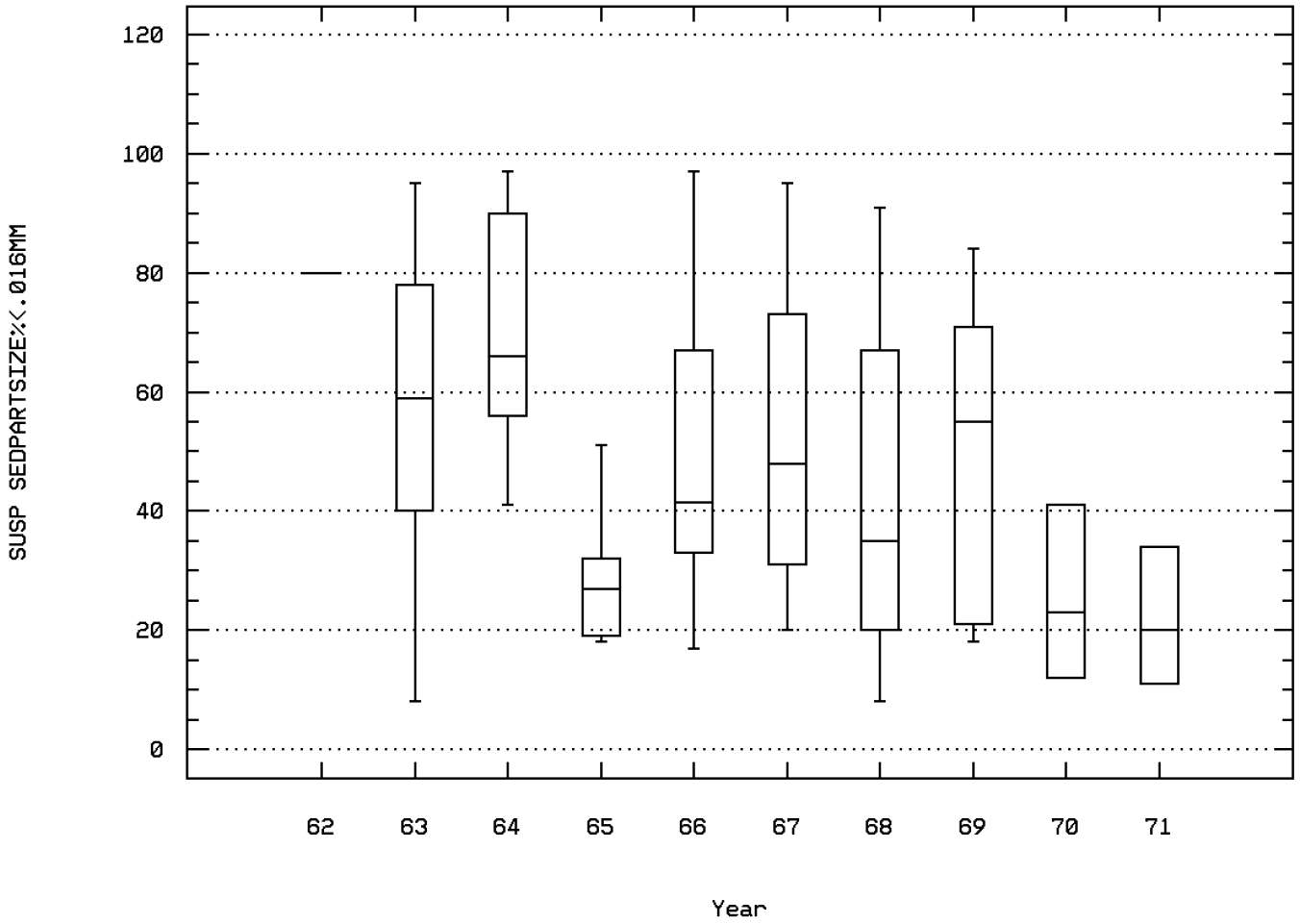
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70340

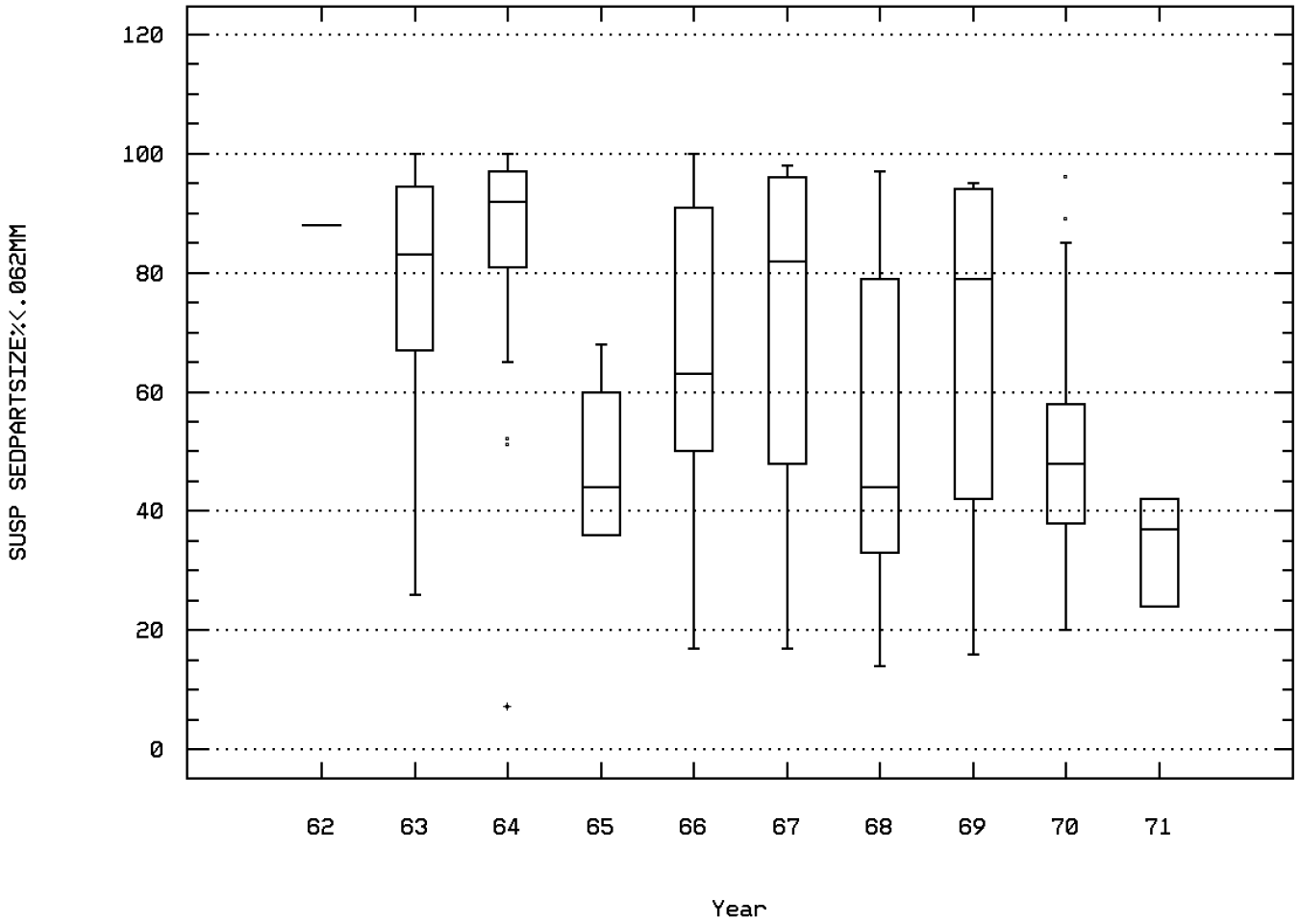
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70342

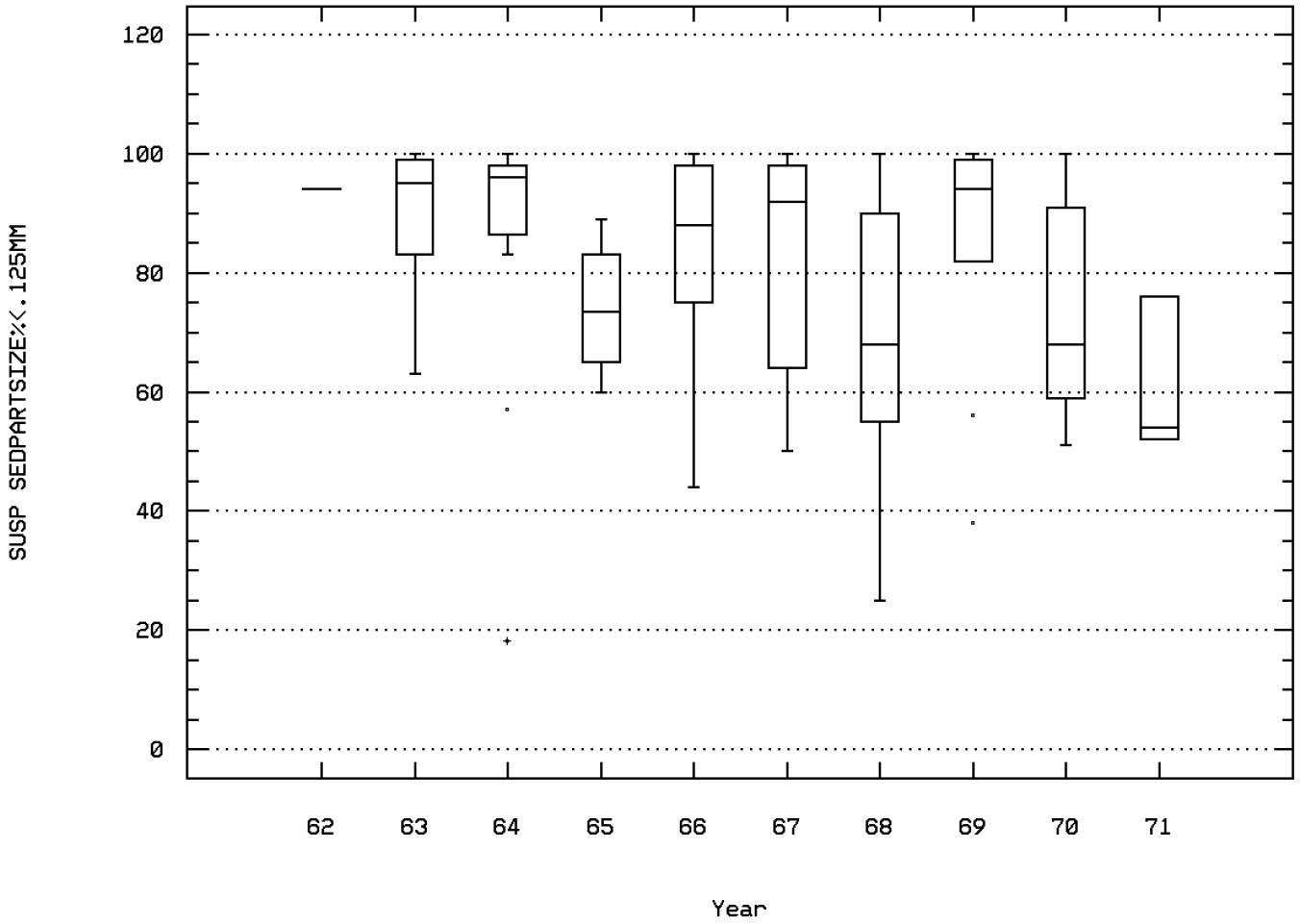
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70343

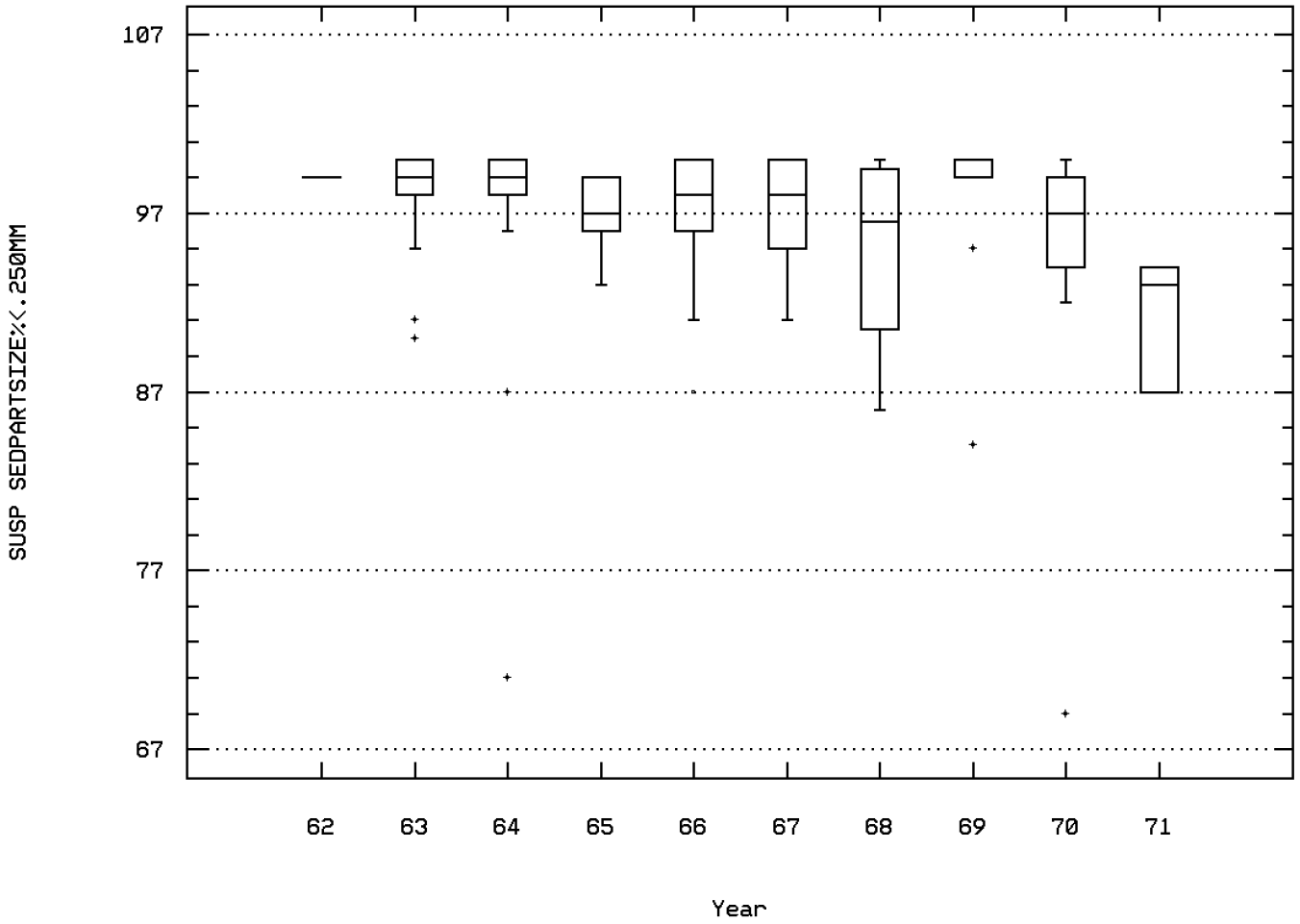
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70344

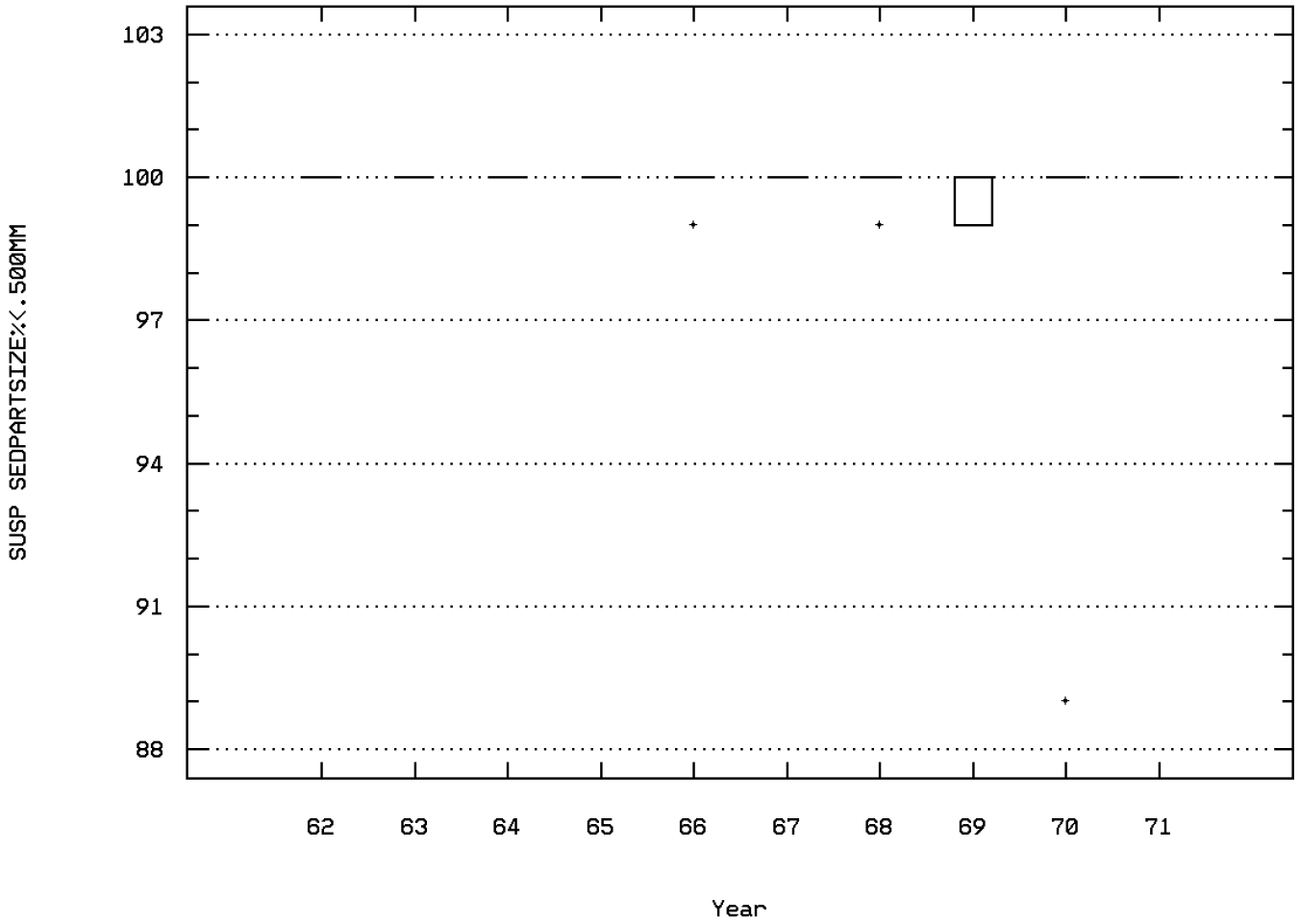
SUS SED FALL DIA(DISTLD WATER)%FINER TH



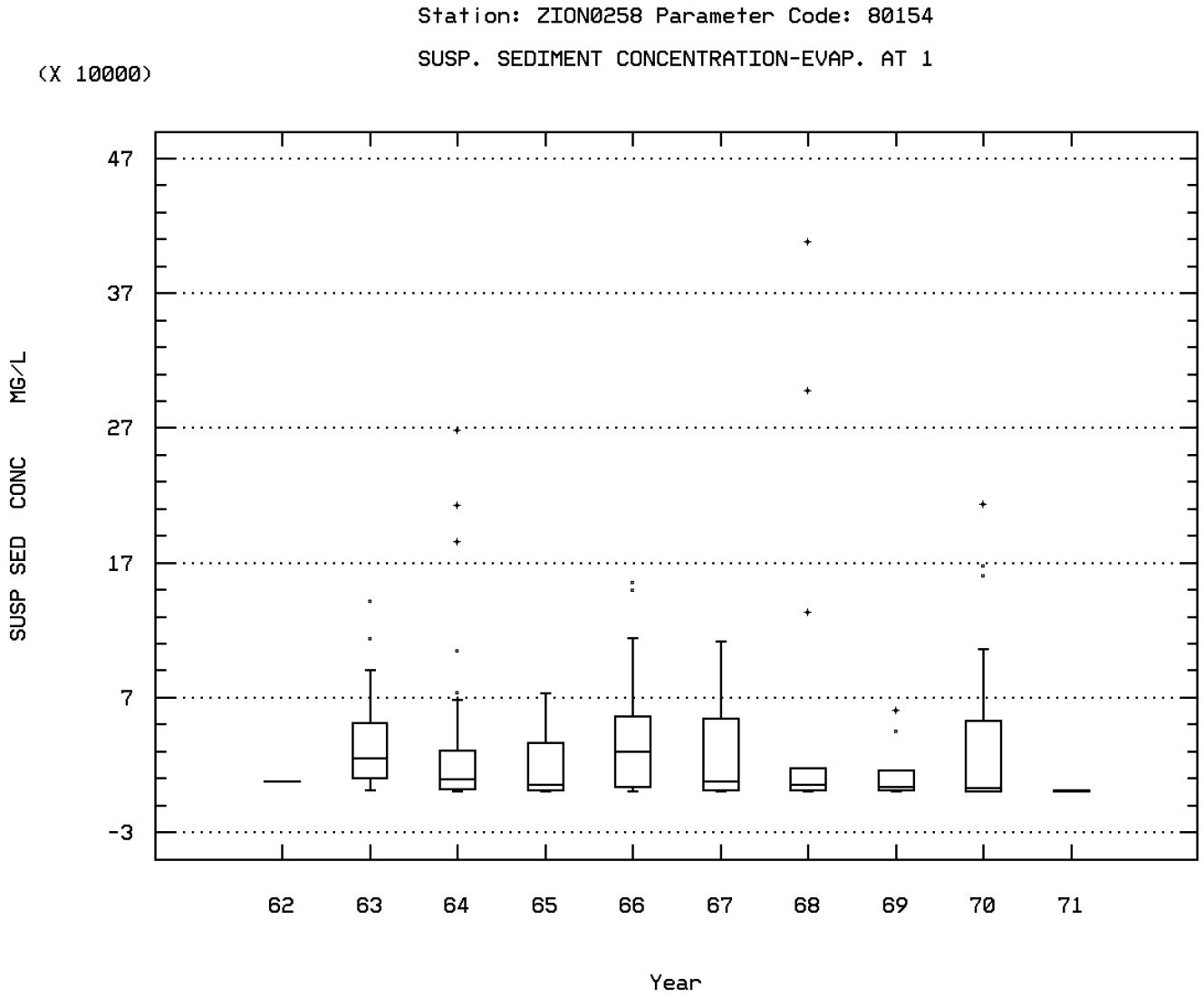
VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 70345

SUS SED FALL DIA(DISTLD WATER)%FINER TH



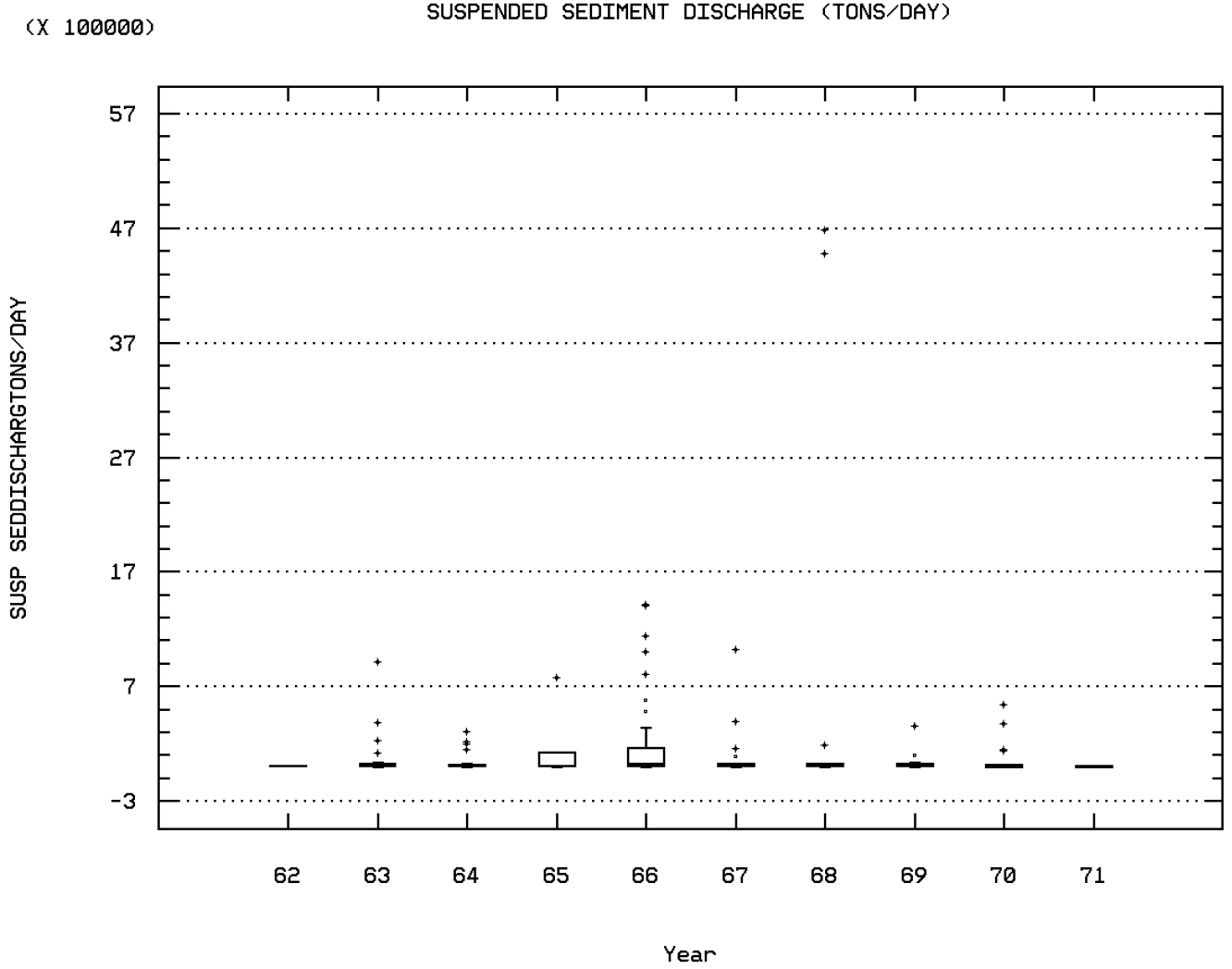
VIRGIN RIVER AT VIRGIN, UTAH



VIRGIN RIVER AT VIRGIN, UTAH

Station: ZION0258 Parameter Code: 80155

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)



VIRGIN RIVER AT VIRGIN, UTAH

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	178	20.	16.96	31.	1.	61.889	7.867	6.	9.375	23.9	26.1
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-07/16/91	24	21.75	22.479	36.	4.5	119.38	10.926	8.	11.625	34.375	35.5
00060	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	147	144.	892.605	9220.	48.	3980614.98	1995.148	88.4	106.	562.	2180.
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	71	117.	133.324	707.	53.	7388.279	85.955	71.4	90.	146.	193.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	69	830.	825.058	1070.	475.	9266.114	96.261	710.	775.	880.	950.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	130	24.	28.7	67.	1.	297.188	17.239	9.	15.	42.5	52.9
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	130	31.	34.862	81.	2.	414.446	20.358	11.	17.75	52.	64.8
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	113	53.	54.186	97.	8.	640.563	25.309	20.	33.	76.5	90.
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	134	78.	69.843	100.	7.	671.817	25.919	33.	50.75	94.	98.
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	130	92.	85.023	100.	18.	296.054	17.206	57.1	76.5	98.	99.9
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	117	99.	97.538	100.	71.	14.647	3.827	93.	96.5	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	73	100.	99.932	100.	99.	0.065	0.254	100.	100.	100.	100.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	144	17800.	42101.569	408000.	406.	3865579607.422	62173.786	1080.	2602.5	56300.	112500.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	144	8160.	174776.125	4680000.	99.342	200552765.215	584979.105	334.5	779.	97200.	383000.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0258

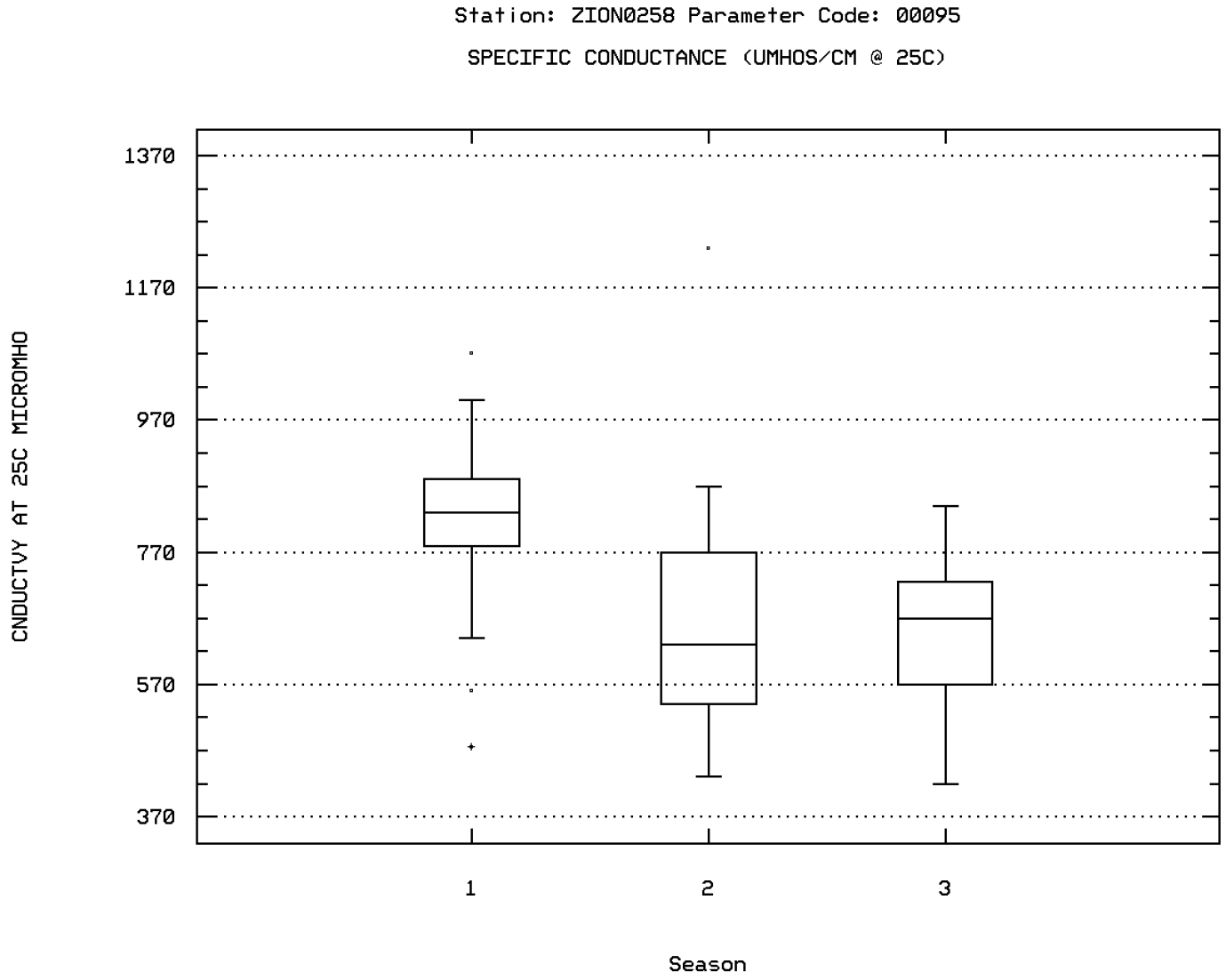
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	32	11.85	11.659	15.5	6.7	6.237	2.497	7.44	10.125	13.	15.35
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-07/16/91	7	23.5	21.286	32.	4.5	79.905	8.939	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	16	235.5	279.25	642.	101.	22964.867	151.542	130.4	173.5	296.	562.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	16	297.5	340.625	724.	146.	30727.183	175.292	160.	179.75	474.5	651.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	15	630.	676.667	1230.	430.	39152.381	197.87	466.	540.	770.	1014.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	15	18.	24.2	58.	6.	220.6	14.853	9.	13.	33.	50.8
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	15	23.	30.	65.	9.	258.571	16.08	10.8	17.	41.	56.6
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	13	42.	49.	91.	20.	472.5	21.737	22.8	31.5	64.5	86.2
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	16	50.5	59.625	94.	23.	500.917	22.381	32.8	42.5	81.5	92.6
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	16	75.5	75.25	99.	44.	302.867	17.403	49.6	59.5	90.75	96.9
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	16	95.5	95.063	100.	87.	18.863	4.343	87.	91.75	99.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	14	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	15	3190.	5355.6	22000.	124.	36261646.257	6021.764	344.2	1180.	8920.	16480.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	15	3350.	5148.733	30200.	34.	58485039.924	7647.551	130.6	668.	6520.	17810.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0258

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/62-08/21/91	22	18.5	19.255	26.	9.	17.83	4.223	14.15	16.875	23.075	25.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-07/16/91	8	26.25	27.938	35.	19.5	31.531	5.615	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/19/62-05/04/71	8	142.5	271.	1170.	97.	133593.429	365.504	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/10/79-08/21/91	14	126.	231.5	1270.	61.	100839.962	317.553	64.	74.25	202.	875.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/66-08/21/91	12	670.	649.167	840.	420.	13608.333	116.655	444.	565.	727.5	810.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	10/19/62-05/04/71	5	10.	10.2	14.	8.	6.2	2.49	**	**	**	**
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	10/19/62-05/04/71	5	12.	12.8	18.	10.	9.7	3.114	**	**	**	**
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	10/19/62-05/04/71	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	10/19/62-05/04/71	5	37.	39.4	48.	33.	40.3	6.348	**	**	**	**
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	10/19/62-05/04/71	5	59.	57.2	67.	45.	63.2	7.95	**	**	**	**
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	10/19/62-05/04/71	5	90.	86.6	95.	69.	117.3	10.831	**	**	**	**
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	10/19/62-05/04/71	5	100.	97.6	100.	89.	23.3	4.827	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/19/62-03/24/71	8	376.5	849.25	3030.	61.	1198175.357	1094.612	**	**	**	**
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	10/19/62-03/24/71	8	151.	1352.625	9580.	38.	11084315.696	3329.312	**	**	**	**

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



VIRGIN RIVER AT VIRGIN, UTAH

Station Inventory for Station: ZION0259

NPS Station ID: ZION0259 LAT/LON: 37.463115/-113.220893 Agency: 11NPSWRD Date Created: 08/02/97
Location: TAYLOR CREEK NEAR WEST ENTRANCE ZION NP FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_USGS_TC
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 5160 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE KOLOB ARCH UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON TAYLOR CREEK NEAR THE WEST ENTRANCE TO ZION NP 1/4 MILE DOWNSTREAM FROM BOUNDARY OF T38S R12W SECT28&29. DATA FOR THIS SITE ARE FROM THE 1964 ADMINISTRATIVE REPORT "WATER SUPPLY FOR TAYLOR CREEK ENTRANCE ZION NATIONAL PARK UTAH" BY JOESEPH S. GATES USGS" THIS REPORT ALSO CONTAINS DATA FOR NEARBY GROUND WATER WELL SITES NOT UPLOADED FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0259

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	06/08/64-06/08/64	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/08/64-06/08/64	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/08/64-06/08/64	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/08/64-06/08/64	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/08/64-06/08/64	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/08/64-06/08/64	1	196.	196.	196.	196.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/08/64-06/08/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/08/64-06/08/64	1	510.	510.	510.	510.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	06/08/64-06/08/64	1	349.	349.	349.	349.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/08/64-06/08/64	1	148.	148.	148.	148.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/08/64-06/08/64	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/08/64-06/08/64	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/08/64-06/08/64	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/08/64-06/08/64	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/08/64-06/08/64	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/08/64-06/08/64	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/08/64-06/08/64	1	394.	394.	394.	394.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/08/64-06/08/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/08/64-06/08/64	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	06/08/64-06/08/64	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/08/64-06/08/64	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/08/64-06/08/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/08/64-06/08/64	1	778.	778.	778.	778.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	06/08/64-06/08/64	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

EPA Water Quality Criteria Analysis for Station: ZION0259

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	1	1.00							1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0260

NPS Station ID: ZION0260
LAT/LON: 37.435004/-113.231003
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCD025R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_NURE_08 /5083898
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Kolob Arch UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0260

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/80-07/12/80	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/80-07/12/80	1	2600.	2600.	2600.	2600.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/12/80-07/12/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/12/80-07/12/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/80-07/12/80	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/80-07/12/80	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/80-07/12/80	1	133.9	133.9	133.9	133.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/80-07/12/80	1	223.2	223.2	223.2	223.2	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/80-07/12/80	1	1664.	1664.	1664.	1664.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/12/80-07/12/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/12/80-07/12/80	1	2268.	2268.	2268.	2268.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/12/80-07/12/80	1	5.944	5.944	5.944	5.944	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/12/80-07/12/80	1	74.	74.	74.	74.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	07/12/80-07/12/80	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: ZION0260

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0261

NPS Station ID: ZION0261
LAT/LON: 37.118504/-113.243393
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDDD501R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_04 /5075913
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Little Creek Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0261

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/80-06/26/80	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/26/80-06/26/80	1	3400.	3400.	3400.	3400.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/26/80-06/26/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/26/80-06/26/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/26/80-06/26/80	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/26/80-06/26/80	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/26/80-06/26/80	1	252.4	252.4	252.4	252.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/26/80-06/26/80	1	323.	323.	323.	323.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/26/80-06/26/80	1	1126.	1126.	1126.	1126.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/26/80-06/26/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/26/80-06/26/80	1	2524.	2524.	2524.	2524.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/26/80-06/26/80	1	5.314	5.314	5.314	5.314	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/26/80-06/26/80	1	193.	193.	193.	193.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/26/80-06/26/80	1	350.6	350.6	350.6	350.6	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/26/80-06/26/80	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: ZION0261

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0262

NPS Station ID: ZION0262
LAT/LON: 37.118615/-113.243338
Agency: 112WRD
Date Created: 07/18/78
Location: (C-42-12)19DBB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370707113143601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 7.40
On/Off RF1:
RF3 Index: 15010008048500.00
RF3 Mile Point: 0.63
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0262

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/77-11/16/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	1	3400.	3400.	3400.	3400.	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: ZION0263

NPS Station ID: ZION0263
LAT/LON: 37.423338/-113.248892
Agency: 112WRD
Date Created: 12/02/81
Location: NORTH ASH CREEK AB ASH CREEK RES., UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372524113145601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002509.53
RF3 Mile Point: 10.01
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0263

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-09/02/82	3	12.5	15.833	24.5	10.5	57.333	7.572	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-09/02/82	3	19.5	21.	31.5	12.	96.75	9.836	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-09/02/82	3	637.	642.	654.	635.	109.	10.44	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-09/02/82	3	2.	7.333	19.	1.	102.333	10.116	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-09/02/82	3	505.	555.	750.	410.	30775.	175.428	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/81-09/02/82	3	9.2	8.5	9.6	6.7	2.47	1.572	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-09/02/82	3	8.3	8.267	8.5	8.	0.063	0.252	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-09/02/82	3	8.3	8.218	8.5	8.	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-09/02/82	3	0.005	0.006	0.01	0.003	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-09/02/82	3	8.3	8.333	8.5	8.2	0.023	0.153	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-09/02/82	3	8.3	8.316	8.5	8.2	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-09/02/82	3	0.005	0.005	0.006	0.003	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-09/02/82	3	0.2	0.3	0.5	0.2	0.03	0.173	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/11/82	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-09/02/82	3	0.02	0.018	0.03	0.005	0.	0.013	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-09/02/82	3	230.	260.	370.	180.	9700.	98.489	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-09/02/82	3	58.	65.333	92.	46.	569.333	23.861	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-09/02/82	3	20.	23.667	35.	16.	100.333	10.017	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-09/02/82	3	16.	17.	23.	12.	31.	5.568	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-09/02/82	3	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-09/02/82	3	12.	12.333	13.	12.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-09/02/82	3	2.4	2.433	2.6	2.3	0.023	0.153	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-09/02/82	3	18.	16.	22.	8.	52.	7.211	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-09/02/82	3	66.	89.667	170.	33.	5112.333	71.501	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-09/02/82	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-09/02/82	3	38.	39.333	48.	32.	65.333	8.083	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-09/02/82	3	30.	40.	60.	30.	300.	17.321	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-09/02/82	3	311.	351.333	482.	261.	13430.333	115.889	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-09/02/82	3	1.69	5.45	13.4	1.26	47.448	6.888	**	**	**	**

** - Less than 9 observations ## - 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: ZION0263

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-09/02/82	3	0.42	0.477	0.66	0.35	0.026	0.163	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	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

EPA Water Quality Criteria Analysis for Station: ZION0263

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	2	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00				1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	2	0	0.00				1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00				1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
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									
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: ZION0264

NPS Station ID: ZION0264
LAT/LON: 37.423059/-113.248892
Agency: 21UTAH
Date Created: 10/26/96
Location: ASH CK AB ASH CK RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495074
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0264

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/02/96-12/11/96	4	15.8	15.2	21.5	7.7	37.447	6.119	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/02/96-12/11/96	4	2.5	2.125	3.	0.5	1.396	1.181	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/02/96-12/11/96	4	2.2	10.4	36.2	1.	296.22	17.211	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/02/96-12/11/96	4	686.5	643.75	838.	364.	44756.25	211.557	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/02/96-12/11/96	4	713.5	662.5	840.	383.	42704.333	206.65	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/02/96-12/11/96	4	6.7	7.4	9.6	6.6	2.16	1.47	**	**	**	**
00400	PH (STANDARD UNITS)	04/02/96-12/11/96	4	8.68	8.653	8.85	8.4	0.038	0.195	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/02/96-12/11/96	4	8.674	8.619	8.85	8.4	0.04	0.199	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/02/96-12/11/96	4	0.002	0.002	0.004	0.001	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/02/96-12/11/96	4	8.5	8.425	8.5	8.2	0.023	0.15	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/02/96-12/11/96	4	8.5	8.404	8.5	8.2	0.023	0.152	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/02/96-12/11/96	4	0.003	0.004	0.006	0.003	0.	0.002	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/02/96-12/11/96	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	4	172.5	158.5	184.	105.	1389.667	37.278	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/02/96-12/11/96	4	210.	193.	224.	128.	2052.	45.299	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/02/96-12/11/96	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/02/96-12/11/96	4	24.	34.25	74.	15.	744.25	27.281	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/02/96-12/11/96	4 ##	0.025	0.035	0.063	0.025	0.	0.019	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/02/96-12/11/96	4 ##	0.02	0.063	0.2	0.01	0.008	0.092	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/02/96-12/11/96	4	0.025	0.038	0.092	0.01	0.001	0.037	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/02/96-12/11/96	4 ##	0.005	0.013	0.035	0.005	0.	0.015	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	4	341.	312.25	398.	169.	11442.917	106.972	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/02/96-12/11/96	4	76.7	72.65	94.2	43.	530.883	23.041	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/02/96-12/11/96	4	35.15	31.85	42.	15.1	148.323	12.179	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/02/96-12/11/96	4	22.75	21.1	26.9	12.	44.967	6.706	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/02/96-12/11/96	4	2.005	2.318	3.26	2.	0.395	0.628	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/02/96-12/11/96	4	19.5	17.75	23.	9.	38.25	6.185	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/02/96-12/11/96	4	201.7	186.325	271.4	70.5	7858.656	88.649	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/02/96-12/11/96	4	495.	458.	576.	266.	20834.667	144.342	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/02/96-12/11/96	4	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0264

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	1	0	0.00	3	0	0.00						
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	3	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	1	0	0.00	3	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	3	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	1	0	0.00	3	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	3	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	3	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	1	0	0.00	3	0	0.00						
		Drinking Water	250.	4	0	0.00	1	0	0.00	3	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	1	0.25	1	0	0.00	3	1	0.33						

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

Station Inventory for Station: ZION0265

NPS Station ID: ZION0265
LAT/LON: 37.127227/-113.252503
Agency: 112WRD
Date Created: 04/14/78
Location: (C-42-12)18CCD- 2
FIPS State/County: 49049 UTAH/UTAH
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370738113150901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.10
On/Off RF1:
RF3 Index: 15010008000317.07
RF3 Mile Point: 17.06
Distance from RF3: 0.07
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0265

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	1	3500.	3500.	3500.	3500.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/16/77-11/16/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/16/77-11/16/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/16/77-11/16/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/16/77-11/16/77	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/16/77-11/16/77	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/16/77-11/16/77	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/16/77-11/16/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/16/77-11/16/77	1	2300.	2300.	2300.	2300.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/16/77-11/16/77	1	2200.	2200.	2200.	2200.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/16/77-11/16/77	1	550.	550.	550.	550.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/16/77-11/16/77	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/16/77-11/16/77	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/16/77-11/16/77	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	11/16/77-11/16/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/16/77-11/16/77	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/16/77-11/16/77	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/16/77-11/16/77	1	2200.	2200.	2200.	2200.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/16/77-11/16/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/16/77-11/16/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/16/77-11/16/77	1	450.	450.	450.	450.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/16/77-11/16/77	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	11/16/77-11/16/77	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	11/16/77-11/16/77	1	3440.	3440.	3440.	3440.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	11/16/77-11/16/77	1	4.68	4.68	4.68	4.68	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0265

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0265

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0266

NPS Station ID: ZION0266
LAT/LON: 37.125281/-113.254170
Agency: 112WRD
Date Created: 07/18/78
Location: (C-42-12)19BBB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370731113151501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.90
On/Off RF1:
RF3 Index: 15010008000309.59
RF3 Mile Point: 9.60
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0266

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/16/77-11/16/77	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	11/16/77-11/16/77	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/16/77-11/16/77	1	2200.	2200.	2200.	2200.	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: ZION0267

NPS Station ID: ZION0267
LAT/LON: 37.358337/-113.263338
Agency: 112WRD
Date Created: 07/17/82
Location: LEAP CREEK NEAR PINTURA
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372130113154801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002100.00
RF3 Mile Point: 0.07
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0267

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/11/82-05/11/82	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/11/82-05/11/82	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	05/11/82-05/11/82	1	648.	648.	648.	648.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/11/82-05/11/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/11/82-05/11/82	1	365.	365.	365.	365.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/11/82-05/11/82	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/11/82-05/11/82	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/11/82-05/11/82	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/11/82-05/11/82	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/11/82-05/11/82	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/11/82-05/11/82	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/11/82-05/11/82	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/11/82-05/11/82	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/11/82-05/11/82	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/11/82-05/11/82	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/11/82-05/11/82	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/11/82-05/11/82	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/11/82-05/11/82	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/11/82-05/11/82	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/11/82-05/11/82	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/11/82-05/11/82	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/11/82-05/11/82	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/11/82-05/11/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/11/82-05/11/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/11/82-05/11/82	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/11/82-05/11/82	1	27.	27.	27.	27.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/11/82-05/11/82	1	30.	30.	30.	30.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/11/82-05/11/82	1	240.	240.	240.	240.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/11/82-05/11/82	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/11/82-05/11/82	1	0.33	0.33	0.33	0.33	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: ZION0267

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			

& - 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: ZION0268

NPS Station ID: ZION0268
LAT/LON: 37.190837/-113.266393
Agency: 112WRD
Date Created: 12/02/81
Location: VRIGIN R. ABOVE LAVERKIN HOT SPRINGS, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371127113155901
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008000200.00
RF3 Mile Point: 0.08
Distance from RF3: 0.06
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0268

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	15.75	17.125	26.5	10.5	52.229	7.227	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	23.75	25.125	37.5	15.5	92.563	9.621	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	5	673.	675.6	686.	667.	59.8	7.733	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	4	65.	166.	500.	34.	49890.	223.361	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	4	860.	787.5	950.	480.	45491.667	213.288	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	4	8.65	8.45	9.7	6.8	1.59	1.261	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	4	8.35	8.35	8.5	8.2	0.017	0.129	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	4	8.347	8.336	8.5	8.2	0.017	0.13	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.004	0.005	0.006	0.003	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	4	8.15	8.1	8.2	7.9	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	4	8.147	8.082	8.2	7.9	0.02	0.143	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.007	0.008	0.013	0.006	0.	0.003	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/02/82-09/02/82	1 ##	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/02/82-09/02/82	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	4	0.3	0.325	0.5	0.2	0.023	0.15	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	3	0.06	0.09	0.15	0.06	0.003	0.052	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	4	0.02	0.024	0.05	0.005	0.	0.019	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	4	335.	322.5	410.	210.	7025.	83.815	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	4	86.	85.5	110.	60.	441.	21.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	4	30.	27.	34.	14.	78.667	8.869	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	4	48.	41.25	51.	18.	244.917	15.65	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	4	1.2	1.075	1.3	0.6	0.109	0.33	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	4	21.5	21.	25.	16.	18.	4.243	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	4	4.05	3.775	4.6	2.4	0.922	0.96	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	4	47.	41.25	54.	17.	282.917	16.82	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	4	205.	183.	250.	72.	6342.667	79.641	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	4	0.2	0.175	0.2	0.1	0.003	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	4	9.55	9.525	12.	7.	5.569	2.36	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	4	70.	62.5	80.	30.	558.333	23.629	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	4	532.	486.	603.	277.	21056.667	145.109	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	4	98.85	155.9	374.	51.9	22086.887	148.617	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	4	0.725	0.663	0.82	0.38	0.038	0.196	**	**	**	**

** - Less than 9 observations ## - 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: ZION0268

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	1	0.25	3	1	0.33	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0269

NPS Station ID: ZION0269
LAT/LON: 37.190560/-113.266670
Agency: 21USU
Date Created: / /
Location: VIRGIN R ABV LAVERKN HOT SPRING
FIPS State/County: 49000 UTAH/
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 00209A
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0013.28
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.490
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:
VIRGIN RIVER 100 FT. ABOVE LA VERKIN HOT SPRINGS.

Parameter Inventory for Station: ZION0269

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: ZION0270

NPS Station ID: ZION0270
LAT/LON: 37.190560/-113.266670
Agency: 21USU
Date Created: / /
Location: VIRGIN R ABV LAVERKN HOT SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000209A
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0013.30
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.490
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008000500.00
RF3 Mile Point: 1.98
Distance from RF3: 0.01
On/Off RF3:
Description:
VIRGIN RIVER 100 FT. ABOVE LA VERKIN HOT SPRINGS.

Parameter Inventory for Station: ZION0270

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/16/74	3	20.	18.	21.	13.	19.	4.359	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	2	23.5	23.5	32.	15.	144.5	12.021	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/16/74	3	790.	787.667	835.	738.	2356.333	48.542	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/16/74	3	8.3	8.533	9.4	7.9	0.603	0.777	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/16/74	3	1.6	1.8	2.4	1.4	0.28	0.529	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-07/16/74	3	8.3	8.367	8.5	8.3	0.013	0.115	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-07/16/74	3	8.3	8.357	8.5	8.3	0.013	0.116	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-07/16/74	3	0.005	0.004	0.005	0.003	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	20.5	20.5	39.	2.	684.5	26.163	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	3	159.	160.333	171.	151.	101.333	10.066	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-07/16/74	3	95.	66.667	103.	2.	3152.333	56.146	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	201.	201.	208.	194.	98.	9.899	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/16/74	3	404.	319.	526.	27.	67669.	260.133	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3	0.084	0.102	0.15	0.072	0.002	0.042	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3	0.22	0.21	0.25	0.16	0.002	0.046	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/16/74	3	0.009	0.008	0.01	0.004	0.	0.003	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/16/74	3	0.118	0.101	0.14	0.046	0.002	0.049	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/16/74	3	7.	6.333	10.	2.	16.333	4.041	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/16/74	3	40.	38.333	42.	33.	22.333	4.726	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/16/74	3	44.	44.667	50.	40.	25.333	5.033	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	3	306.	520.	960.	294.	145236.	381.098	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/16/74	3	73.	74.333	78.	72.	10.333	3.215	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/16/74	3	27.	27.333	28.	27.	0.333	0.577	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/16/74	3	53.	62.667	88.	47.	490.333	22.143	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/16/74	3	4.	5.333	8.	4.	5.333	2.309	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/16/74	3	59.	59.667	66.	54.	36.333	6.028	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/16/74	3	170.	163.667	177.	144.	302.333	17.388	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	0.115	0.115	0.12	0.11	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	9.5	9.5	10.	9.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/16/74	3	10.	6.667	10.	0.	33.333	5.774	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/16/74	3	200.	220.	350.	110.	14700.	121.244	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/16/74	3	0.	1.333	4.	0.	5.333	2.309	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/16/74	3	0.	0.667	2.	0.	1.333	1.155	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0270

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	2	1695.	1695.	3050.	340.	3672050.	1916.259	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/16/74	3	10.	6.667	10.	0.	33.333	5.774	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/16/74	3	0.	6.667	20.	0.	133.333	11.547	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/16/74	3	0.	2.667	8.	0.	21.333	4.619	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/16/74	3	10.	6.667	10.	0.	33.333	5.774	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/16/74	3	7500.	6366.667	9300.	2300.	13213333.333	3635.015	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-07/16/74	3	3.875	3.735	3.968	3.362	0.107	0.327	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			5433.638								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	3	2300.	3916.667	9300.	150.	22890833.333	4784.437	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	3	3.362	3.169	3.968	2.176	0.831	0.912	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1474.916								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/16/74	3	4.68	13.71	32.8	3.65	273.586	16.54	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/16/74	3	532.	583.333	726.	492.	15665.333	125.161	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/16/74-07/16/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75012	SNAILS	07/16/74-07/16/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/16/74-07/16/74	1	86.	86.	86.	86.	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: ZION0270

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00				1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	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			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	1	0.33	1	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	5.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	2	0.67	1	1	1.00	1	1	1.00	1	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0270

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
71900 MERCURY, TOTAL	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

Station Inventory for Station: ZION0271

NPS Station ID: ZION0271
Location: LA VERKIN HOT SPRINGS
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes: 1101001 005770
RMI-Miles: 0038.65 0013.30
HUC: 15010008
Major Basin: COLORADO RIVER BASIN
Minor Basin: LOWER COLORADO RIVER
RF1 Index: 15010008005
RF3 Index: 15010008000500.00
Description:
LA VERKIN HOT SPRINGS.

LAT/LON: 37.188892/-113.268338

Depth of Water: 0
Elevation: 0

RF1 Mile Point: 1.380
RF3 Mile Point: 2.03

Agency: 21USU
FIPS State/County: 49000 UTAH/
STORET Station ID(s): 00209B
Within Park Boundary: No

Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 0.00
Distance from RF3: 0.01

Date Created: / /

On/Off RF1: OFF
On/Off RF3:

Parameter Inventory for Station: ZION0271

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: ZION0272

NPS Station ID: ZION0272
LAT/LON: 37.188892/-113.268338
Agency: 21USU
Date Created: / /
Location: LA VERKIN HOT SPRINGS
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000209B
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0013.28
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.380
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008000500.00
RF3 Mile Point: 2.03
Distance from RF3: 0.01
On/Off RF3:
Description:
LA VERKIN HOT SPRINGS.

Parameter Inventory for Station: ZION0272

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-07/16/74	3	41.	41.	41.	41.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/09/74-05/28/74	2	35.5	35.5	70.	1.	2380.5	48.79	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-07/16/74	3	13580.	13660.	13900.	13500.	44800.	211.66	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-07/16/74	3	1.	1.	1.2	0.8	0.04	0.2	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-07/16/74	3	1.4	1.633	2.2	1.3	0.243	0.493	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-07/16/74	3	6.2	6.233	6.4	6.1	0.023	0.153	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-07/16/74	3	6.2	6.216	6.4	6.1	0.024	0.154	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-07/16/74	3	0.631	0.608	0.794	0.398	0.04	0.199	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	237.5	237.5	320.	155.	13612.5	116.673	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	3	1007.	1009.333	1042.	979.	996.333	31.565	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	2	816.	816.	1007.	625.	72962.	270.115	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	1249.5	1249.5	1271.	1228.	924.5	30.406	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-07/16/74	3	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3	0.987	1.025	1.212	0.877	0.029	0.171	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-07/16/74	3	0.03	0.024	0.04	0.002	0.	0.02	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-07/16/74	3	0.003	0.005	0.01	0.002	0.	0.004	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-07/16/74	3	0.108	0.106	0.112	0.098	0.	0.007	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-07/16/74	3	20.	29.333	60.	8.	741.333	27.227	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-07/16/74	3	288.	277.333	348.	196.	5861.333	76.559	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-07/16/74	3	296.	306.667	368.	256.	3221.333	56.757	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/09/74-07/16/74	3	2560.	2314.667	4088.	296.	3639957.333	1907.867	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-07/16/74	3	672.	700.	780.	648.	4944.	70.314	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-07/16/74	3	156.	301.333	600.	148.	66917.333	258.684	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-07/16/74	3	2400.	2330.	2600.	1990.	96700.	310.966	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-07/16/74	3	240.	236.667	240.	230.	33.333	5.774	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-07/16/74	3	3475.	3448.333	3500.	3370.	4758.333	68.981	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-07/16/74	3	1960.	1960.	2000.	1920.	1600.	40.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	1.06	1.06	1.9	0.22	1.411	1.188	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	28.5	28.5	29.	28.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-07/16/74	3	180.	180.	200.	160.	400.	20.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-07/16/74	3	3600.	3380.	4140.	2400.	793200.	890.618	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-07/16/74	3	0.	14.	42.	0.	588.	24.249	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-07/16/74	3	0.	0.667	2.	0.	1.333	1.155	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0272

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-07/16/74	3	0.	3.333	10.	0.	33.333	5.774	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/09/74-05/28/74	2	290.	290.	450.	130.	51200.	226.274	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-07/16/74	3	120.	103.333	130.	60.	1433.333	37.859	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-07/16/74	3	80.	53.333	80.	0.	2133.333	46.188	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-07/16/74	3	75.	54.333	84.	4.	1920.333	43.822	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-07/16/74	3	20.	23.333	50.	0.	633.333	25.166	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-07/16/74	3	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-07/16/74	2	5700.	5700.	9300.	2100.	25920000.	5091.169	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-07/16/74	2	3.645	3.645	3.968	3.322	0.209	0.457	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			4419.276								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	2	4865.	4865.	9300.	430.	39338450.	6272.037	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-07/16/74	2	3.301	3.301	3.968	2.633	0.891	0.944	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1999.75								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-07/16/74	3 ##	3.65	2.802	3.655	1.1	2.172	1.474	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-07/16/74	3	9312.	9307.333	9410.	9200.	11041.333	105.078	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0272

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50				1	0	0.00	1	1	1.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00400	PH	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
		Drinking Water	250.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00				1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	1	0.33	1	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	5.	3	1	0.33	1	0	0.00	1	0	0.00	1	1	1.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	2	1.00	1	1	1.00	1	1	1.00						
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00						
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0273

NPS Station ID: ZION0273
LAT/LON: 37.188615/-113.270838
Agency: 112WRD
Date Created: 12/19/81
Location: LAVERKIN HOT SPRINGS, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371119113161501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002300.00
RF3 Mile Point: 0.05
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0273

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-05/05/82	2	41.5	41.5	41.5	41.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-05/05/82	2	28.	28.	36.	20.	128.	11.314	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-05/05/82	2	675.5	675.5	682.	669.	84.5	9.192	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-05/05/82	3	11.	11.333	12.	11.	0.333	0.577	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-05/05/82	2	12800.	12800.	13000.	12600.	80000.	282.843	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-05/05/82	2	0.8	0.8	1.1	0.5	0.18	0.424	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-05/05/82	2	6.25	6.25	6.4	6.1	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-05/05/82	2	6.225	6.225	6.4	6.1	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-05/05/82	2	0.596	0.596	0.794	0.398	0.078	0.28	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-05/05/82	2	6.75	6.75	6.8	6.7	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-05/05/82	2	6.747	6.747	6.8	6.7	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-05/05/82	2	0.179	0.179	0.2	0.158	0.001	0.029	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-05/05/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-05/05/82	2	0.165	0.165	0.18	0.15	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-05/05/82	2	0.055	0.055	0.06	0.05	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-05/05/82	2	2800.	2800.	2900.	2700.	20000.	141.421	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-05/05/82	2	850.	850.	880.	820.	1800.	42.426	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-05/05/82	2	160.	160.	160.	160.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-05/05/82	2	2300.	2300.	2300.	2300.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-05/05/82	2	19.	19.	19.	19.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-05/05/82	2	62.5	62.5	63.	62.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-05/05/82	2	150.	150.	150.	150.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-05/05/82	2	3850.	3850.	4100.	3600.	125000.	353.553	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-05/05/82	2	2100.	2100.	2100.	2100.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-05/05/82	2	2.85	2.85	2.9	2.8	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-05/05/82	2	26.	26.	28.	24.	8.	2.828	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-05/05/82	2	3035.	3035.	5200.	870.	9374450.	3061.772	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-05/05/82	2	9750.	9750.	9840.	9660.	16200.	127.279	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-05/05/82	2	302.5	302.5	313.	292.	220.5	14.849	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-05/05/82	2	13.25	13.25	13.4	13.1	0.045	0.212	**	**	**	**

** - Less than 9 observations ## - 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: ZION0273

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	2	1.00	1	1	1.00	1	1	1.00						
00400	PH	Other-Hi Lim.	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						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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	2	1.00	1	1	1.00	1	1	1.00						
		Drinking Water	250.	2	2	1.00	1	1	1.00	1	1	1.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	2	1.00	1	1	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0274

NPS Station ID: ZION0274
LAT/LON: 37.190003/-113.271115
Agency: 112WRD
Date Created: 02/28/78
Location: DIXIE HOT SPRINGS UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371124113161600
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008086300.00
RF3 Mile Point: 6.92
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0274

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
09511	RADIUM 226, DISSOLVED, RADON METHOD	07/23/75-07/23/75	1	41.	41.	41.	41.	0.	0.	**	**	**	**
80020	URANIUM,DISS.,BY EXTRACTION FLUOROMETRIC METHOD	07/23/75-07/23/75	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0274

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
80020	URANIUM, DISS. BY EXTRACTION FLUOROMETRI	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0275

NPS Station ID: ZION0275 LAT/LON: 37.189337/-113.271309 Agency: 11NPSWRD Date Created: 08/02/97
Location: VIRGIN RIVER NEAR LA VERKIN HOT SPRINGS FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): ZION_EPA_VR8
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 3080 Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 3.60 On/Off RF1:
RF3 Index: 15010008039000.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
THE SITE IS LOCATED ON THE HURRICANE UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON THE VIRGIN RIVER 150M DOWNSTREAM FROM LA VERKIN HOT SPRINGS BRIDGE. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0275

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/15/76	3	7.	6.667	7.	6.	0.333	0.577	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/15/76	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/15/76	3	86.	94.667	115.	83.	312.333	17.673	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/15/76	3	3000.	2766.667	3000.	2300.	163333.333	404.145	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/15/76	3	9.8	9.733	9.9	9.5	0.043	0.208	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/15/76	3	6.95	6.983	7.05	6.95	0.003	0.058	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/15/76	3	6.95	6.981	7.05	6.95	0.003	0.058	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/15/76	3	0.112	0.105	0.112	0.089	0.	0.013	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/15/76	3	204.	212.667	294.	140.	5985.333	77.365	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/15/76	3	438.	402.667	454.	316.	5697.333	75.481	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/15/76	3	381.	385.333	450.	325.	3920.333	62.613	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/15/76	3	0.54	0.53	0.59	0.46	0.004	0.066	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	03/13/76-03/13/76	1	26.	26.	26.	26.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/15/76	3	28.	28.	34.	22.	36.	6.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/13/76-03/13/76	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/15/76	3	4200.	4500.	7100.	2200.	6070000.	2463.737	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/13/76-03/13/76	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/13/76-03/13/76	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/15/76	3 ##	2.5	3.333	5.	2.5	2.083	1.443	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/13/76-03/13/76	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/13/76-03/13/76	1	64.	64.	64.	64.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/15/76	3	255.	225.	260.	160.	3175.	56.347	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/13/76-03/13/76	1	45.	45.	45.	45.	0.	0.	**	**	**	**
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	03/13/76-03/13/76	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/15/76	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

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Parameter Inventory for Station: ZION0275

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/15/76	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/13/76-03/13/76	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/13/76-03/13/76	1	2230.	2230.	2230.	2230.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	03/13/76-03/13/76	1 ##	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/15/76	3	1750.	1833.333	2080.	1670.	47233.333	217.332	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	03/13/76-03/13/76	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/15/76	3	2.	1.567	2.4	0.3	1.243	1.115	**	**	**	**
75049	MERCURY (HG) SEDIMENT,DRY,WT,UG/KG	03/13/76-03/13/76	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0275

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	3	1.00	3	3	1.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	3	1.00	3	3	1.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	3	1.00	3	3	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
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.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	1	1.00	1	1	1.00									
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	1	0.33	3	1	0.33									
		Drinking Water	2.	3	2	0.67	3	2	0.67									

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

Station Inventory for Station: ZION0276

NPS Station ID: ZION0276
LAT/LON: 37.219726/-113.271671
Agency: 21UTAH
Date Created: 06/21/80
Location: LAVERKIN CK AT U17 XING N OF LAVERKIN
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495077
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO R-VIRGIN R DRAINAGE
ECO Region:
RF1 Index: 15010008021
RF1 Mile Point: 0.890
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002200.04
RF3 Mile Point: 7.79
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-12/11/96	91	15.6	15.32	29.5	1.6	50.758	7.124	6.1	8.3	21.7	24.4
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-07/31/91	4	18.9	19.95	29.	13.	51.843	7.2	**	**	**	**
00058	FLOW, RATE GALLONS/MIN	08/05/87-08/05/87	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/17/80-12/11/96	72	7.	13.333	140.	1.	542.338	23.288	2.	4.	10.75	24.7
00076p	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-12/11/96	84	24.	252.914	8930.	0.3	999848.696	999.924	0.85	2.6	143.75	695.
00094p	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-12/11/96	91	1124.	1159.835	6363.	338.	405728.05	636.968	677.4	962.	1280.	1505.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-12/11/96	84	1130.5	1145.393	3207.	403.	140570.964	374.928	735.	941.75	1315.75	1535.
00300p	OXYGEN, DISSOLVED MG/L	06/17/80-12/11/96	88	8.4	8.484	11.9	4.	2.488	1.577	6.69	7.2	9.775	10.6
00335	COD, .025N K2CR2O7 MG/L	06/17/80-06/13/90	57 ##	7.	11.268	50.	1.3	98.821	9.941	5.	7.	13.5	24.
00400p	PH (STANDARD UNITS)	06/17/80-12/11/96	88	8.	7.934	8.6	6.5	0.11	0.332	7.59	7.8	8.1	8.3
00400p	CONVERTED PH (STANDARD UNITS)	06/17/80-12/11/96	88	8.	7.735	8.6	6.5	0.15	0.388	7.59	7.8	8.1	8.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/80-12/11/96	88	0.01	0.018	0.316	0.003	0.001	0.036	0.005	0.008	0.016	0.026
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	57	8.	7.968	8.4	7.6	0.035	0.188	7.7	7.8	8.1	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	57	8.	7.928	8.4	7.6	0.037	0.192	7.7	7.8	8.1	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	57	0.01	0.012	0.025	0.004	0.	0.005	0.006	0.008	0.016	0.02
00405p	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-12/11/96	84	3.	3.119	11.	0.	3.022	1.738	1.	2.	4.	5.
00410p	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	84	168.5	166.726	327.	72.	1153.454	33.963	127.	154.75	182.	197.5
00440p	BICARBONATE ION (MG/L AS HCO3)	06/17/80-12/11/96	84	205.	203.	398.	88.	1718.578	41.456	153.	188.5	223.	241.
00445p	CARBONATE ION (MG/L AS CO3)	06/17/80-12/11/96	84	0.	0.095	4.	0.	0.256	0.506	0.	0.	0.	0.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/17/80-08/28/84	13	210.	1172.154	6190.	19.	3538346.974	1881.049	23.8	70.	1816.	5230.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-12/11/96	69	48.	363.986	6190.	1.5	883952.478	940.187	1.5	4.	253.	1192.
00560	OIL & GREASE (FREON EXTR.-IR METHOD) TOT,REC,MG/L	10/01/86-10/01/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-12/11/96	84 ##	0.025	0.04	0.2	0.	0.001	0.03	0.025	0.025	0.05	0.065
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	41 ##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.005	0.025
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/19/88	16 ##	0.005	0.012	0.025	0.005	0.	0.009	0.005	0.005	0.025	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	41	0.28	0.304	1.06	0.07	0.028	0.167	0.13	0.19	0.385	0.466
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/19/88	16	0.27	0.272	0.48	0.07	0.018	0.136	0.084	0.16	0.4	0.459
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-03/17/93	72	0.2	0.335	2.1	0.	0.13	0.361	0.05	0.1	0.47	0.6
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-10/29/91	17	0.25	0.273	0.45	0.12	0.014	0.119	0.12	0.175	0.4	0.45
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	26	0.25	0.323	1.	0.1	0.05	0.223	0.1	0.2	0.4	0.69
00665p	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-12/11/96	84	0.04	0.133	1.45	0.003	0.052	0.228	0.008	0.02	0.156	0.32
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	27	0.01	0.015	0.09	0.005	0.	0.021	0.005	0.005	0.015	0.035
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/17/80-06/13/90	48	0.01	4.631	220.	0.003	1007.889	31.747	0.003	0.003	0.065	0.192
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/17/80-06/13/90	56	2.1	4.945	34.6	0.5	56.226	7.498	0.97	1.5	4.5	17.05
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	10/01/86-10/01/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
00900p	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	84	584.5	596.06	1650.	180.	46581.888	215.828	339.5	473.	700.	813.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-12/11/96	84	157.	162.902	460.	56.6	4309.771	65.649	85.	116.25	198.25	245.
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-12/11/96	83	46.	44.016	86.	9.5	147.812	12.158	30.	37.	52.	56.36

** - 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 time series plot

Parameter Inventory for Station: ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930p	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-12/11/96	84	32.	36.344	398.	9.66	1707.129	41.317	19.5	28.	36.975	42.
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-12/11/96	83	4.	4.314	30.1	1.54	9.318	3.052	3.	3.	4.42	5.
00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-10/18/89	51	19.	18.078	29.	1.	38.194	6.18	9.	14.	22.	26.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-12/11/96	48	20.	32.042	620.	0.	7644.041	87.43	8.9	14.25	23.	28.1
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-12/11/96	84	454.05	453.737	1100.	0.05	37791.399	194.4	217.5	325.35	565.	673.55
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/17/80-04/14/81	5	0.21	0.21	0.22	0.19	0.	0.012	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/17/80-04/14/81	5	12.	11.6	14.	10.	2.8	1.673	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/92-10/30/96	8 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-09/18/91	60 ##	2.	2.193	12.	0.25	4.029	2.007	0.25	0.5	2.5	4.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/20/92-10/30/96	8	88.5	87.75	110.	62.	206.5	14.37	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-09/18/91	60	70.	60.096	270.	0.	3313.337	57.562	0.	0.025	100.	129.
01020	BORON, DISSOLVED (UG/L AS B)	06/17/80-04/14/81	5	225.	263.4	450.	150.	13897.8	117.889	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/92-10/30/96	8 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-09/18/91	60 ##	0.5	0.525	1.	0.5	0.012	0.11	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/92-10/30/96	8 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/17/80-04/14/81	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-09/18/91	60 ##	2.5	2.725	6.	2.5	0.58	0.761	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/92-10/30/96	8 ##	10.	8.5	10.	6.	4.286	2.07	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-09/18/91	60 ##	10.	11.433	55.	5.	67.741	8.231	5.	10.	10.	14.5
01046	IRON, DISSOLVED (UG/L AS FE)	05/20/92-10/30/96	8	29.	32.25	89.	10.	627.071	25.041	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/01/86-10/30/96	9 ##	2.5	6.556	43.	1.5	187.028	13.676	1.5	1.5	2.5	43.
01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-09/18/91	60 ##	2.5	3.192	20.	2.5	8.179	2.86	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-09/18/91	60	41.5	185.175	4100.	2.5	316456.329	562.545	10.	23.	99.5	512.5
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/92-10/30/96	8	40.5	38.4	75.	2.5	784.38	28.007	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/01/86-10/01/86	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/17/80-06/21/83	15 ##	5.	10.267	25.	5.	46.352	6.808	5.	5.	16.	22.
01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/92-10/30/96	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-09/18/91	60 ##	1.	1.017	2.	1.	0.017	0.129	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/92-10/30/96	8 ##	15.	15.	24.	10.	27.429	5.237	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-09/18/91	60 ##	10.	17.883	100.	2.5	304.215	17.442	5.	10.	22.5	39.8
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	3 ##	15.	43.333	100.	15.	2408.333	49.075	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/92-10/30/96	8 ##	2.5	3.125	10.	1.	7.982	2.825	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-09/18/91	60 ##	0.25	0.633	4.	0.25	0.745	0.863	0.25	0.25	0.5	2.5
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	10/28/80-02/18/81	2	15.	15.	16.	14.	2.	1.414	**	**	**	**
03501	BETA, TOTAL	10/28/80-02/18/81	2	80.	80.	146.	14.	8712.	93.338	**	**	**	**
07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	10/28/80-02/18/81	2	190.	190.	234.	146.	3872.	62.225	**	**	**	**
09501	RADIUM 226, TOTAL	10/28/80-02/18/81	2	0.5	0.5	1.	0.	0.5	0.707	**	**	**	**
11501	RADIUM 228, TOTAL	10/28/80-02/18/81	2	0.5	0.5	1.	0.	0.5	0.707	**	**	**	**
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-12/11/96	88	839.	872.614	2722.	7.	175735.412	419.208	466.9	616.	1087.5	1341.
71830p	HYDROXIDE ION (MG/L AS OH)	06/17/80-12/11/96	83	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	06/17/80-04/14/81	5 ##	0.01	0.017	0.03	0.01	0.	0.01	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/20/92-10/30/96	8 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-09/18/91	60 ##	0.1	0.104	0.8	0.01	0.013	0.115	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	06/17/80-09/18/91	60	0.33	1.342	14.	0.01	6.673	2.583	0.03	0.07	1.483	3.861
82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	130.	135.	170.	110.	700.	26.458	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	3.125	5.	2.5	1.563	1.25	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	14.5	28.	10.	81.	9.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	0.92	3.818	13.	0.43	37.624	6.134	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	4.375	10.	2.5	14.063	3.75	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4	98.	166.25	430.	39.	31786.917	178.289	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	27.75	81.	10.	1260.25	35.5	**	**	**	**

** - 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: ZION0276

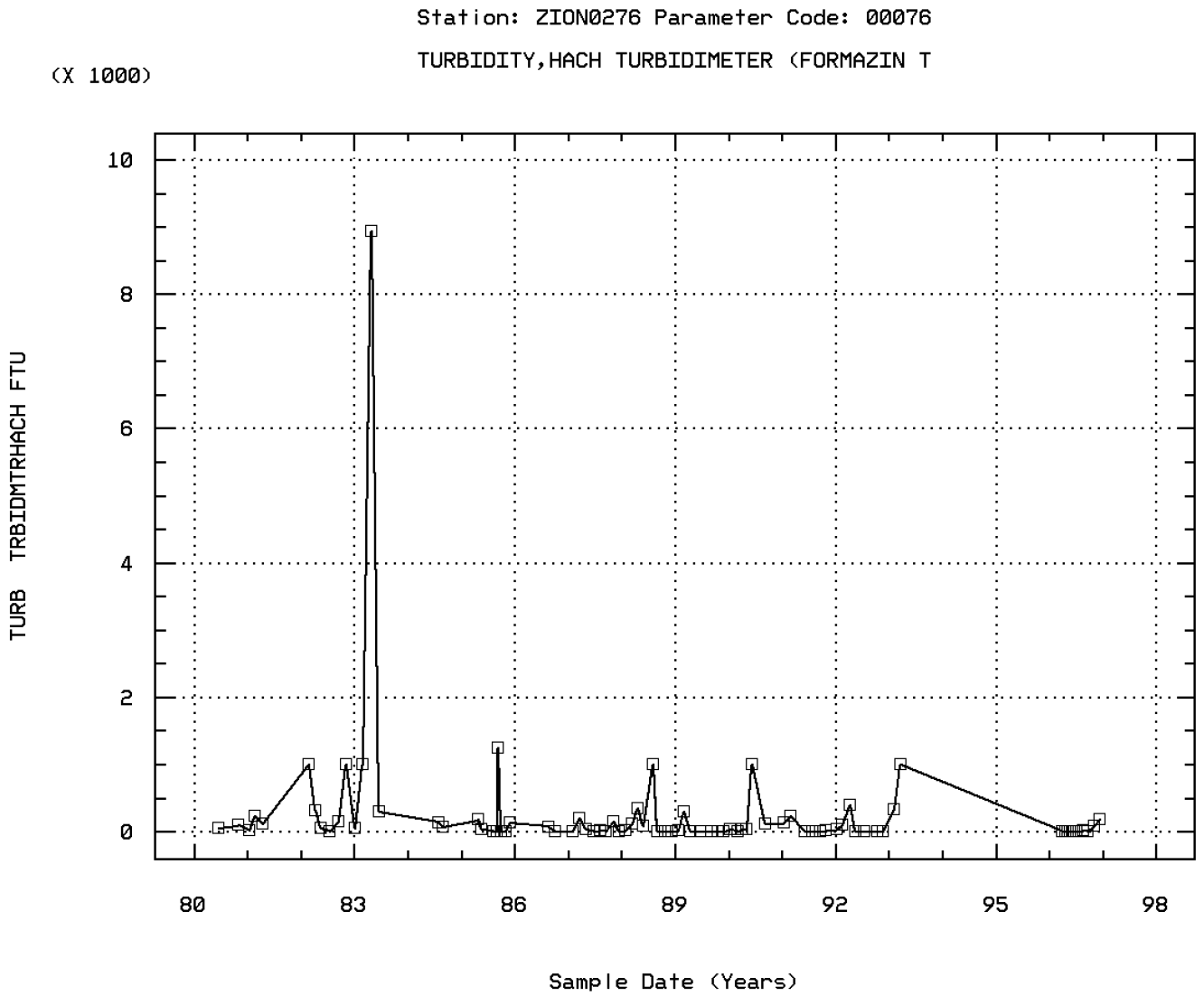
Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	84	35	0.42	58	25	0.43	13	6	0.46	13	4	0.31			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	88	1	0.01	60	0	0.00	13	0	0.00	15	1	0.07			
00400	PH	Other-Hi Lim.	9.	88	0	0.00	60	0	0.00	13	0	0.00	15	0	0.00			
		Other-Lo Lim.	6.5	88	1	0.01	60	0	0.00	13	0	0.00	15	1	0.07			
00403	PH, LAB	Other-Hi Lim.	9.	57	0	0.00	39	0	0.00	9	0	0.00	9	0	0.00			
		Other-Lo Lim.	6.5	57	0	0.00	39	0	0.00	9	0	0.00	9	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	41	0	0.00	31	0	0.00	4	0	0.00	6	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	16	0	0.00	11	0	0.00	3	0	0.00	2	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	41	0	0.00	31	0	0.00	4	0	0.00	6	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	16	0	0.00	11	0	0.00	3	0	0.00	2	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	17	0	0.00	11	0	0.00	3	0	0.00	3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	26	0	0.00	17	0	0.00	4	0	0.00	5	0	0.00			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	0 &	0	0.00												
		Drinking Water	0.2	0 &	0	0.00												
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	51	0	0.00	37	0	0.00	7	0	0.00	7	0	0.00			
		Drinking Water	250.	51	0	0.00	37	0	0.00	7	0	0.00	7	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	48	0	0.00	30	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	250.	48	1	0.02	30	1	0.03	9	0	0.00	9	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	84	72	0.86	58	51	0.88	13	8	0.62	13	13	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	50.	8	0	0.00	6	0	0.00				2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	50.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	8	0	0.00	6	0	0.00				2	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	5.	8	0	0.00	6	0	0.00				2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	5.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	8	0	0.00	6	0	0.00				2	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	1300.	8	0	0.00	6	0	0.00				2	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	60	5	0.08	42	4	0.10	9	0	0.00	9	1	0.11			
		Drinking Water	1300.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	15.	9	1	0.11	7	1	0.14				2	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	15.	60	2	0.03	42	0	0.00	9	1	0.11	9	1	0.11			
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									
01067	NICKEL, TOTAL	Fresh Acute	1400.	15	0	0.00	9	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	100.	15	0	0.00	9	0	0.00	3	0	0.00	3	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	100.	8	0	0.00	6	0	0.00				2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	100.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	5000.	8	0	0.00	6	0	0.00				2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	5000.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	50.	8	0	0.00	6	0	0.00				2	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	50.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			

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

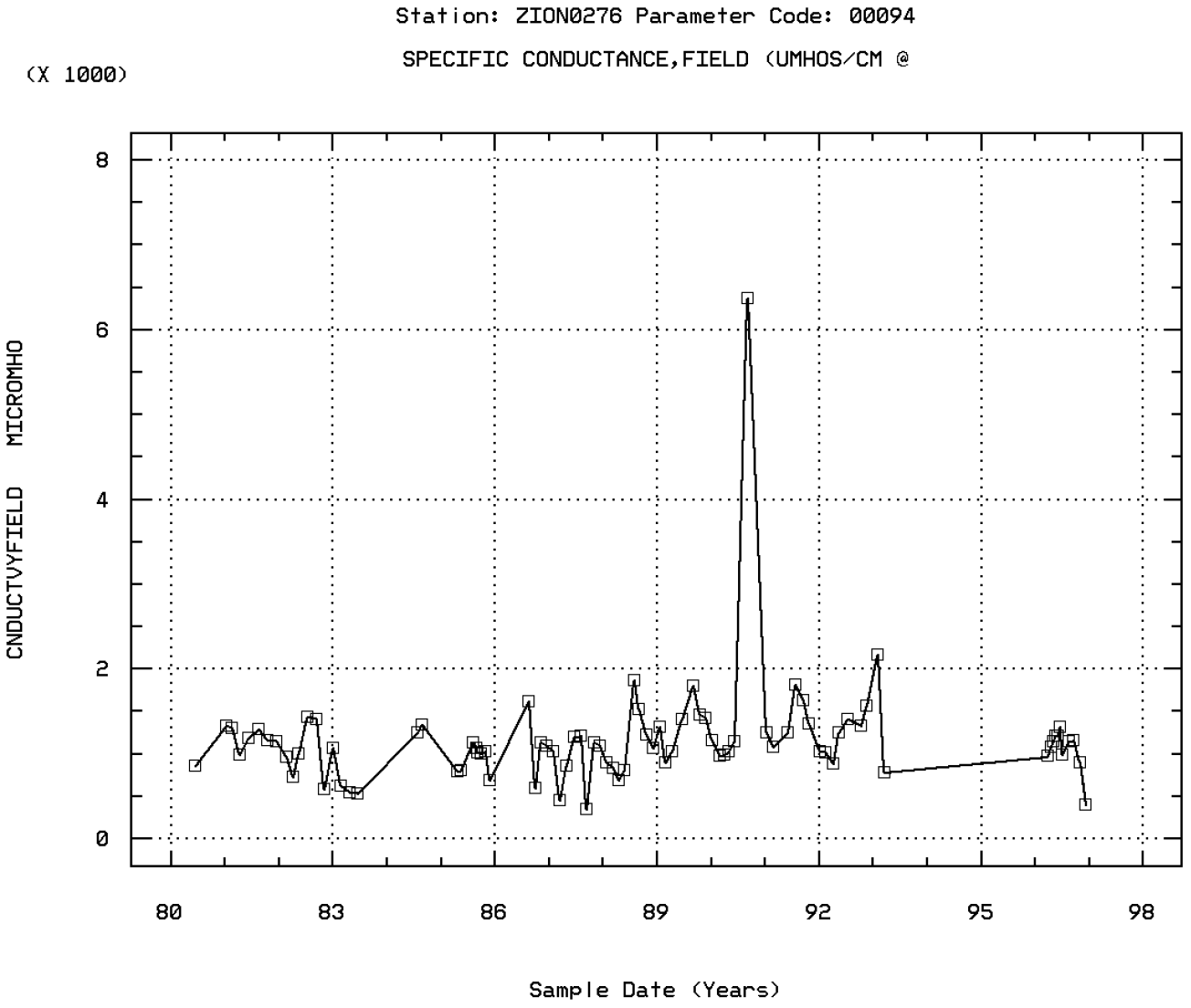
EPA Water Quality Criteria Analysis for Station: ZION0276

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
07000	TRITIUM, TOTAL	Drinking Water	20000.	2	0	0.00	2	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	8	0	0.00	6	0	0.00				2	0	0.00			
		Drinking Water	2.	8	0	0.00	6	0	0.00				2	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			
		Drinking Water	2.	60	0	0.00	42	0	0.00	9	0	0.00	9	0	0.00			

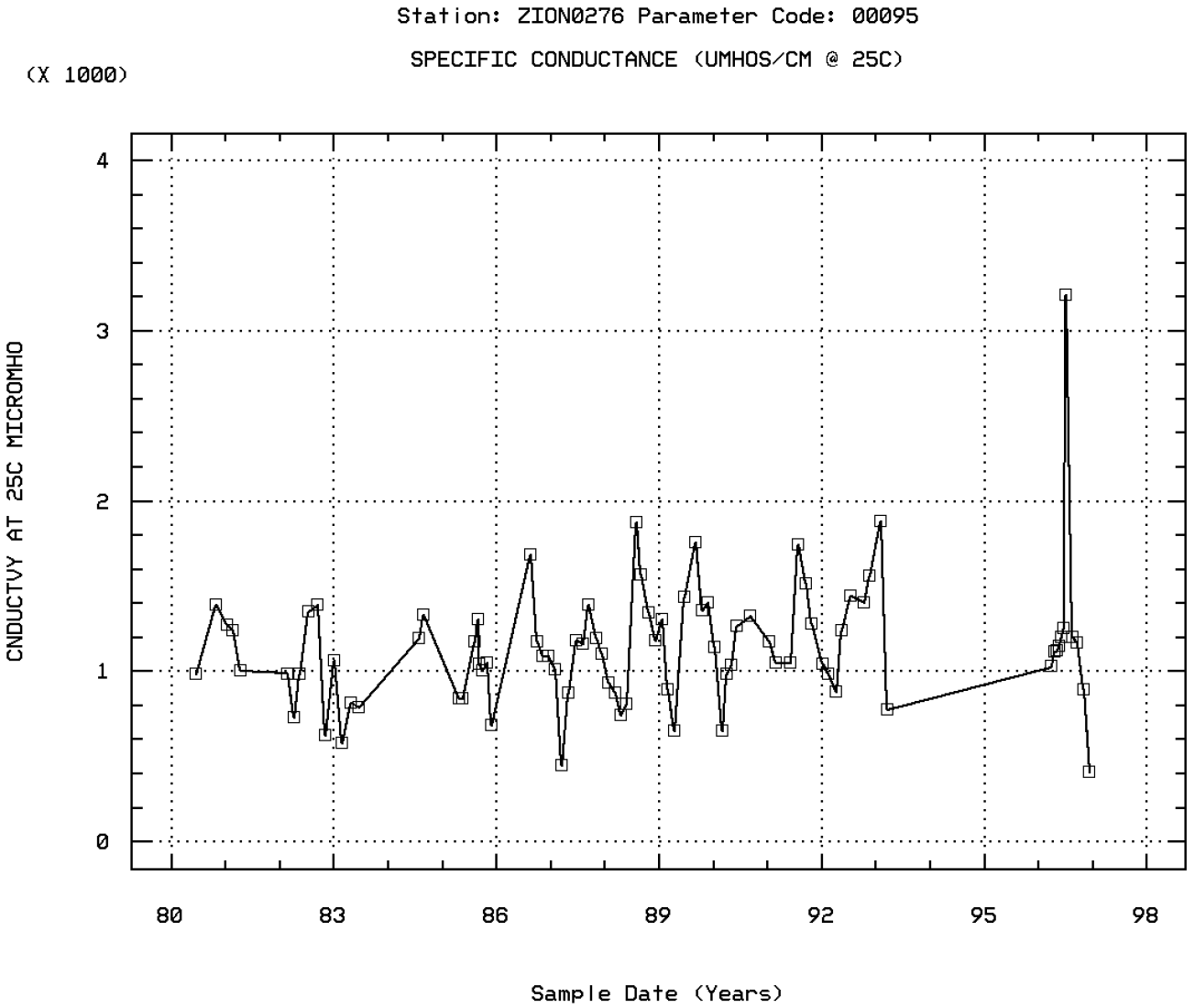
& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter



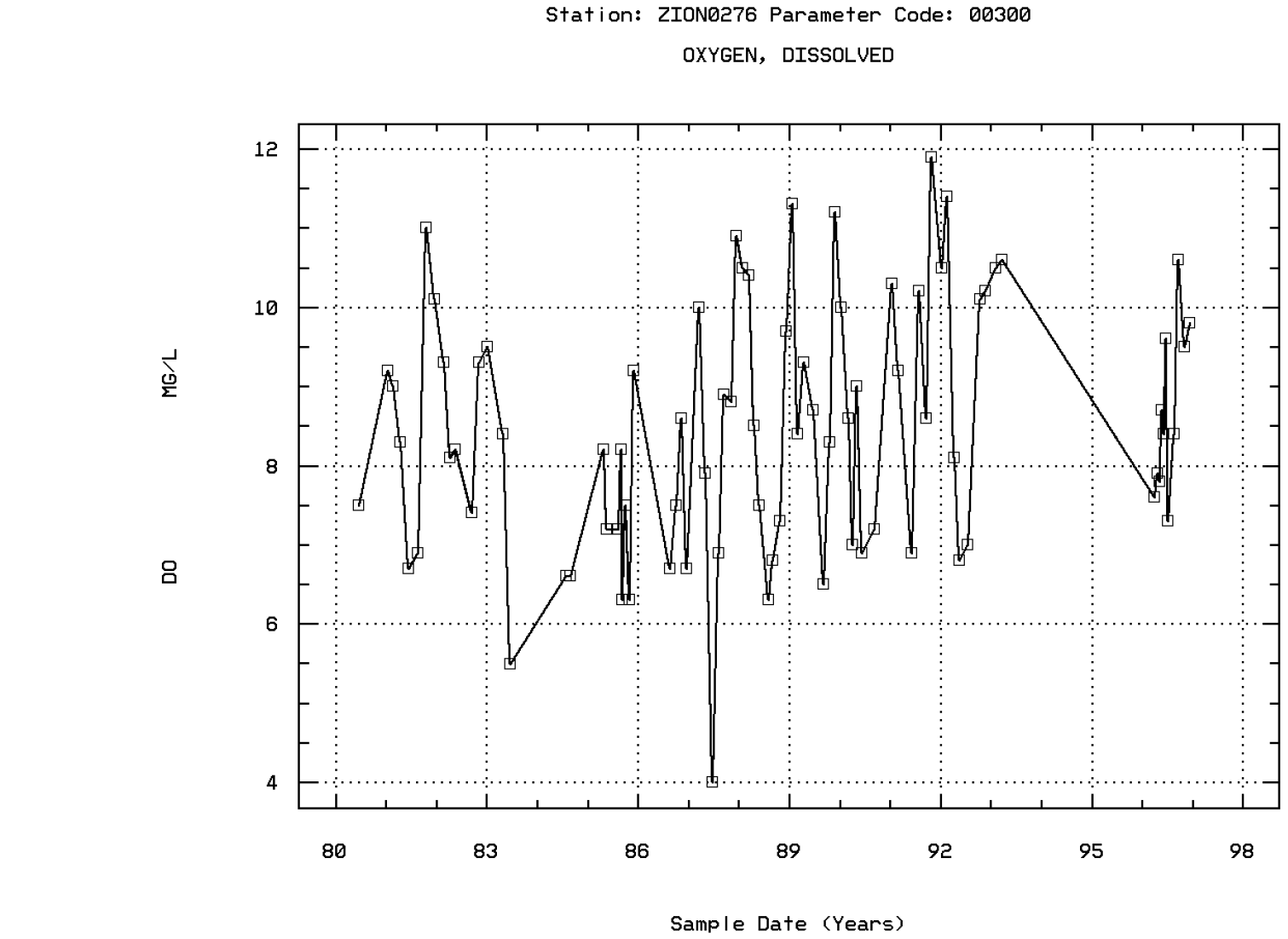
LAVERKIN CK AT U17 XING N OF LAVERKIN



LAVERKIN CK AT U17 XING N OF LAVERKIN



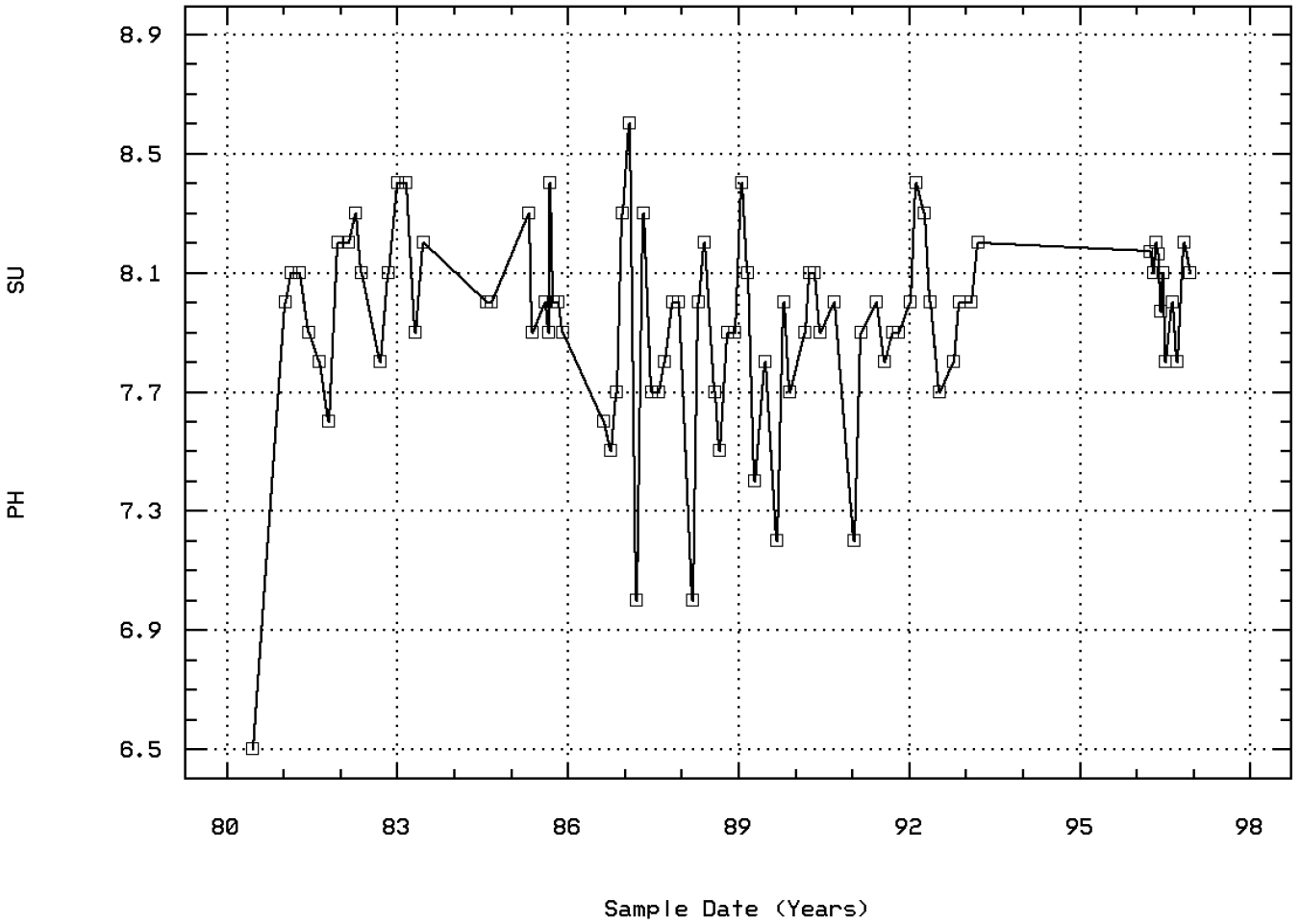
LAVERKIN CK AT U17 XING N OF LAVERKIN



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00400

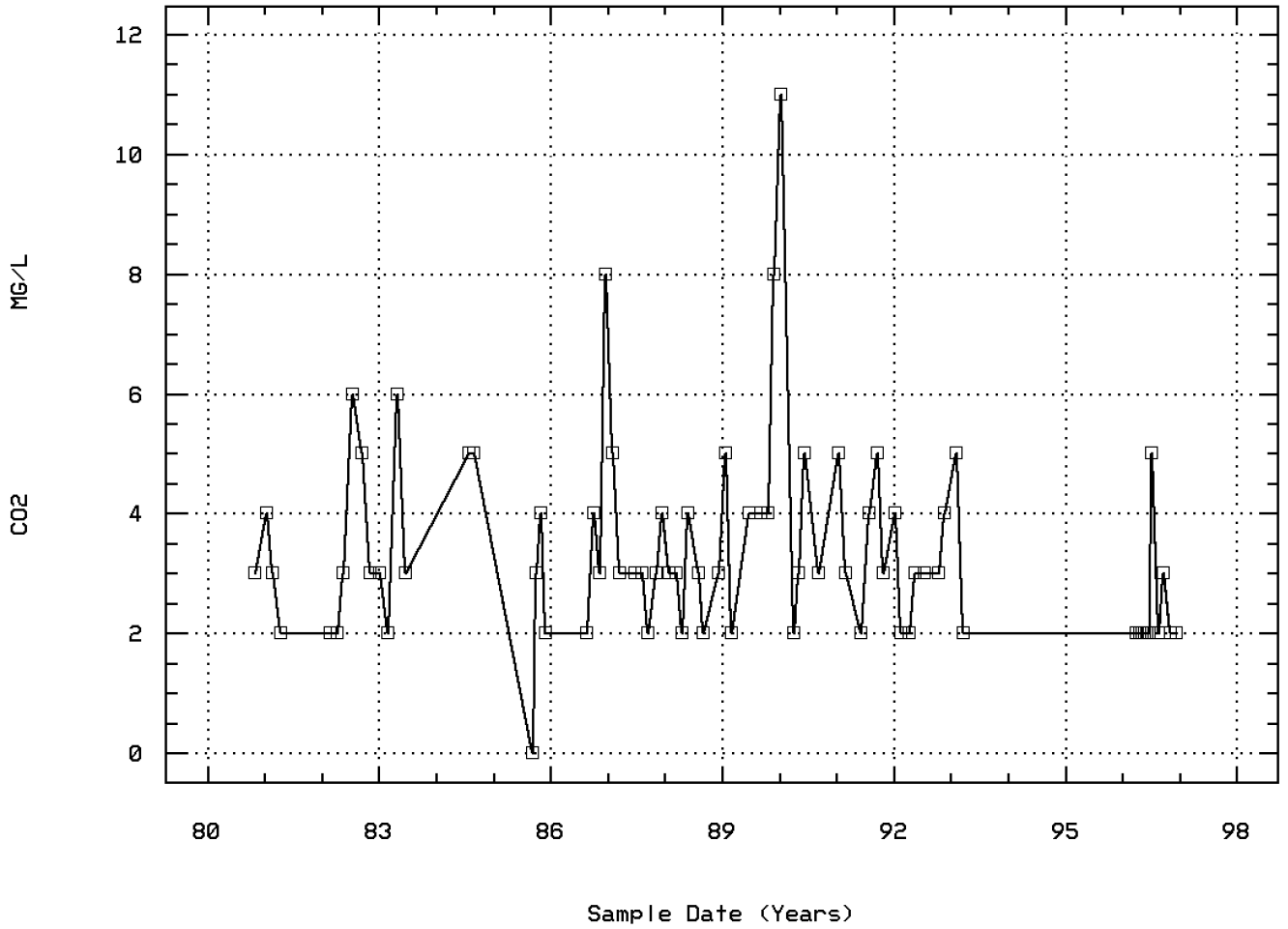
PH (STANDARD UNITS)



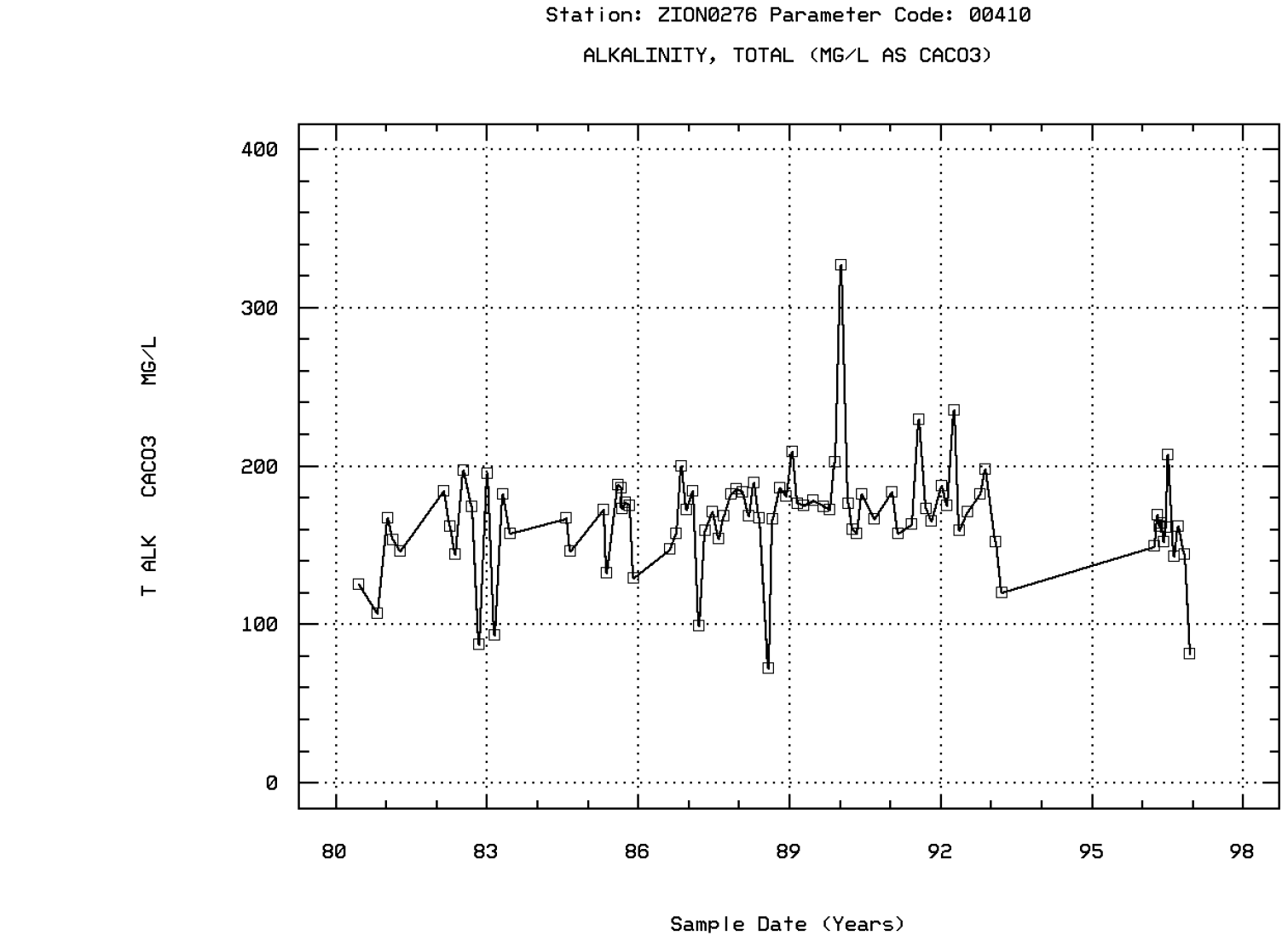
LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00405

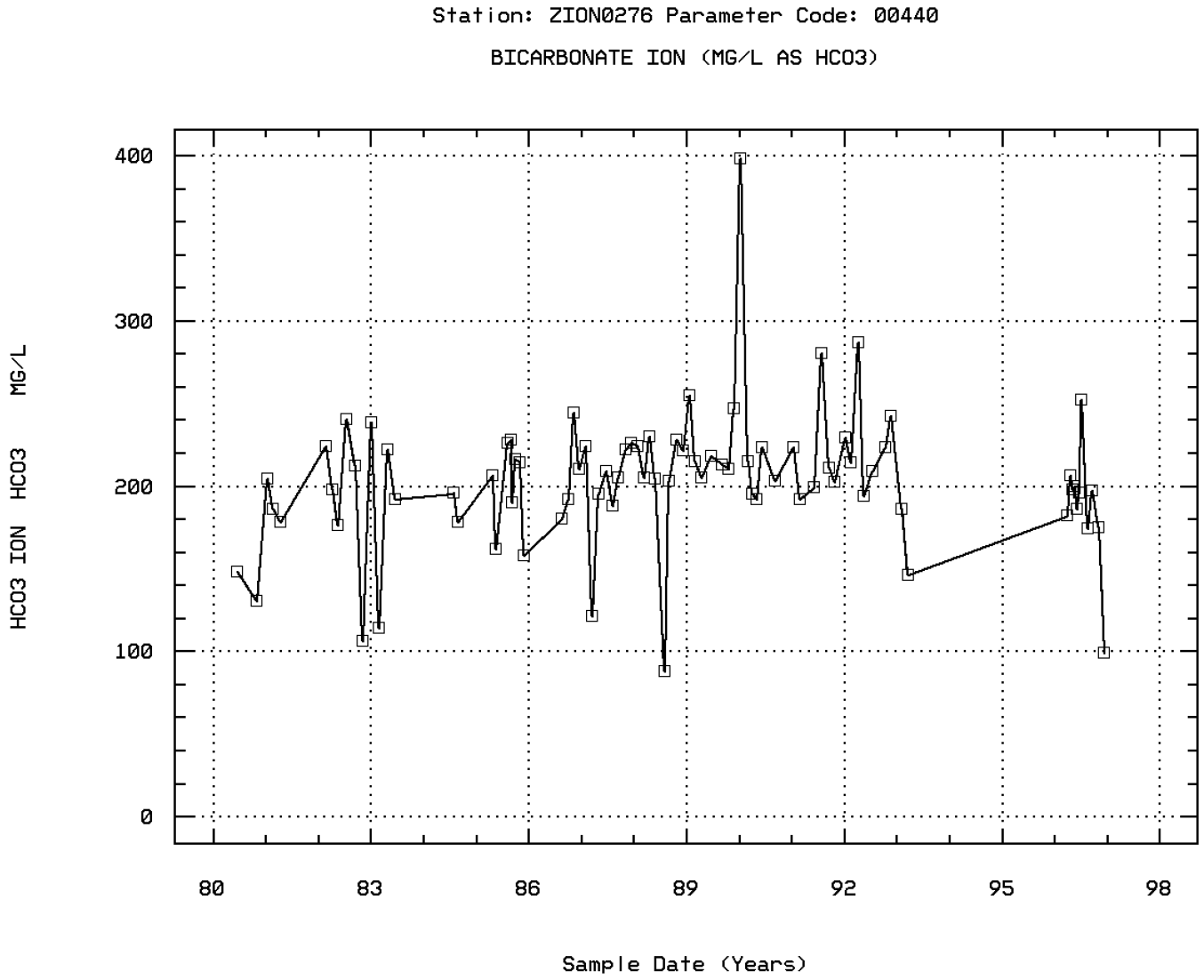
CARBON DIOXIDE (MG/L AS CO2)



LAVERKIN CK AT U17 XING N OF LAVERKIN



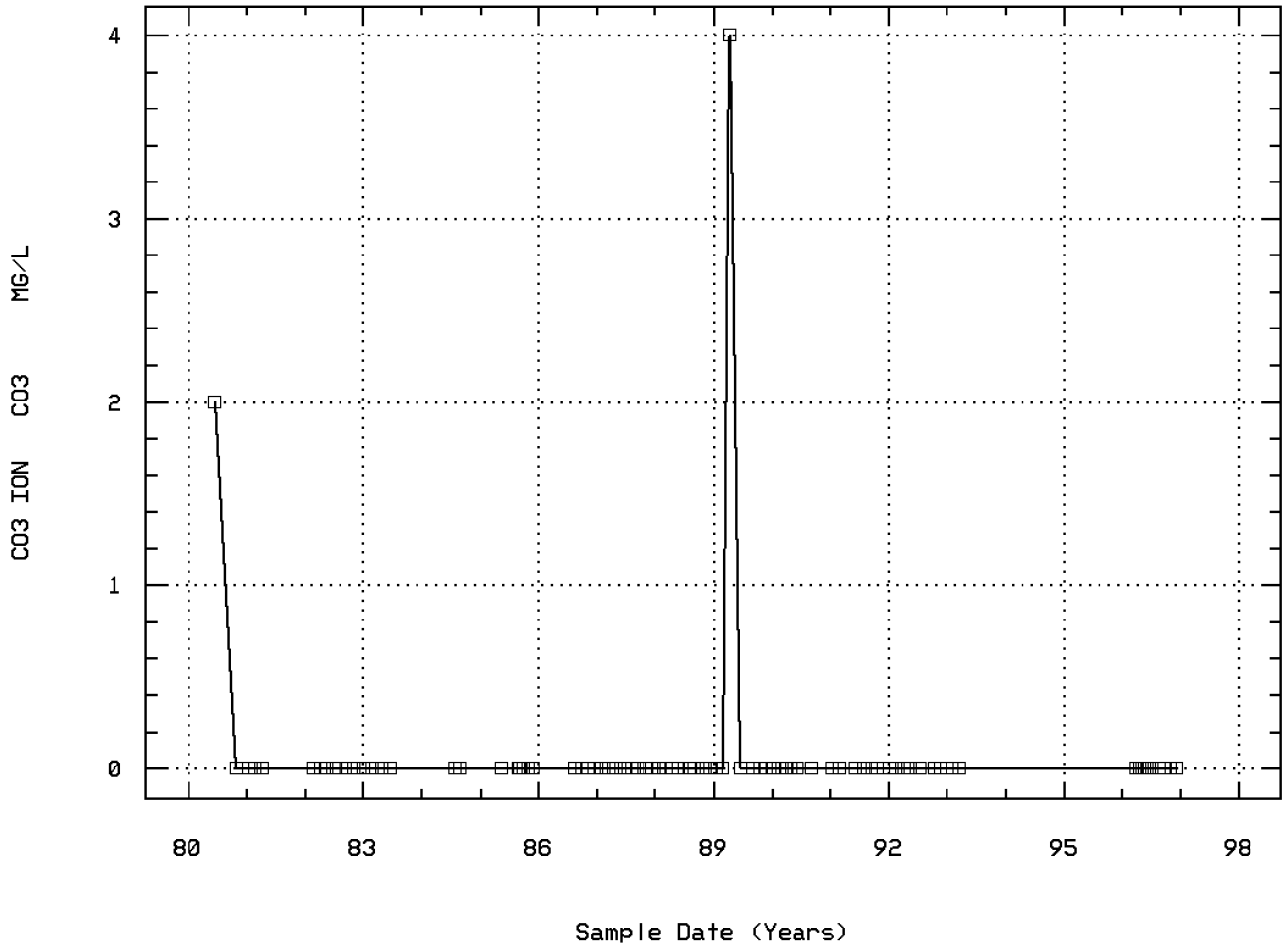
LAVERKIN CK AT U17 XING N OF LAVERKIN



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00445

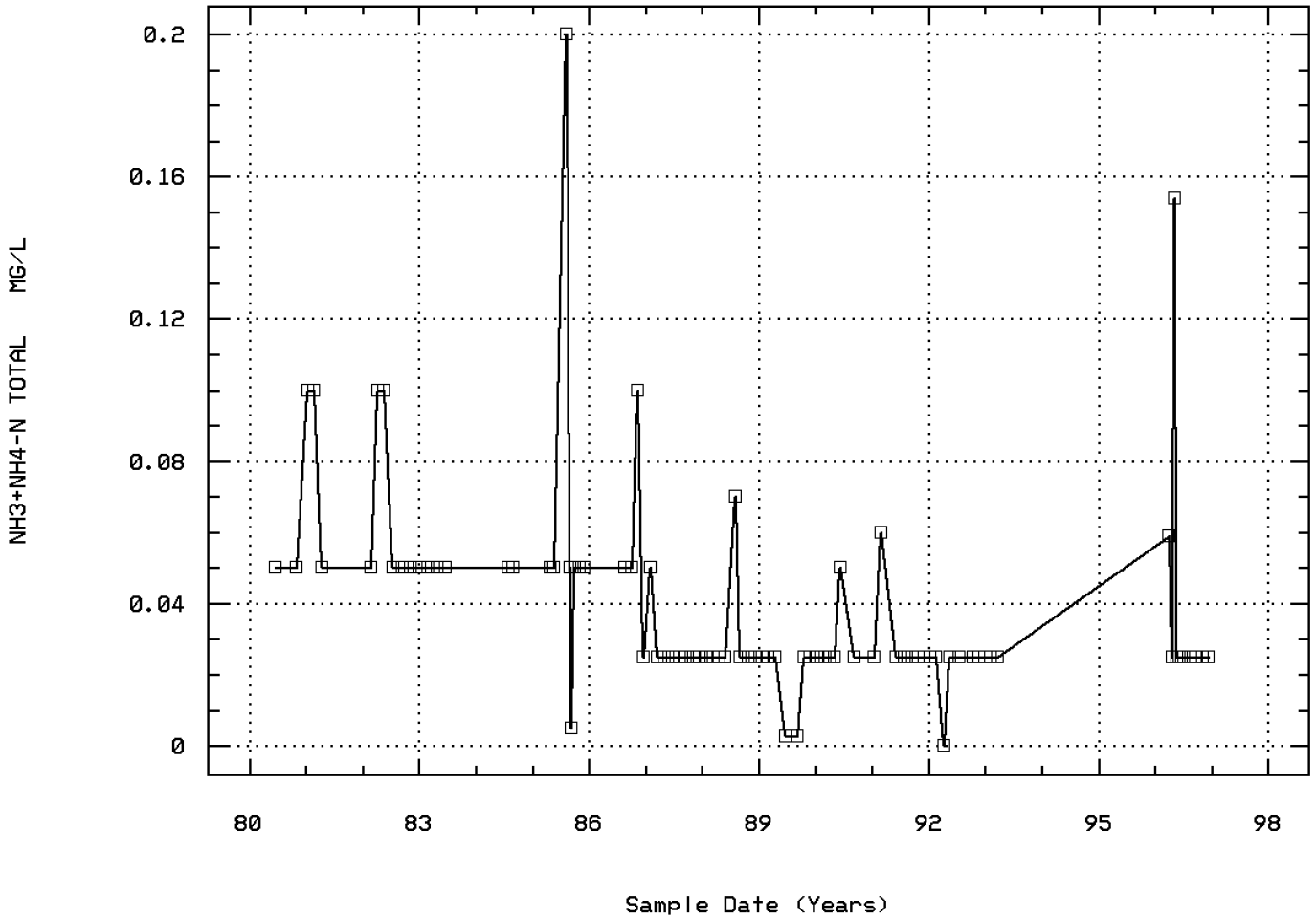
CARBONATE ION (MG/L AS CO3)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00610

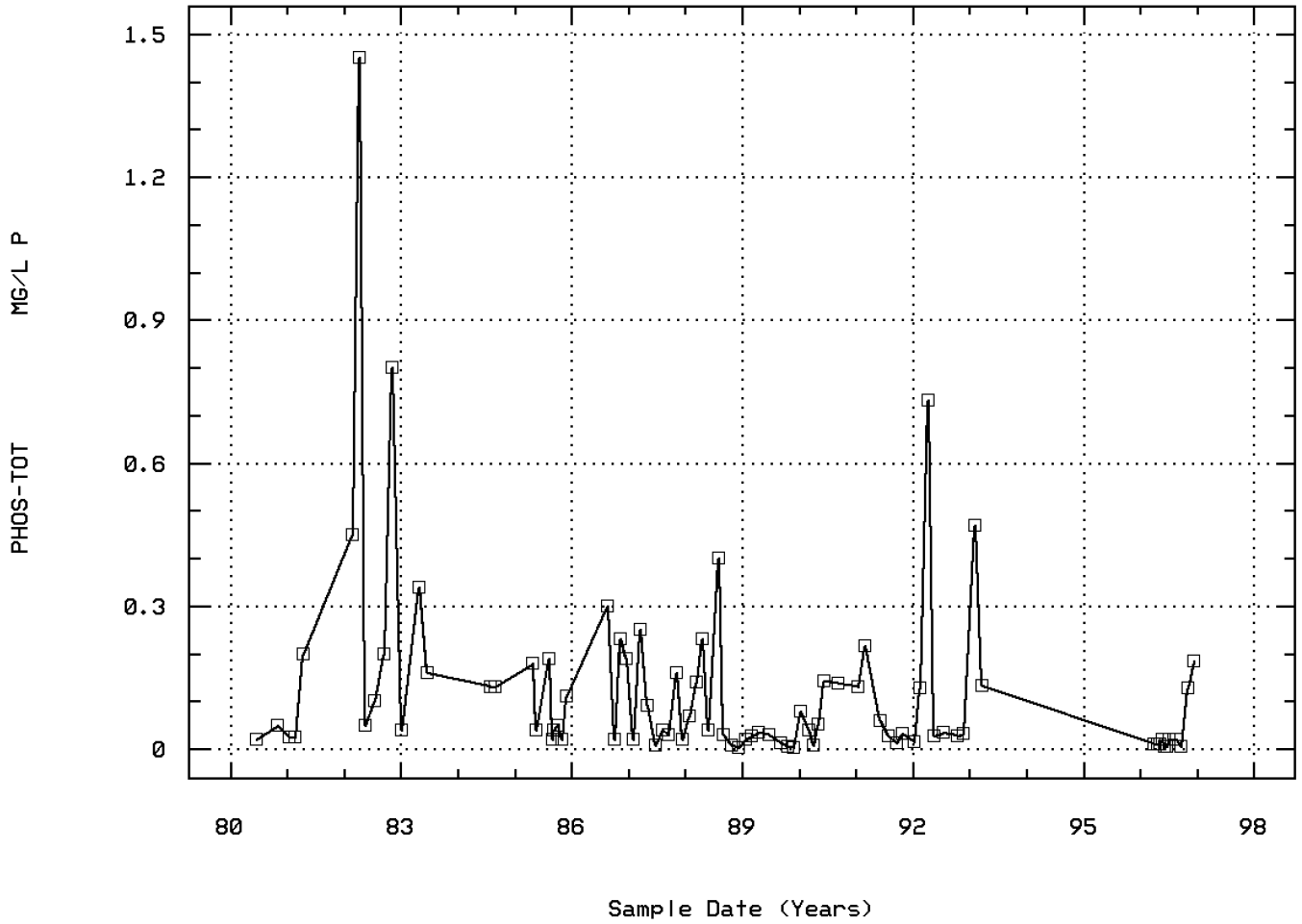
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00665

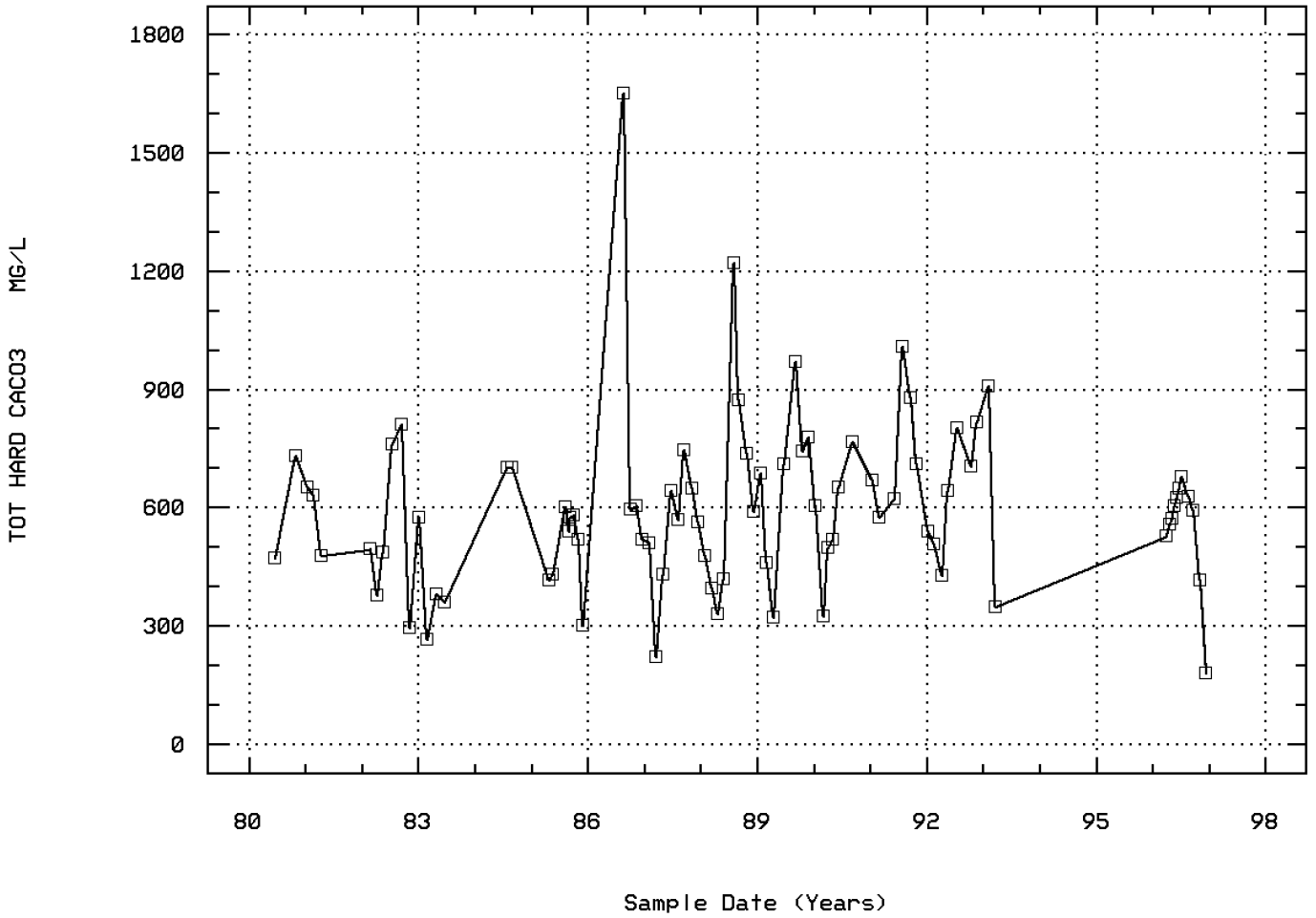
PHOSPHORUS, TOTAL (MG/L AS P)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00900

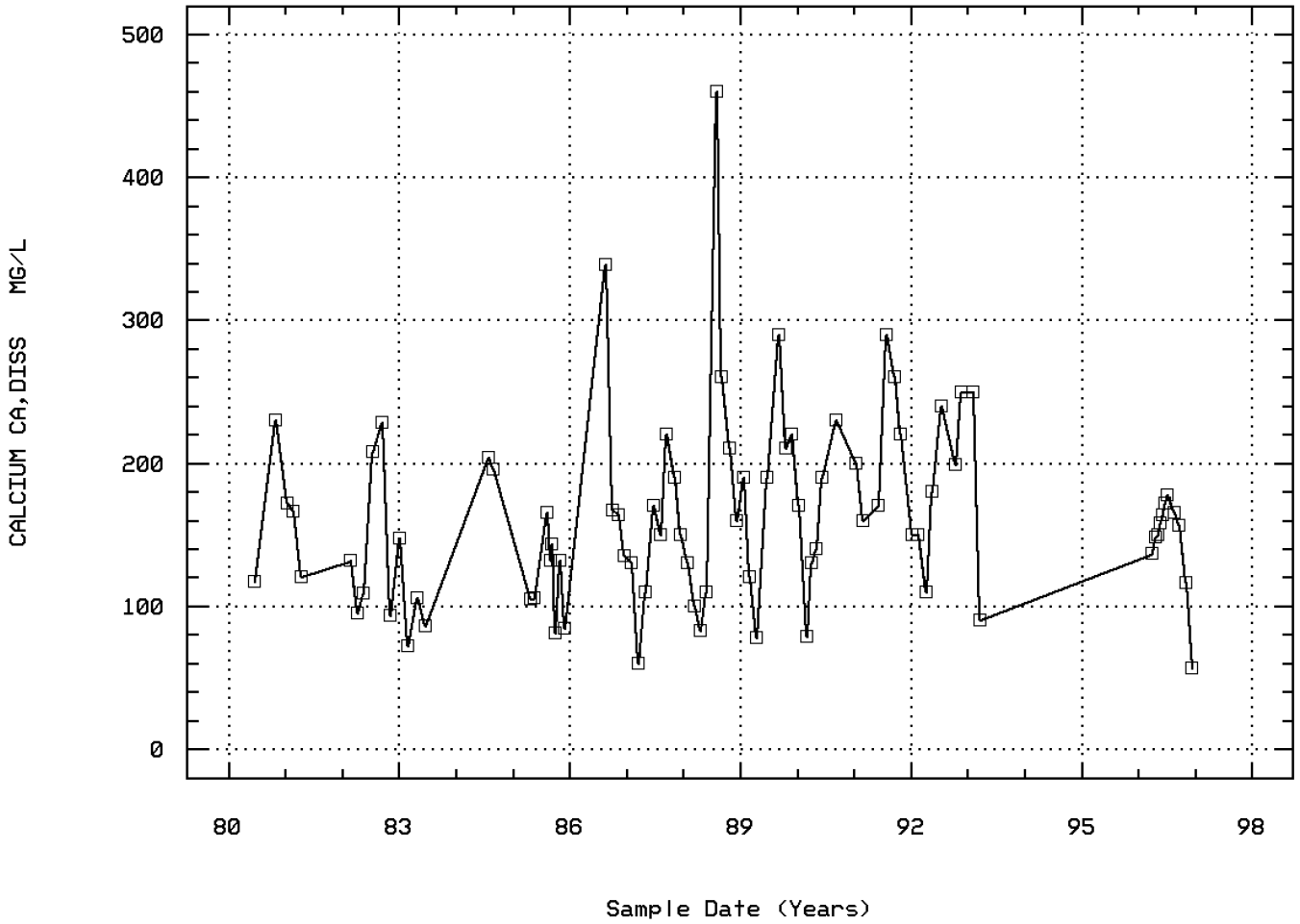
HARDNESS, TOTAL (MG/L AS CACO3)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00915

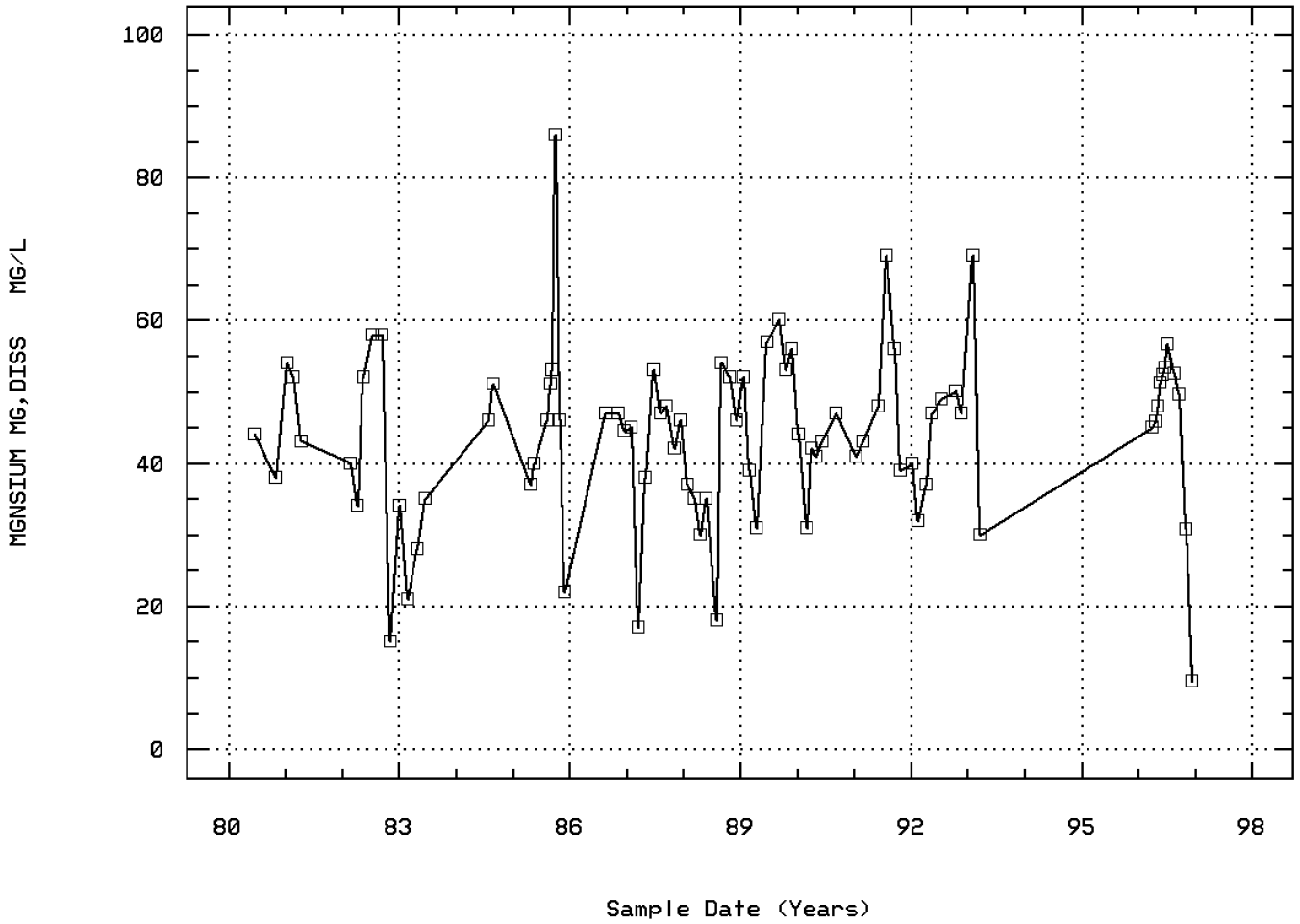
CALCIUM, DISSOLVED (MG/L AS CA)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00925

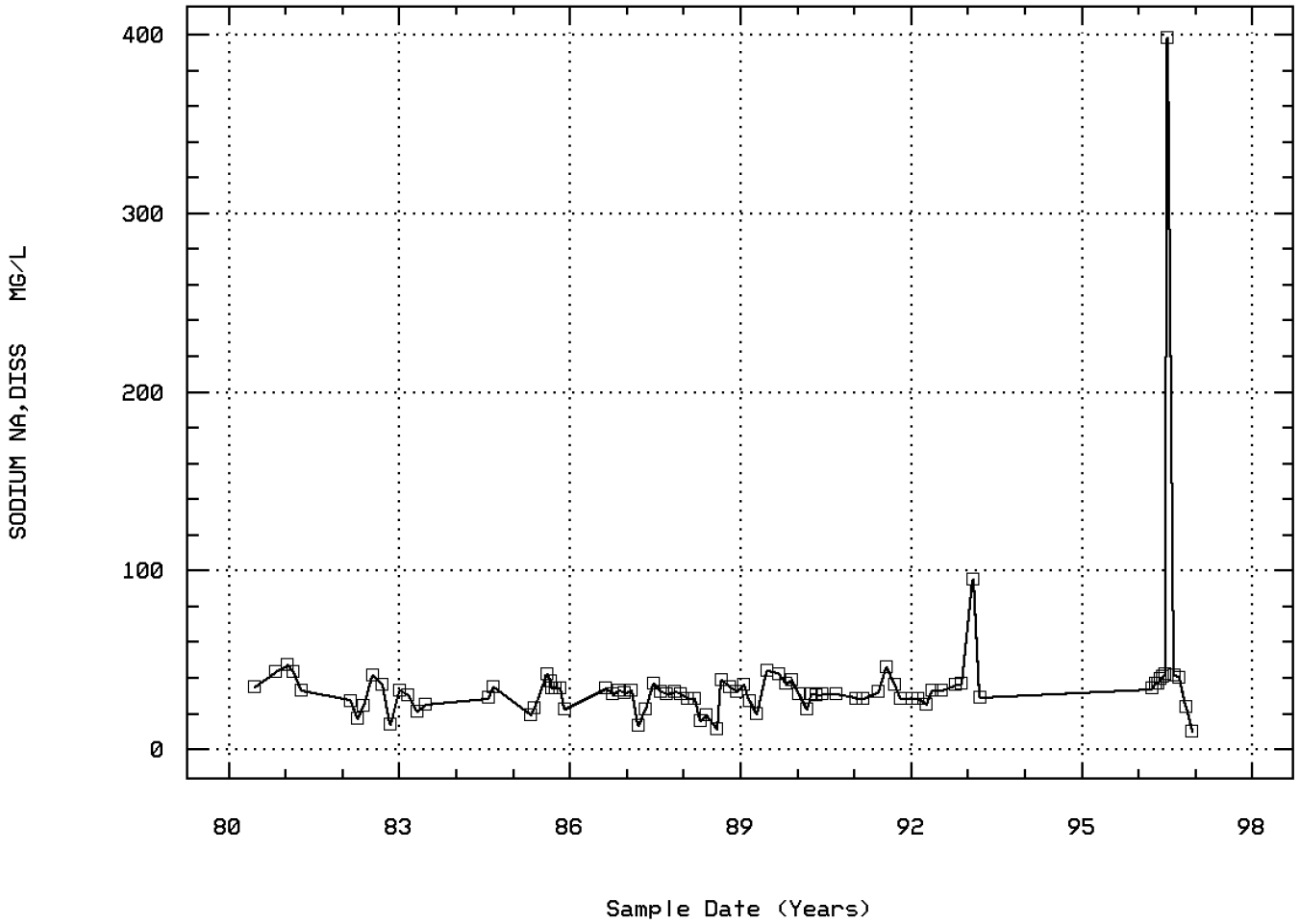
MAGNESIUM, DISSOLVED (MG/L AS MG)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00930

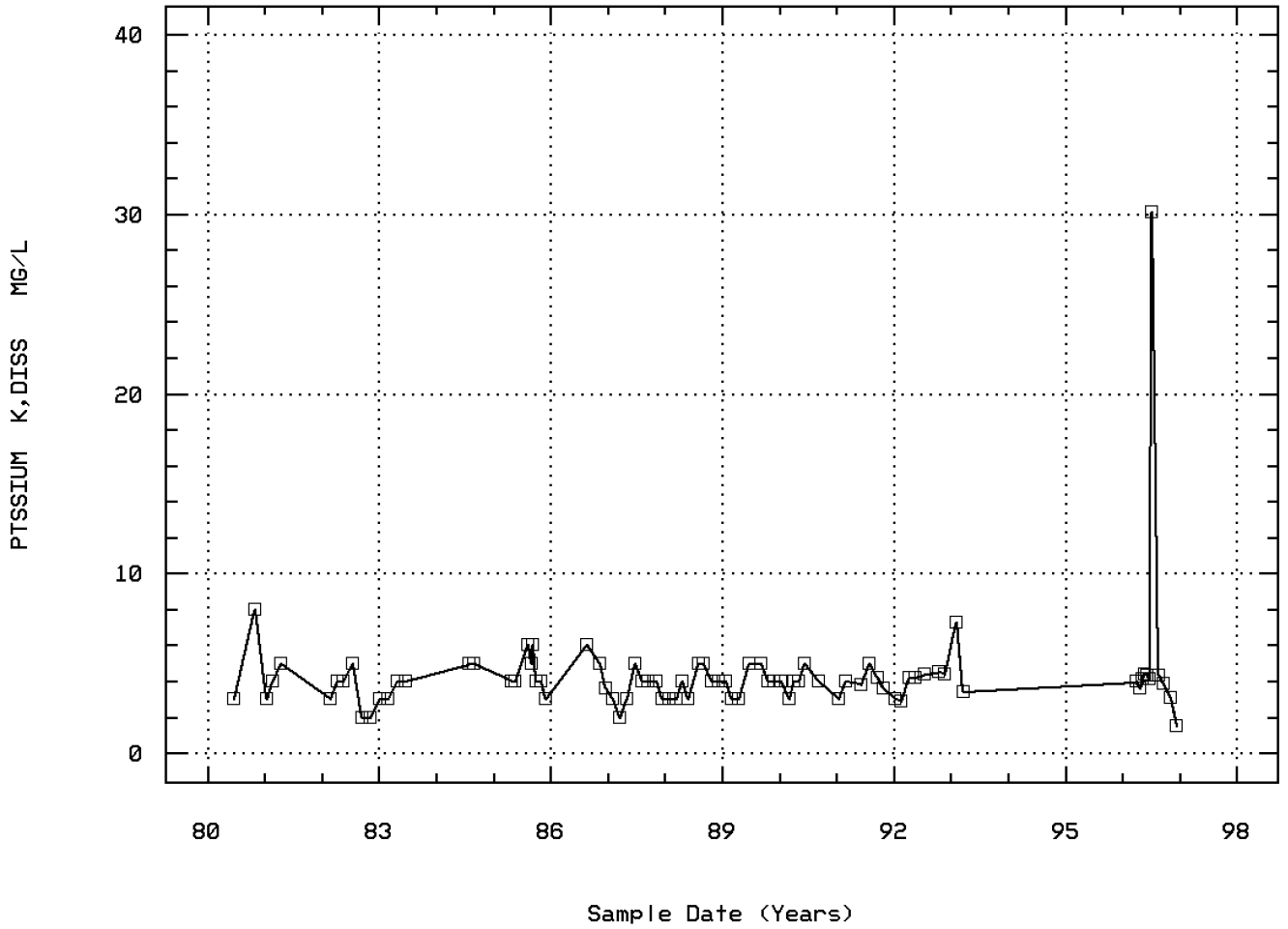
SODIUM, DISSOLVED (MG/L AS NA)



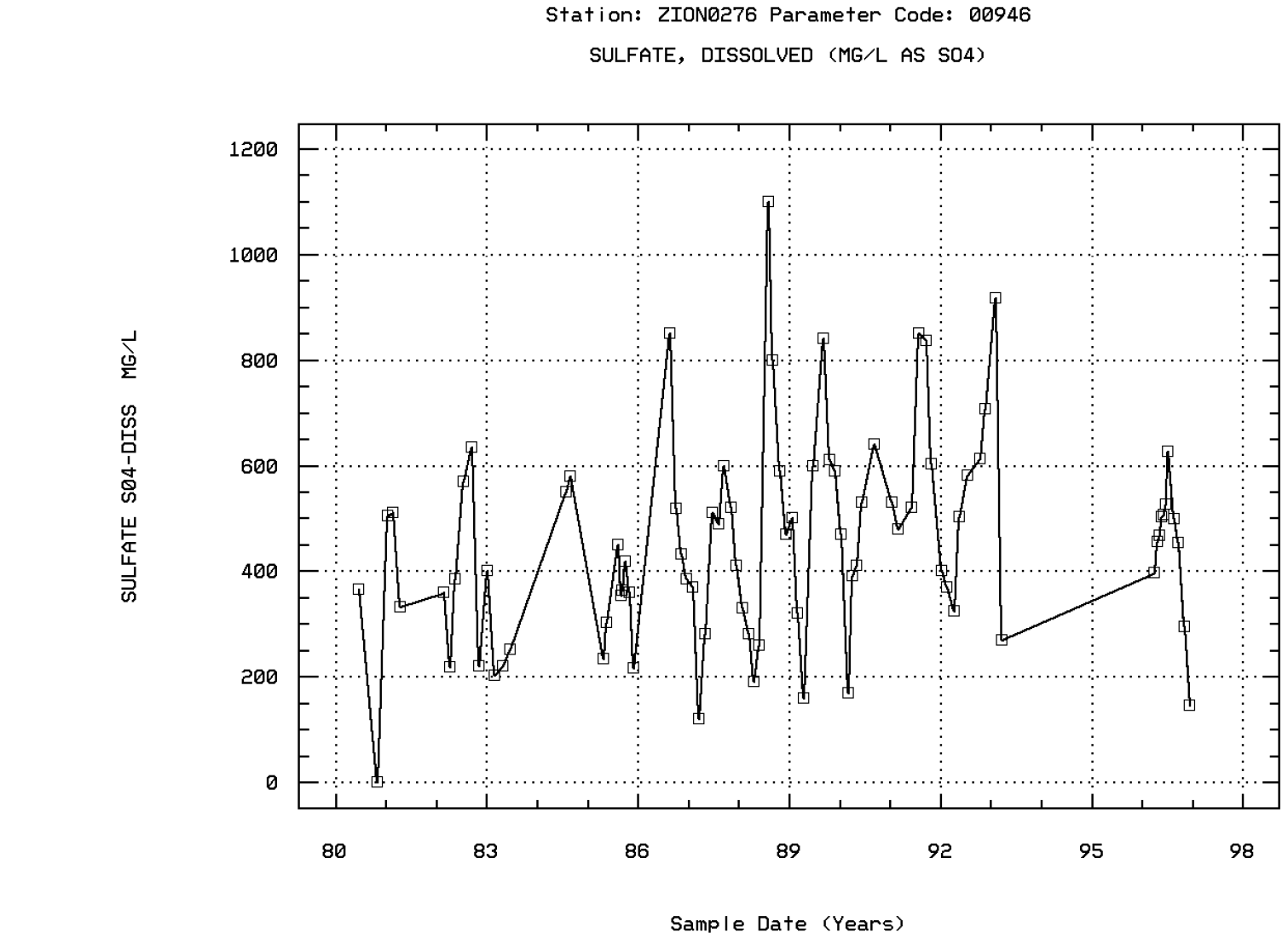
LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 00935

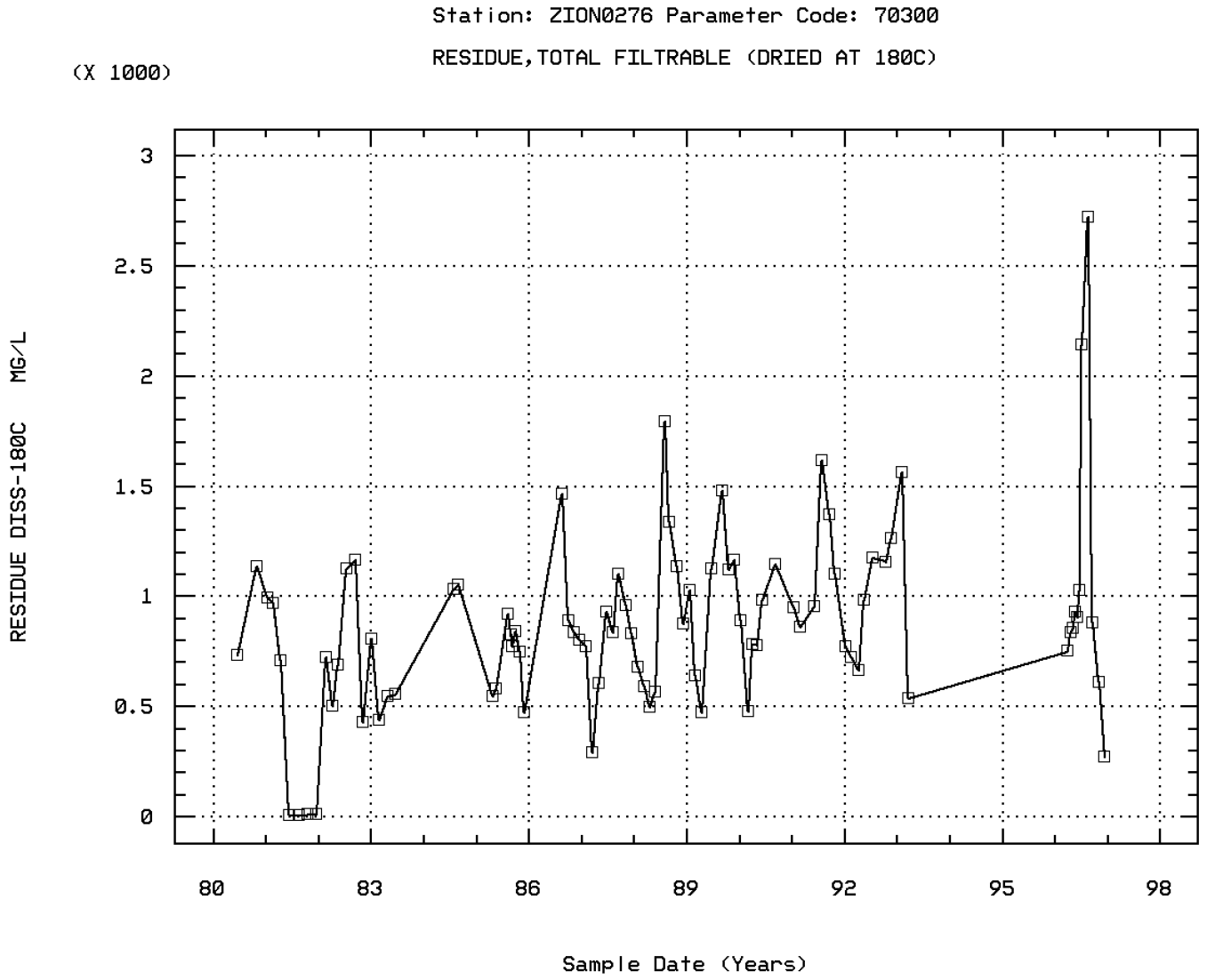
POTASSIUM, DISSOLVED (MG/L AS K)



LAVERKIN CK AT U17 XING N OF LAVERKIN



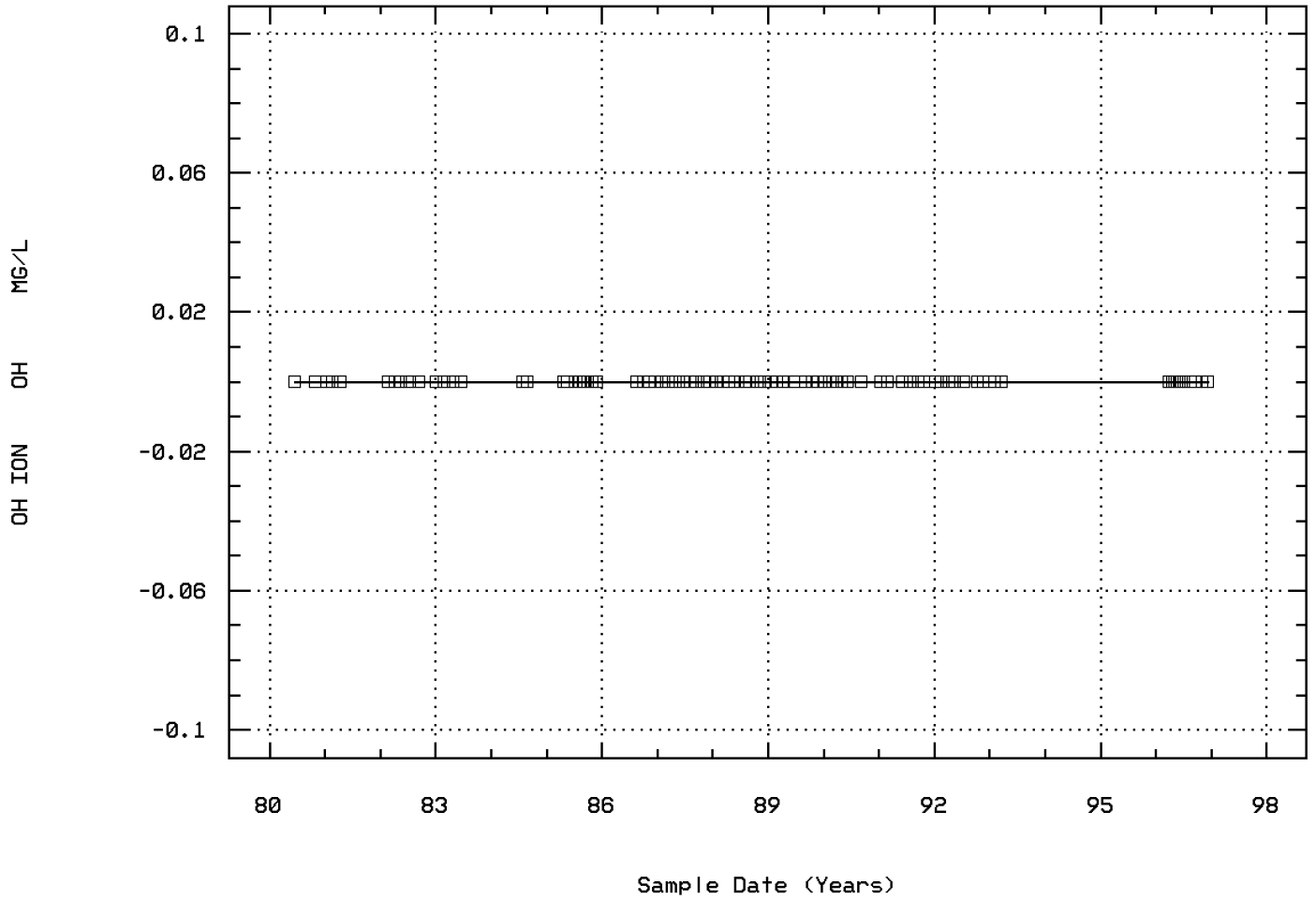
LAVERKIN CK AT U17 XING N OF LAVERKIN



LAVERKIN CK AT U17 XING N OF LAVERKIN

Station: ZION0276 Parameter Code: 71830

HYDROXIDE ION (MG/L AS OH)



LAVERKIN CK AT U17 XING N OF LAVERKIN

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-12/11/96	63	11.7	14.09	29.5	1.6	62.539	7.908	5.94	7.8	21.8	26.26
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/17/80-12/11/96	52	7.	13.481	140.	1.	687.235	26.215	2.	4.	10.	19.7
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-12/11/96	58	20.	161.033	1250.	0.3	98059.336	313.144	1.27	2.975	141.25	1000.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-12/11/96	63	1146.	1232.159	6363.	338.	548934.62	740.901	640.6	998.	1340.	1622.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-12/11/96	58	1176.	1211.086	3207.	403.	173525.308	416.564	677.	1007.5	1390.	1686.
00300	OXYGEN, DISSOLVED MG/L	06/17/80-12/11/96	60	9.1	8.853	11.9	6.3	2.62	1.619	6.61	7.225	10.2	10.99
00400	PH (STANDARD UNITS)	06/17/80-12/11/96	60	7.95	7.91	8.6	7.	0.104	0.322	7.51	7.8	8.1	8.39
00400	CONVERTED PH (STANDARD UNITS)	06/17/80-12/11/96	60	7.947	7.768	8.6	7.	0.124	0.352	7.51	7.8	8.1	8.39
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/80-12/11/96	60	0.011	0.017	0.1	0.003	0.	0.019	0.004	0.008	0.016	0.031
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	39	7.9	7.918	8.3	7.6	0.03	0.175	7.7	7.8	8.	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	39	7.9	7.884	8.3	7.6	0.032	0.178	7.7	7.8	8.	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	39	0.013	0.013	0.025	0.005	0.	0.005	0.006	0.01	0.016	0.02
00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-12/11/96	58	3.	3.431	11.	0.	3.407	1.846	1.9	2.	4.	5.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	58	173.	167.81	327.	72.	1489.841	38.598	106.2	153.75	184.25	200.2
00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-12/11/96	58	210.5	204.328	398.	88.	2216.575	47.081	129.1	187.5	224.5	244.3
00445	CARBONATE ION (MG/L AS CO3)	06/17/80-12/11/96	58	0.	0.017	1.	0.	0.017	0.131	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-12/11/96	46	44.	315.859	6190.	1.5	887864.663	942.266	1.5	6.5	250.5	645.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-12/11/96	58 ##	0.025	0.039	0.2	0.003	0.001	0.029	0.025	0.025	0.05	0.061
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	31 ##	0.005	0.008	0.03	0.005	0.	0.007	0.005	0.005	0.005	0.025
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	31	0.3	0.327	1.06	0.07	0.03	0.175	0.164	0.23	0.4	0.466
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-03/17/93	52	0.2	0.335	2.1	0.	0.15	0.387	0.05	0.1	0.47	0.57
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-10/29/91	11	0.39	0.329	0.45	0.12	0.012	0.111	0.136	0.25	0.41	0.45
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-12/11/96	58	0.04	0.125	1.	0.003	0.034	0.185	0.012	0.02	0.145	0.31
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	18	0.01	0.019	0.09	0.005	0.001	0.025	0.005	0.005	0.018	0.078
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	58	604.	636.655	1650.	180.	56822.335	238.374	322.5	517.5	743.	881.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-12/11/96	58	165.5	176.721	460.	56.6	5136.928	71.672	83.7	132.	220.	260.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-12/11/96	57	46.	44.609	86.	9.5	187.213	13.683	21.8	38.5	52.3	58.
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-12/11/96	58	33.	39.411	398.	9.66	2424.423	49.238	22.	28.	37.25	43.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-12/11/96	57	4.	4.443	30.1	1.54	13.437	3.666	2.98	3.	5.	6.
00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-10/18/89	37	20.	19.081	28.	1.	37.354	6.112	8.8	17.	23.	26.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-12/11/96	30	19.	38.2	620.	0.	12135.131	110.16	6.2	13.5	24.	28.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-12/11/96	58	485.	487.463	1100.	0.05	44278.049	210.423	214.7	360.	600.75	837.3
01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-09/18/91	42 ##	2.5	2.506	12.	0.25	5.145	2.268	0.25	0.5	3.	5.
01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-09/18/91	42	75.	64.299	270.	0.	3456.275	58.79	0.	0.044	102.5	127.
01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-09/18/91	42 ##	0.5	0.524	1.	0.5	0.012	0.108	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-09/18/91	42 ##	2.5	2.643	6.	2.5	0.43	0.656	2.5	2.5	2.5	2.5
01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-09/18/91	42 ##	10.	11.333	40.	5.	46.228	6.799	5.	10.	10.	17.
01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-09/18/91	42 ##	2.5	2.643	6.	2.5	0.43	0.656	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-09/18/91	42	45.	194.214	4100.	5.	426212.319	652.849	8.6	20.	98.5	164.
01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-09/18/91	42 ##	1.	1.024	2.	1.	0.024	0.154	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-09/18/91	42 ##	10.	14.976	60.	2.5	143.78	11.991	5.	10.	20.	32.1
01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-09/18/91	42 ##	0.25	0.661	4.	0.25	0.859	0.927	0.25	0.25	0.5	2.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-12/11/96	61	890.	939.328	2722.	7.	216228.291	465.004	428.6	723.	1141.	1476.4
71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-12/11/96	57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-09/18/91	42 ##	0.1	0.103	0.8	0.01	0.015	0.124	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	06/17/80-09/18/91	42	0.23	0.782	4.1	0.01	1.227	1.108	0.03	0.068	1.448	2.775

** - 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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-12/11/96	13	16.	15.692	21.7	11.7	9.737	3.12	11.78	12.45	17.45	21.06
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/17/80-12/11/96	8	10.	17.	52.	4.	293.429	17.13	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-12/11/96	13	35.	798.331	8930.	0.6	5990304.819	2447.51	0.68	1.45	334.5	5514.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-12/11/96	13	975.	896.462	1137.	538.	29937.436	173.024	596.	754.5	1022.	1110.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-12/11/96	13	880.	908.615	1122.	651.	22939.256	151.457	682.6	777.5	1033.	1119.6

** - 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: 3/20 to 5/09 - Station ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	06/17/80-12/11/96	13	8.1	8.162	9.3	7.	0.344	0.587	7.24	7.85	8.45	9.18
00400	PH (STANDARD UNITS)	06/17/80-12/11/96	13	8.1	8.098	8.3	7.4	0.06	0.244	7.6	8.05	8.3	8.3
00400	CONVERTED PH (STANDARD UNITS)	06/17/80-12/11/96	13	8.1	8.009	8.3	7.4	0.068	0.261	7.6	8.05	8.3	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/80-12/11/96	13	0.008	0.01	0.04	0.005	0.	0.009	0.005	0.005	0.009	0.029
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	9	8.2	8.156	8.4	7.9	0.018	0.133	7.9	8.1	8.2	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	9	8.2	8.137	8.4	7.9	0.018	0.135	7.9	8.1	8.2	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	9	0.006	0.007	0.013	0.004	0.	0.002	0.004	0.006	0.008	0.013
00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-12/11/96	13	2.	2.154	6.	1.	1.641	1.281	1.	1.5	2.	4.8
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	13	162.	170.538	235.	146.	524.269	22.897	147.2	158.	178.5	216.6
00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-12/11/96	13	198.	207.231	287.	178.	775.026	27.839	179.6	193.5	214.	264.2
00445	CARBONATE ION (MG/L AS CO3)	06/17/80-12/11/96	13	0.	0.385	4.	0.	1.256	1.121	0.	0.	0.	2.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-12/11/96	11	62.	732.136	3790.	1.5	1559177.605	1248.67	1.6	2.	1192.	3496.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-12/11/96	13 ##	0.025	0.047	0.154	0.	0.002	0.04	0.01	0.025	0.055	0.132
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	4 ##	0.005	0.01	0.025	0.005	0.	0.01	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	4	0.18	0.193	0.25	0.16	0.002	0.043	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-03/17/93	10	0.3	0.369	1.	0.05	0.097	0.311	0.05	0.088	0.617	0.97
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-10/29/91	3	0.2	0.183	0.2	0.15	0.001	0.029	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-12/11/96	13	0.09	0.257	1.45	0.007	0.169	0.411	0.008	0.01	0.285	1.162
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	4 ##	0.008	0.01	0.02	0.005	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	13	431.	448.538	571.	322.	6871.603	82.895	325.6	379.	522.5	565.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-12/11/96	13	110.	116.308	150.	78.	556.231	23.585	80.	100.	138.5	149.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-12/11/96	13	38.	38.438	47.9	28.	40.529	6.366	28.8	32.5	44.	47.06
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-12/11/96	13	25.	26.277	36.9	16.	57.859	7.606	16.4	19.5	33.5	36.82
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-12/11/96	13	4.	3.92	5.	3.	0.262	0.512	3.	3.8	4.08	4.68
00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-10/18/89	7	12.	12.429	18.	9.	11.619	3.409	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-12/11/96	9	19.	24.111	84.	9.	521.361	22.833	9.	13.	20.5	84.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-12/11/96	13	323.8	313.738	467.9	160.	10882.651	104.32	172.	219.5	403.3	462.86
01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-09/18/91	9	1.	1.444	2.5	0.5	0.653	0.808	0.5	0.75	2.25	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-09/18/91	9	40.	51.122	130.	0.	2909.834	53.943	0.	0.025	100.	130.
01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-09/18/91	9 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-09/18/91	9 ##	2.5	3.056	5.	2.5	1.215	1.102	2.5	2.5	3.75	5.
01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-09/18/91	9 ##	10.	10.	15.	5.	6.25	2.5	5.	10.	10.	15.
01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-09/18/91	9 ##	2.5	5.056	20.	2.5	34.715	5.892	2.5	2.5	5.25	20.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-09/18/91	9	95.	210.278	795.	2.5	77410.444	278.227	2.5	29.	367.5	795.
01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-09/18/91	9 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-09/18/91	9	25.	26.944	60.	7.5	380.903	19.517	7.5	10.	45.	60.
01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-09/18/91	9 ##	0.25	0.583	2.5	0.25	0.531	0.729	0.25	0.25	0.5	2.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-12/11/96	13	662.	656.154	856.	472.	18636.308	136.515	481.6	523.	777.	847.2
71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-12/11/96	13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-09/18/91	9 ##	0.1	0.111	0.4	0.05	0.012	0.111	0.05	0.05	0.1	0.4
74010	IRON, TOTAL (MG/L AS FE)	06/17/80-09/18/91	9	1.34	3.376	11.2	0.01	15.587	3.948	0.01	0.44	6.24	11.2

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-12/11/96	15	19.8	20.16	25.8	15.5	8.963	2.994	15.62	17.7	22.5	23.94
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/17/80-12/11/96	12	5.5	10.25	32.	2.	107.295	10.358	2.3	4.	19.75	29.9
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-12/11/96	13	7.5	117.431	1000.	0.6	76574.944	276.722	0.6	1.3	67.	716.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-12/11/96	15	1184.	1084.333	1407.	522.	57538.095	239.871	688.2	850.	1239.	1345.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-12/11/96	13	1145.	1089.077	1434.	785.	40067.91	200.17	793.	910.5	1245.	1366.4
00300	OXYGEN, DISSOLVED MG/L	06/17/80-12/11/96	15	7.2	7.287	9.6	4.	1.91	1.382	4.9	6.7	8.4	9.06
00400	PH (STANDARD UNITS)	06/17/80-12/11/96	15	7.97	7.889	8.2	6.5	0.169	0.411	7.22	7.9	8.1	8.2
00400	CONVERTED PH (STANDARD UNITS)	06/17/80-12/11/96	15	7.97	7.505	8.2	6.5	0.326	0.571	7.22	7.9	8.1	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/80-12/11/96	15	0.011	0.031	0.316	0.006	0.006	0.079	0.006	0.008	0.013	0.138
00403	PH, LAB, STANDARD UNITS SU	11/12/86-12/11/96	9	8.	8.	8.2	7.7	0.032	0.18	7.7	7.85	8.2	8.2

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Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0276

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	11/12/86-12/11/96	9	8.	7.966	8.2	7.7	0.034	0.184	7.7	7.85	8.2	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/12/86-12/11/96	9	0.01	0.011	0.02	0.006	0.	0.005	0.006	0.006	0.014	0.02
00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-12/11/96	13	3.	2.692	5.	1.	1.397	1.182	1.	2.	3.5	4.6
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	13	161.	158.077	182.	125.	274.577	16.57	127.8	148.	169.	180.4
00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-12/11/96	13	196.	192.846	223.	148.	443.474	21.059	153.6	181.	206.5	221.
00445	CARBONATE ION (MG/L AS CO3)	06/17/80-12/11/96	13	0.	0.154	2.	0.	0.308	0.555	0.	0.	0.	1.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-12/11/96	12	20.	211.	1734.	1.5	244072.5	494.037	1.5	2.	136.5	1338.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-12/11/96	13 ##	0.025	0.037	0.1	0.003	0.001	0.024	0.012	0.025	0.05	0.08
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	6 ##	0.005	0.008	0.025	0.005	0.	0.008	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-09/05/90	6	0.21	0.258	0.48	0.12	0.024	0.156	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-03/17/93	10	0.2	0.305	1.	0.05	0.079	0.281	0.055	0.1	0.425	0.95
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-10/29/91	3	0.15	0.157	0.2	0.12	0.002	0.04	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-12/11/96	13	0.03	0.047	0.16	0.005	0.002	0.05	0.005	0.014	0.054	0.153
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	5 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-12/11/96	13	622.	562.462	709.	360.	12649.436	112.47	383.6	451.5	646.	685.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-12/11/96	13	164.	147.846	190.	86.	1332.141	36.499	94.	109.5	176.	190.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-12/11/96	13	48.	46.992	57.	35.	50.891	7.134	35.	41.5	52.65	55.56
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-12/11/96	13	33.	32.723	44.	19.	64.305	8.019	20.6	24.5	40.2	43.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-12/11/96	13	4.1	4.144	5.	3.	0.427	0.653	3.	3.9	4.71	5.
00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-10/18/89	7	16.	18.429	29.	12.	38.952	6.241	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-12/11/96	9	20.	19.444	22.	15.	6.028	2.455	15.	17.5	21.5	22.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-12/11/96	13	503.1	443.269	600.	252.	13337.914	115.49	255.2	333.5	522.9	572.
01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-09/18/91	9 ##	2.	1.483	2.5	0.25	0.984	0.992	0.25	0.5	2.5	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-09/18/91	9 ##	25.	49.453	160.	0.	3501.851	59.176	0.	0.025	100.	160.
01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-09/18/91	9 ##	0.5	0.556	1.	0.5	0.028	0.167	0.5	0.5	0.5	1.
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-09/18/91	9 ##	2.5	2.778	5.	2.5	0.694	0.833	2.5	2.5	2.5	5.
01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-09/18/91	9 ##	10.	13.333	55.	5.	250.	15.811	5.	5.	10.	55.
01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-09/18/91	9 ##	2.5	3.889	15.	2.5	17.361	4.167	2.5	2.5	2.5	15.
01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-09/18/91	9	28.	117.889	800.	14.	65885.611	256.682	14.	19.	63.	800.
01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-09/18/91	9 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-09/18/91	9 ##	10.	22.389	100.	2.5	966.236	31.084	2.5	5.	29.5	100.
01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-09/18/91	9 ##	0.25	0.556	2.5	0.25	0.543	0.737	0.25	0.25	0.5	2.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-12/11/96	14	916.	782.929	1126.	7.	84494.533	290.679	281.5	574.5	981.	1077.
71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-12/11/96	13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-09/18/91	9 ##	0.1	0.1	0.3	0.05	0.006	0.079	0.05	0.05	0.1	0.3
74010	IRON, TOTAL (MG/L AS FE)	06/17/80-09/18/91	9	0.43	1.92	14.	0.03	20.659	4.545	0.03	0.09	0.995	14.

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Station Inventory for Station: ZION0277

NPS Station ID: ZION0277
LAT/LON: 37.189727/-113.272504
Agency: 21UTAH
Date Created: 06/21/80
Location: VIRGIN R AT U17 XING E OF LAVERKIN
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495081
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO R DRAINAGE
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.280
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002100.00
RF3 Mile Point: 0.96
Distance from RF3: 0.16
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0277

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/80-04/23/85	15	13.4	17.813	29.7	7.3	70.501	8.397	7.3	10.5	27.6	29.7
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/28/80-06/16/81	4	44.	78.	200.	24.	6970.667	83.491	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/17/80-04/23/85	8	137.5	180.875	350.	29.	17328.411	131.637	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/80-04/23/85	15	2400.	2639.6	6280.	1000.	2445547.4	1563.825	1174.	1800.	2700.	6280.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/17/80-04/23/85	8	2090.	2028.75	3050.	1290.	391412.5	625.63	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/17/80-04/23/85	15	8.3	7.847	9.9	5.	2.386	1.545	5.	6.7	9.1	9.9
00335	COD, .025N K2CR2O7 MG/L	06/17/80-04/14/81	5 ##	7.5	11.	25.	7.5	61.25	7.826	**	**	**	**
00400	PH (STANDARD UNITS)	06/17/80-04/23/85	15	6.6	6.687	7.4	6.1	0.157	0.396	6.1	6.4	7.	7.22
00400	CONVERTED PH (STANDARD UNITS)	06/17/80-04/23/85	15	6.6	6.533	7.4	6.1	0.182	0.427	6.1	6.4	7.	7.22
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/80-04/23/85	15	0.251	0.293	0.794	0.04	0.06	0.244	0.064	0.1	0.398	0.794
00405	CARBON DIOXIDE (MG/L AS CO2)	06/17/80-04/23/85	8	10.	19.	80.	2.	676.857	26.016	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/17/80-04/23/85	8	247.5	248.75	326.	159.	2821.071	53.114	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/17/80-04/23/85	8	301.5	302.875	398.	194.	4240.411	65.118	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/17/80-04/23/85	8	0.	0.25	2.	0.	0.5	0.707	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/17/80-08/28/84	3	2210.	3080.	6970.	60.	12504700.	3536.199	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/17/80-06/17/80	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/17/80-04/14/81	5	0.1	0.14	0.2	0.1	0.003	0.055	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-04/23/85	6 ##	0.025	0.059	0.25	0.005	0.009	0.094	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/14/81	5 ##	0.025	0.07	0.25	0.025	0.01	0.101	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	06/17/80-04/23/85	6	0.455	7.852	45.	0.25	331.21	18.199	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/17/80-04/14/81	5	0.5	9.372	45.	0.4	396.677	19.917	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/17/80-04/14/81	5	0.2	0.36	0.7	0.2	0.053	0.23	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/80-04/14/81	5	0.45	0.462	0.55	0.4	0.004	0.063	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/17/80-04/14/81	5	0.03	0.094	0.29	0.025	0.013	0.114	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/17/80-04/14/81	5 ##	0.01	0.012	0.02	0.01	0.	0.004	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/17/80-04/14/81	5	3.7	6.44	16.1	0.5	48.998	7.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/17/80-04/23/85	8	532.5	534.375	760.	380.	18795.982	137.098	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/17/80-04/23/85	8	143.	147.75	208.	104.	1551.357	39.387	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/17/80-04/23/85	8	39.5	40.125	58.	26.	110.411	10.508	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/17/80-04/23/85	8	242.5	236.125	375.	120.	9874.696	99.372	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/17/80-04/23/85	8	21.5	19.	26.	9.	47.429	6.887	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/17/80-04/23/85	8	327.5	310.25	490.	164.	14287.071	119.529	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/17/80-04/14/81	5	325.	290.4	430.	164.	13822.3	117.568	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/17/80-04/23/85	8	350.	332.375	515.	190.	15789.696	125.657	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/17/80-04/14/81	5	0.47	0.386	0.48	0.22	0.016	0.126	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/17/80-04/14/81	5	13.	12.	13.	10.	2.	1.414	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/17/80-04/14/81	5	21.	23.6	41.	15.	115.8	10.761	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/17/80-04/14/81	5 ##	0.025	0.034	0.07	0.025	0.	0.02	**	**	**	**

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

Parameter Inventory for Station: ZION0277

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01020	BORON, DISSOLVED (UG/L AS B)	06/17/80-04/14/81	5	600.	572.	875.	335.	49545.	222.587	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/17/80-04/14/81	5 ##	0.5	0.7	1.	0.5	0.075	0.274	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	06/17/80-04/14/81	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/17/80-04/14/81	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/17/80-04/14/81	5 ##	5.	12.	40.	5.	245.	15.652	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/17/80-04/14/81	5	5.	10.8	35.	2.5	190.075	13.787	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/17/80-04/14/81	5	65.	190.4	655.	32.	69265.8	263.184	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/17/80-04/14/81	5	15.	21.	50.	5.	367.5	19.17	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/17/80-04/14/81	5 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/17/80-04/14/81	5	50.	46.	65.	5.	567.5	23.822	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/17/80-04/14/81	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/17/80-04/23/85	12	827.	847.083	1936.	5.	497549.174	705.372	5.6	9.25	1463.5	1841.2
71830	HYDROXIDE ION (MG/L AS OH)	06/17/80-04/23/85	8	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	06/17/80-04/14/81	5 ##	0.01	0.012	0.02	0.01	0.	0.004	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/17/80-04/14/81	5 ##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/17/80-04/14/81	5	1.32	1.594	3.18	0.48	1.111	1.054	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0277

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	8	7	0.88	5	5	1.00	2	2	1.00	1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	15	0	0.00	10	0	0.00	2	0	0.00	3	0	0.00			
00400	PH	Other-Hi Lim.	9.	15	0	0.00	10	0	0.00	2	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	15	7	0.47	10	5	0.50	2	0	0.00	3	2	0.67			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	6	1	0.17	3	1	0.33	2	0	0.00	1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	8	0	0.00	5	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	250.	8	5	0.63	5	5	1.00	2	0	0.00	1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	3	0.60	3	3	1.00	1	0	0.00	1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	5	0.63	5	5	1.00	2	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	5	0	0.00	3	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: ZION0278

NPS Station ID: ZION0278
LAT/LON: 37.190003/-113.272504
Agency: 21USU
Date Created: / /
Location: VIRGIN RIV N OF HURRICN AT BRDG
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000209
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0013.21
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.280
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002200.04
RF3 Mile Point: 7.60
Distance from RF3: 0.02
On/Off RF3:
Description:
VIRGIN RIVER 1 MILE NORTH OF HURRICANE AT BRIDGE CROSSING.

Parameter Inventory for Station: ZION0278

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	5	21.	18.2	27.	4.	93.7	9.68	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-02/12/74	2	108.	108.	111.	105.	18.	4.243	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	8.35	9.975	23.	0.2	104.576	10.226	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	5	4650.	4235.4	5130.	2940.	863250.8	929.113	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	5	7.4	7.38	9.9	5.5	2.977	1.725	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	5	1.5	1.62	2.7	0.9	0.477	0.691	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/16/74	5	6.6	6.64	7.1	6.4	0.083	0.288	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/16/74	5	6.6	6.576	7.1	6.4	0.088	0.297	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/16/74	5	0.251	0.265	0.398	0.079	0.019	0.136	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	136.05	124.275	192.	33.	5000.369	70.713	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	341.	369.	435.	313.	2794.	52.858	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	205.	214.75	261.	188.	1014.917	31.858	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	416.	436.25	531.	382.	4246.917	65.168	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	5	82.	87.4	221.	14.	6804.3	82.488	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.31	0.274	0.35	0.159	0.008	0.087	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.002	0.003	0.005	0.001	0.	0.002	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.15	51.348	256.	0.12	13088.27	114.404	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	5	0.007	0.007	0.01	0.003	0.	0.003	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	5	0.116	0.125	0.25	0.062	0.006	0.077	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	4	17.	21.75	37.	16.	104.25	10.21	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	5	96.	100.4	114.	90.	102.8	10.139	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	4	128.	124.75	133.	110.	104.917	10.243	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	984.	1146.8	2320.	660.	454751.2	674.352	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	5	273.	247.8	296.	182.	2477.2	49.771	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	5	63.	62.2	73.	50.	102.7	10.134	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	5	685.	598.	800.	330.	36432.5	190.873	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	5	52.	50.	65.	33.	142.	11.916	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	5	960.	858.6	1100.	530.	52159.8	228.385	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	5	600.	600.	735.	455.	10437.5	102.164	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.62	0.535	0.68	0.22	0.045	0.213	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	15.	14.75	15.	14.	0.25	0.5	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	5	30.	38.	70.	10.	520.	22.804	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	5	610.	696.	1400.	220.	190430.	436.383	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	5	2.	3.6	14.	0.	34.8	5.899	**	**	**	**

** - 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: ZION0278

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	5	0.	2.	10.	0.	20.	4.472	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	380.	455.	1000.	60.	157166.667	396.443	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	5	30.	34.	100.	0.	1680.	40.988	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	5	0.	20.	90.	0.	1550.	39.37	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	5	4.	16.	56.	0.	550.	23.452	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	5	0.	14.	50.	0.	480.	21.909	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	5	0.	1.6	8.	0.	12.8	3.578	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	5	2300.	2120.	4300.	200.	2222000.	1490.637	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/16/74	5	3.362	3.167	3.633	2.301	0.261	0.511	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1468.281								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	210.	554.	2300.	9.	963235.5	981.446	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	2.322	2.064	3.362	0.954	0.905	0.951	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			115.992								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	5 ##	4.	6.72	16.8	0.	42.373	6.509	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	5	2950.	2651.6	3260.	1788.	364140.8	603.441	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/16/74-07/16/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75012	SNAILS	07/16/74-07/16/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/16/74-07/16/74	1	43.	43.	43.	43.	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: ZION0278

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	2	0.40	3	1	0.33	1	0	0.00	1	1	1.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	3	0.60	3	1	0.33	1	1	1.00	1	1	1.00			
		Drinking Water	250.	5	5	1.00	3	3	1.00	1	1	1.00	1	1	1.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	5	1.00	3	3	1.00	1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	2	0.40	3	1	0.33	1	1	1.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	1	0.20	3	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	5.	5	1	0.20	3	0	0.00	1	0	0.00	1	1	1.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	4	0.80	3	2	0.67	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: ZION0278

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	3	0.60	3	1	0.33	1	1	1.00	1	1	1.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0279

NPS Station ID: ZION0279
LAT/LON: 37.191115/-113.272504
Agency: 21UTAH
Date Created: 01/21/84
Location: LAVERKIN SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495076
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008005
RF1 Mile Point: 1.280
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002905.28
RF3 Mile Point: 5.44
Distance from RF3: 0.03
On/Off RF3:
Description:
USGS HYDROLOGIC UNIT=15010008

Parameter Inventory for Station: ZION0279

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/21/83-06/21/83	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/21/83-06/21/83	1	15700.	15700.	15700.	15700.	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	06/21/83-06/21/83	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/21/83-06/21/83	1	405.	405.	405.	405.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/21/83-06/21/83	1	1041.	1041.	1041.	1041.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/21/83-06/21/83	1	1270.	1270.	1270.	1270.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/21/83-06/21/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/21/83-06/21/83	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/21/83-06/21/83	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/21/83-06/21/83	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/21/83-06/21/83	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/21/83-06/21/83	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/21/83-06/21/83	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/21/83-06/21/83	1	108.5	108.5	108.5	108.5	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/21/83-06/21/83	1	2480.	2480.	2480.	2480.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/21/83-06/21/83	1	768.	768.	768.	768.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/21/83-06/21/83	1	136.	136.	136.	136.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/21/83-06/21/83	1	2315.	2315.	2315.	2315.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/21/83-06/21/83	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/21/83-06/21/83	1	3400.	3400.	3400.	3400.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/21/83-06/21/83	1	3400.	3400.	3400.	3400.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/21/83-06/21/83	1	2025.	2025.	2025.	2025.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/21/83-06/21/83	1	400.	400.	400.	400.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	06/21/83-06/21/83	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/21/83-06/21/83	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/21/83-06/21/83	1	32.	32.	32.	32.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/21/83-06/21/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/21/83-06/21/83	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/21/83-06/21/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/21/83-06/21/83	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	06/21/83-06/21/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/21/83-06/21/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/21/83-06/21/83	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	06/21/83-06/21/83	1	69.	69.	69.	69.	0.	0.	**	**	**	**
03501	BETA, TOTAL	06/21/83-06/21/83	1	316.	316.	316.	316.	0.	0.	**	**	**	**
07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	06/21/83-06/21/83	1	43.	43.	43.	43.	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: ZION0279

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
09501	RADIUM 226, TOTAL	06/21/83-06/21/83	1	43.	43.	43.	43.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/21/83-06/21/83	1	9498.	9498.	9498.	9498.	0.	0.	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	06/21/83-06/21/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	06/21/83-06/21/83	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	06/21/83-06/21/83	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

EPA Water Quality Criteria Analysis for Station: ZION0279

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
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			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	1	1.00							1	1	1.00			
		Drinking Water	250.	1	1	1.00							1	1	1.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	1	1.00							1	1	1.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	1	1.00							1	1	1.00			
		Drinking Water	50.	1	1	1.00							1	1	1.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00							1	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
		Drinking Water	5000.	1	0	0.00							1	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
07000	TRITIUM, TOTAL	Drinking Water	20000.	1	0	0.00							1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
		Drinking Water	2.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0280

NPS Station ID: ZION0280
LAT/LON: 37.189448/-113.272781
Agency: 112WRD
Date Created: 12/19/81
Location: VIRGIN R. BELOW LAVERKIN HOT SPRINGS, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371122113162201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.80
On/Off RF1:
RF3 Index: 15010008031500.00
RF3 Mile Point: 3.37
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0280

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	19.5	20.625	30.	13.5	60.563	7.782	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	25.25	27.	38.5	19.	79.5	8.916	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	5	673.	676.2	686.	670.	48.7	6.979	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	4	67.5	172.75	510.	46.	50656.917	225.071	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	5	2780.	2832.	4430.	850.	1681370.	1296.677	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	4	7.45	7.3	9.1	5.2	3.3	1.817	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	4	6.8	7.175	8.3	6.8	0.563	0.75	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	4	6.8	6.92	8.3	6.8	0.649	0.806	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.158	0.12	0.158	0.005	0.006	0.077	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	4	7.45	7.55	8.	7.3	0.097	0.311	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	4	7.447	7.483	8.	7.3	0.103	0.32	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.036	0.033	0.05	0.01	0.	0.017	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	4	0.35	0.35	0.5	0.2	0.017	0.129	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-05/05/82	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	4 ##	0.013	0.013	0.02	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	4	725.	667.5	960.	260.	86225.	293.641	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	4	205.	192.	280.	78.	7042.667	83.921	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	4	52.	46.	63.	17.	401.333	20.033	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	4	385.	353.25	580.	63.	47908.917	218.881	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	4	6.2	5.6	8.2	1.8	7.733	2.781	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	4	52.	48.	55.	33.	108.	10.392	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	4	29.	26.925	43.	6.7	231.356	15.21	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	4	555.	541.25	960.	95.	128706.25	358.757	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	4	470.	437.5	690.	120.	55625.	235.85	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	4	0.55	0.5	0.7	0.2	0.047	0.216	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	4	12.	12.275	16.	9.1	8.703	2.95	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	4	840.	782.5	1300.	150.	241891.667	491.825	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	4	1900.	1763.	2760.	492.	899396.	948.365	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	4	352.5	427.75	677.	329.	27771.583	166.648	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	4	2.585	2.398	3.75	0.67	1.659	1.288	**	**	**	**

** - Less than 9 observations ## - 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: ZION0280

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	1	0.25	3	1	0.33	1	0	0.00						
		Drinking Water	250.	4	3	0.75	3	3	1.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	3	0.75	3	3	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0281

NPS Station ID: ZION0281
LAT/LON: 37.190281/-113.273616
Agency: 112WRD
Date Created: 02/28/78
Location: (C-41-13)25CBC-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371125113162501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.00
On/Off RF1:
RF3 Index: 15010008000500.00
RF3 Mile Point: 2.00
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0281

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/25/66-03/25/66	1	41.7	41.7	41.7	41.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/25/66-03/25/66	1	14200.	14200.	14200.	14200.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/25/66-03/25/66	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/25/66-03/25/66	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/25/66-03/25/66	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/25/66-03/25/66	1	721.	721.	721.	721.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/25/66-03/25/66	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/25/66-03/25/66	1	2130.	2130.	2130.	2130.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/25/66-03/25/66	1	1540.	1540.	1540.	1540.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/25/66-03/25/66	1	643.	643.	643.	643.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/25/66-03/25/66	1	128.	128.	128.	128.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/25/66-03/25/66	1	2530.	2530.	2530.	2530.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/25/66-03/25/66	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/25/66-03/25/66	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/25/66-03/25/66	1	3620.	3620.	3620.	3620.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/25/66-03/25/66	1	1990.	1990.	1990.	1990.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/25/66-03/25/66	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/25/66-03/25/66	1	28.	28.	28.	28.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/25/66-03/25/66	1	4800.	4800.	4800.	4800.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/25/66-03/25/66	1	9680.	9680.	9680.	9680.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/25/66-03/25/66	1	9530.	9530.	9530.	9530.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/25/66-03/25/66	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
71865	IODIDE (MG/L AS I)	03/25/66-03/25/66	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
71870	BROMIDE (MG/L AS BR)	03/25/66-03/25/66	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0281

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	1	1.00				1	1	1.00						
		Drinking Water	250.	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: ZION0281

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00				1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

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

Station Inventory for Station: ZION0282

NPS Station ID: ZION0282
LAT/LON: 37.260837/-113.275003
Agency: 112WRD
Date Created: / /
Location: WEST FIELD DITCH AT TOQUERVILLE,UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09407150
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008022
RF1 Mile Point: 4.450
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.69
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0282

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/23/73-07/18/78	16	16.75	16.844	21.	13.5	3.191	1.786	14.55	16.	17.375	20.3
00060	FLOW, STREAM, MEAN DAILY CFS	01/23/73-05/20/74	4	5.5	5.	6.	3.	2.	1.414	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/16/75-07/18/78	14	3.5	3.329	6.	0.6	2.404	1.55	1.3	2.	4.	6.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-07/18/78	18	662.5	604.722	800.	225.	25730.801	160.408	274.5	557.5	700.	732.5

** - 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

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

Station Inventory for Station: ZION0283

NPS Station ID: ZION0283
LAT/LON: 37.219726/-113.275559
Agency: 21USU
Date Created: / /
Location: LAVERKIN CR N OF HURRICANE U-17
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000207
RMI-Indexes: 1101001 005770 01550
Within Park Boundary: No
RMI-Miles: 0038.65 0013.10 000.15
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008021
RF1 Mile Point: 0.890
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001900.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:
LA VERKIN CREEK 3 MILES NORTH OF HURRICANE ON U-17 AT BRIDGE CROSSING.

Parameter Inventory for Station: ZION0283

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	5	11.5	12.6	19.	4.	39.425	6.279	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-04/09/74	3	8.	8.667	15.	3.	36.333	6.028	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	24.5	39.175	105.	2.7	2068.856	45.485	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	5	1360.	1360.	1820.	990.	113450.	336.823	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	5	9.3	9.02	11.5	6.4	3.487	1.867	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	5	0.9	1.3	3.3	0.3	1.34	1.158	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/16/74	5	7.95	7.91	8.4	7.4	0.146	0.381	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/16/74	5	7.95	7.78	8.4	7.4	0.167	0.408	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/16/74	5	0.011	0.017	0.04	0.004	0.	0.014	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	22.7	32.85	82.	4.	1154.89	33.984	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	192.	195.8	262.	154.	1725.2	41.536	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	108.	107.25	121.	92.	173.583	13.175	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	220.	218.5	246.	188.	694.333	26.35	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	5	21.	66.4	188.	2.	6751.3	82.166	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.072	0.062	0.108	0.011	0.001	0.039	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.004	0.005	0.011	0.001	0.	0.004	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.42	79.88	398.	0.21	31625.117	177.835	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	5	0.003	0.008	0.03	0.001	0.	0.012	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	5	0.101	0.082	0.118	0.018	0.002	0.041	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	4	10.25	10.875	16.	7.	16.063	4.008	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	5	46.	44.4	52.	37.	50.3	7.092	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	4	53.75	54.875	68.	44.	112.729	10.617	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	730.	722.6	1053.	480.	56763.8	238.252	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	5	202.	207.2	334.	124.	7741.2	87.984	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	5	51.	49.2	55.	41.	32.2	5.675	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	5	35.	36.4	48.	27.	68.8	8.295	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	5	5.	4.6	6.	3.	1.3	1.14	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	5	18.	21.2	30.	14.	47.7	6.907	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	5	560.	565.2	910.	350.	47945.2	218.964	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.195	0.19	0.22	0.15	0.001	0.029	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	13.5	13.75	17.	11.	10.25	3.202	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	5	0.	4.	10.	0.	30.	5.477	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	5	140.	200.	480.	70.	26750.	163.554	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	5	0.	1.4	5.	0.	4.8	2.191	**	**	**	**

** - Less than 9 observations ## - 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: ZION0283

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	5	0.	0.8	2.	0.	1.2	1.095	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	5	0.	2.	10.	0.	20.	4.472	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	325.	580.	1670.	0.	601933.333	775.844	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	5	0.	6.	20.	0.	80.	8.944	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	5	10.	10.	30.	0.	150.	12.247	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	5	6.	4.6	7.	0.	7.8	2.793	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	4	0.	0.5	2.	0.	1.	1.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	5	0.	4.	20.	0.	80.	8.944	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	5	0.	1.6	8.	0.	12.8	3.578	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	5	4300.	22966.	93000.	230.	1565161780.	39562.126	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/16/74	5	3.633	3.7	4.968	2.362	0.936	0.968	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			5015.332								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	430.	740.9	2300.	1.5	899246.8	948.286	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	2.633	2.155	3.362	0.176	1.634	1.278	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			142.774								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	5 ##	3.655	4.961	10.95	0.	16.836	4.103	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	5	1120.	1049.6	1552.	688.	124236.8	352.472	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.375	1.5	0.	0.563	0.75	**	**	**	**

** - Less than 9 observations ## - 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: ZION0283

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	1	0.25	2	0	0.00	1	1	1.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	5	1.00	3	3	1.00	1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	4	0	0.00	3	0	0.00				1	0	0.00			
		Drinking Water	15.	4	0	0.00	3	0	0.00				1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	4	0	0.00	3	0	0.00				1	0	0.00			
		Drinking Water	100.	4	0	0.00	3	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	4	0.80	3	2	0.67	1	1	1.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	3	0.60	3	2	0.67	1	0	0.00	1	1	1.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0284

NPS Station ID: ZION0284
LAT/LON: 37.386116/-113.276392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA506R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_07 /5075809
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the New Harmony UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0284

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/80-07/12/80	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/12/80-07/12/80	1	580.	580.	580.	580.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/12/80-07/12/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/12/80-07/12/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/80-07/12/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/12/80-07/12/80	1	260.	260.	260.	260.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/12/80-07/12/80	1	11.5	11.5	11.5	11.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/12/80-07/12/80	1	26.9	26.9	26.9	26.9	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/12/80-07/12/80	1	98.	98.	98.	98.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/12/80-07/12/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/12/80-07/12/80	1	1.535	1.535	1.535	1.535	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/12/80-07/12/80	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/12/80-07/12/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/12/80-07/12/80	1	6400.	6400.	6400.	6400.	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: ZION0284

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0285

NPS Station ID: ZION0285
LAT/LON: 37.551003/-113.276392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDBC508R
FIPS State/County: 49021 UTAH/IRON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_18 /5075717
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Stoddard Mountain UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0285

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/23/80-06/23/80	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/23/80-06/23/80	1	470.	470.	470.	470.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/23/80-06/23/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/23/80-06/23/80	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/80-06/23/80	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/23/80-06/23/80	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/23/80-06/23/80	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/23/80-06/23/80	1	9.12	9.12	9.12	9.12	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/23/80-06/23/80	1	26.	26.	26.	26.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	06/23/80-06/23/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/23/80-06/23/80	1	835.	835.	835.	835.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	06/23/80-06/23/80	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	INVALID PARAMETER	06/23/80-06/23/80	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
50760	INVALID PARAMETER	06/23/80-06/23/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	06/23/80-06/23/80	1	22.7	22.7	22.7	22.7	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	06/23/80-06/23/80	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: ZION0285

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0286

NPS Station ID: ZION0286
LAT/LON: 37.222892/-113.278116
Agency: 11NPSWRD
Date Created: 08/02/97
Location: LA VERKIN CREEK AT HIGHWAY 17 BRIDGE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): ZION_EPA_LVC1
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 3100
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
THE SITE IS LOCATED ON THE HURRICANE UTAH 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS ON LA VERKIN CREEK 2/5 KM UPSTREAM FROM HIGHWAY 15 17 BRIDGE. DATA FOR THIS SITE ARE FROM THE 1976 REPORT "VIRGIN RIVER STUDY" BY ROBERT L. FOX AND RONALD M. EDDY EPA REGION 8. THE REPORT ALSO CONTAINS DATA FOR ADDITIONAL STATIONS NOT UPLOADED. FOR MORE INFORMATION CONTACT DAN COHAN ZION NP RESOURCE MANAGEMENT (801)772-0213 SPRINGDALE UT 84767. DATA PROCESSED AND UPLOADED TO STORET BY J. CHRIS ECHOHAWK NPS-WRD FORT COLLINS COLORADO 80525. PH.(970)225-3516.

Parameter Inventory for Station: ZION0286

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/76-03/14/76	2	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/13/76-03/14/76	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	03/13/76-03/14/76	2	89.	89.	110.	68.	882.	29.698	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/13/76-03/14/76	2	1175.	1175.	1200.	1150.	1250.	35.355	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/13/76-03/14/76	2	11.85	11.85	12.1	11.6	0.125	0.354	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	03/13/76-03/14/76	2	7.75	7.75	7.75	7.75	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	03/13/76-03/14/76	2	7.75	7.75	7.75	7.75	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/76-03/14/76	2	0.018	0.018	0.018	0.018	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/13/76-03/14/76	2	158.5	158.5	198.	119.	3120.5	55.861	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/76-03/14/76	2	17.	17.	17.	17.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/76-03/14/76	2	413.	413.	432.	394.	722.	26.87	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/13/76-03/14/76	2	0.22	0.22	0.24	0.2	0.001	0.028	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/13/76-03/14/76	2	3850.	3850.	4600.	3100.	1125000.	1060.66	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/13/76-03/14/76	2 ##	6.25	6.25	10.	2.5	28.125	5.303	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/13/76-03/14/76	2	75.	75.	85.	65.	200.	14.142	**	**	**	**
01062	MOLYBDENUM, TOTAL (UG/L AS MO)	03/13/76-03/14/76	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/13/76-03/14/76	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/13/76-03/14/76	2	803.	803.	816.	790.	338.	18.385	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	03/13/76-03/14/76	2 ##	5.55	5.55	11.	0.1	59.405	7.707	**	**	**	**

** - Less than 9 observations ## - 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: ZION0286

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	2	1.00	2	2	1.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00406	PH, FIELD	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	2	1.00	2	2	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	1	0.50	2	1	0.50									
		Drinking Water	2.	2	1	0.50	2	1	0.50									

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

Station Inventory for Station: ZION0287

NPS Station ID: ZION0287
LAT/LON: 37.266670/-113.278615
Agency: 112WRD
Date Created: 01/07/89
Location: ASH CREEK ABOVE TOQUERVILLE, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09407000
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.30
On/Off RF1:
RF3 Index: 15010008002100.00
RF3 Mile Point: 0.10
Distance from RF3: 0.11
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0287

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/11/87-05/20/91	9	16.	13.611	22.	3.	44.674	6.684	3.	8.	19.	22.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/11/87-05/20/91	9	21.	18.056	26.	5.	50.528	7.108	5.	12.5	24.	26.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/11/87-05/20/91	9	2.	3.011	9.	0.3	9.391	3.064	0.3	0.9	5.5	9.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/11/87-05/20/91	9	220.	246.111	485.	195.	8273.611	90.959	195.	200.	235.	485.

** - Less than 9 observations ## - 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: ZION0288

NPS Station ID: ZION0288
LAT/LON: 37.268892/-113.279170
Agency: 21UTAH
Date Created: 10/26/96
Location: ASH CK AB SPRINGS
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495072
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0288

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/11/96-12/11/96	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	12/11/96-12/11/96	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/11/96-12/11/96	1	203.	203.	203.	203.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/11/96-12/11/96	1	225.	225.	225.	225.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/11/96-12/11/96	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	12/11/96-12/11/96	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/11/96-12/11/96	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/11/96-12/11/96	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/11/96-12/11/96	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/11/96-12/11/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/11/96-12/11/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/11/96-12/11/96	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	12/11/96-12/11/96	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/11/96-12/11/96	1	81.	81.	81.	81.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/11/96-12/11/96	1	99.	99.	99.	99.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/11/96-12/11/96	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/11/96-12/11/96	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/11/96-12/11/96	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	12/11/96-12/11/96	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/11/96-12/11/96	1	0.392	0.392	0.392	0.392	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	12/11/96-12/11/96	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/11/96-12/11/96	1	99.	99.	99.	99.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/11/96-12/11/96	1	26.7	26.7	26.7	26.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/11/96-12/11/96	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/11/96-12/11/96	1	3.65	3.65	3.65	3.65	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/11/96-12/11/96	1	2.57	2.57	2.57	2.57	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/11/96-12/11/96	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/11/96-12/11/96	1	20.9	20.9	20.9	20.9	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/11/96-12/11/96	1	160.	160.	160.	160.	0.	0.	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	12/11/96-12/11/96	1	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0288

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	1	1.00	1	1	1.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									

& - 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: ZION0289

NPS Station ID: ZION0289
LAT/LON: 37.265559/-113.279727
Agency: 21UTDHDW
Date Created: 05/26/90
Location: TOQUERVILLE - TOQUERVILLE SPR
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 2701801 /UT4900438001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 5.20
On/Off RF1:
RF3 Index: 15010008066900.00
RF3 Mile Point: 0.33
Distance from RF3: 0.04
On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * *
NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV
SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-3546

Parameter Inventory for Station: ZION0289

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: ZION0290

NPS Station ID: ZION0290 LAT/LON: 37.265559/-113.279727 Agency: 21UTDHDW Date Created: 05/26/90
Location: LA VERKIN - TOQUERVILLE SPR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2700901 /UT4900253001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008087700.00 RF3 Mile Point: 0.26 Distance from RF3: 0.03 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-2287

Parameter Inventory for Station: ZION0290

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/07/84-07/06/87	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/07/84-07/06/87	2	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/07/84-07/06/87	2	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/07/84-07/06/87	2	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/07/84-07/06/87	2	0.55	0.55	0.7	0.4	0.045	0.212	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/87-07/06/87	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/07/84-07/06/87	2	13.5	13.5	15.	12.	4.5	2.121	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/07/84-07/06/87	2	141.5	141.5	156.	127.	420.5	20.506	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/07/84-07/06/87	2	0.165	0.165	0.18	0.15	0.	0.021	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/07/84-07/06/87	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/07/84-07/06/87	2 ##	0.1	0.1	0.15	0.05	0.005	0.071	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/07/84-07/06/87	2 ##	2.	2.	3.	1.	2.	1.414	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/07/84-07/06/87	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/07/84-07/06/87	2	11.	11.	20.	2.	162.	12.728	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/07/84-07/06/87	2 ##	15.	15.	25.	5.	200.	14.142	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/07/84-07/06/87	2	9.5	9.5	10.	9.	0.5	0.707	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/07/84-07/06/87	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/07/84-07/06/87	2 ##	37.5	37.5	50.	25.	312.5	17.678	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/07/84-07/06/87	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	09/10/85-09/10/85	1	3.	3.	3.	3.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/06/87-07/06/87	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/07/84-07/06/87	2	450.	450.	464.	436.	392.	19.799	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/07/84-07/06/87	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/07/84-07/06/87	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: ZION0290

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (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						
01002	ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	50.	2	0	0.00	1	0	0.00	1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	1	0	0.00	1	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.	2	0	0.00	1	0	0.00	1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	2	1	0.50	1	1	1.00	1	0	0.00						
		Drinking Water	1300.	2	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.	1 &	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	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.	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						
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	50.	2	0	0.00	1	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0291

NPS Station ID: ZION0291 LAT/LON: 37.265559/-113.279727 Agency: 21UTDHDW Date Created: 05/26/90
Location: HURRICANE - TOQUERVILLE SPR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2700701 /UT4900221001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 1.70 On/Off RF1:
RF3 Index: 15010008002500.00 RF3 Mile Point: 0.00 Distance from RF3: 0.10 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0291

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/81-09/16/89	4	0.15	0.2	0.4	0.1	0.02	0.141	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/81-09/16/89	4	657.5	659.75	675.	649.	123.583	11.117	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/06/81-09/16/89	4	8.1	8.125	8.2	8.1	0.002	0.05	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/06/81-09/16/89	4	8.1	8.123	8.2	8.1	0.003	0.05	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/81-09/16/89	4	0.008	0.008	0.008	0.006	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/06/81-09/16/89	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	4	168.	165.75	179.	148.	199.583	14.127	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/06/81-09/16/89	4	205.	202.25	219.	180.	317.583	17.821	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/06/81-09/16/89	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	4 ##	0.025	0.02	0.025	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	4	0.7	0.7	0.8	0.6	0.007	0.082	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	4	324.	322.	330.	310.	82.667	9.092	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/81-09/16/89	4	73.5	75.5	85.	70.	51.	7.141	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/81-09/16/89	4	32.	32.5	38.	28.	17.667	4.203	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/81-09/16/89	4	21.5	22.	25.	20.	4.667	2.16	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/81-09/16/89	4	3.	2.75	3.	2.	0.25	0.5	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/81-09/16/89	4	16.5	16.25	17.	15.	0.917	0.957	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/81-09/16/89	4	169.	167.75	173.	160.	30.917	5.56	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/81-09/16/89	4	0.18	0.178	0.2	0.15	0.	0.022	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/81-09/16/89	4	42.	42.5	47.	39.	11.	3.317	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/06/81-09/16/89	4	2.	1.875	2.5	1.	0.396	0.629	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/06/81-09/16/89	4 ##	0.025	0.031	0.05	0.025	0.	0.013	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/06/81-12/22/81	3	75.	83.333	125.	50.	1458.333	38.188	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/06/81-09/16/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/06/81-09/16/89	4 ##	5.	6.25	10.	5.	6.25	2.5	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/81-09/16/89	4 ##	5.	4.375	5.	2.5	1.563	1.25	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/06/81-12/22/81	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/06/81-09/16/89	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/06/81-09/16/89	4 ##	6.25	8.75	20.	2.5	68.75	8.292	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/06/81-09/16/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0291

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01501	ALPHA, TOTAL	10/01/81-09/16/89	3	2.	1.833	3.	0.5	1.583	1.258	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/06/81-09/16/89	4	469.	470.5	490.	454.	251.667	15.864	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/06/81-09/16/89	5	0.2	0.91	4.	0.05	2.988	1.729	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/06/81-09/16/89	4 ##	0.015	0.023	0.05	0.01	0.	0.018	**	**	**	**

** - Less than 9 observations ## - 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: ZION0291

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	4	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00	4	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	4	0	0.00									
		Drinking Water	250.	4	0	0.00	4	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	4	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	4	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	4	0	0.00									
		Drinking Water	50.	4	0	0.00	4	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	4	0	0.00	4	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	4	0	0.00									
		Drinking Water	5.	4	0	0.00	4	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	4	0	0.00									
		Drinking Water	100.	4	0	0.00	4	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	4	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	4	0	0.00									
		Drinking Water	1300.	4	0	0.00	4	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	4	0	0.00									
		Drinking Water	15.	4	0	0.00	4	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	4	0	0.00	4	0	0.00									
		Drinking Water	100.	4	0	0.00	4	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	4	0	0.00	4	0	0.00									
		Drinking Water	5000.	4	0	0.00	4	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	4	0	0.00									
		Drinking Water	50.	4	0	0.00	4	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	5	1	0.20	5	1	0.20									
		Drinking Water	2.	5	1	0.20	5	1	0.20									

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

Station Inventory for Station: ZION0292

NPS Station ID: ZION0292
LAT/LON: 37.266670/-113.280004
Agency: 112WRD
Date Created: 02/28/78
Location: (C-40-13)35ACD-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371600113164801
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 22.20
On/Off RF1:
RF3 Index: 15010008082200.00
RF3 Mile Point: 0.63
Distance from RF3: 0.92
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0292

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/25/68-02/27/70	2	16.75	16.75	17.	16.5	0.125	0.354	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/25/68-02/27/70	2	692.	692.	702.	682.	200.	14.142	**	**	**	**
00400	PH (STANDARD UNITS)	10/25/68-10/25/68	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/25/68-10/25/68	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/25/68-10/25/68	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/25/68-10/25/68	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/25/68-10/25/68	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/25/68-10/25/68	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/25/68-02/27/70	2	325.	325.	326.	324.	2.	1.414	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/25/68-10/25/68	1	146.	146.	146.	146.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/25/68-10/25/68	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/25/68-10/25/68	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/25/68-10/25/68	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00933	SODIUM,PLUS POTASSIUM (MG/L)	10/25/68-10/25/68	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/25/68-02/27/70	2	19.	19.	20.	18.	2.	1.414	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/25/68-10/25/68	1	159.	159.	159.	159.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/25/68-10/25/68	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/25/68-10/25/68	1	60.	60.	60.	60.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/25/68-10/25/68	1	474.	474.	474.	474.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/25/68-10/25/68	1	456.	456.	456.	456.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/25/68-10/25/68	1	3.1	3.1	3.1	3.1	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: ZION0292

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0293

NPS Station ID: ZION0293
LAT/LON: 37.265837/-113.280560
Agency: 112WRD
Date Created: / /
Location: ASH CR BLW WEST FIELD DITCH AT TOQUERVILLE,UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09407200
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002407.03
RF3 Mile Point: 8.50
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	86	17.	16.413	23.	6.	5.683	2.384	13.5	16.	17.5	18.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	3	23.5	24.333	26.5	23.	3.583	1.893	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	3	663.	663.	666.	660.	9.	3.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	01/23/73-08/19/74	16	8.	25.438	178.	3.	2339.729	48.371	3.	6.	15.25	131.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	77	7.	16.506	238.	2.	1422.016	37.71	2.	3.	12.	34.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	93	670.	626.151	800.	225.	14356.26	119.818	477.	597.5	695.	716.
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	3	8.2	8.133	8.3	7.9	0.043	0.208	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	3	7.8	7.867	8.2	7.6	0.093	0.306	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	3	7.8	7.802	8.2	7.6	0.1	0.315	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	3	0.016	0.016	0.025	0.006	0.	0.009	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	3	8.1	8.1	8.2	8.	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	3	8.1	8.092	8.2	8.	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	3	0.008	0.008	0.01	0.006	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	3	0.8	0.767	0.9	0.6	0.023	0.153	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	3	0.06	0.07	0.12	0.03	0.002	0.046	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	3	0.02	0.023	0.04	0.01	0.	0.015	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	3	300.	310.	330.	300.	300.	17.321	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	3	74.	75.	79.	72.	13.	3.606	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	3	29.	29.333	31.	28.	2.333	1.528	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	3	19.	19.333	21.	18.	2.333	1.528	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	3	0.5	0.533	0.6	0.5	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	3	12.	12.	12.	12.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	3	2.4	2.5	2.9	2.2	0.13	0.361	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	3	25.	26.	35.	18.	73.	8.544	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	3	170.	166.667	170.	160.	33.333	5.774	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	3	38.	39.333	42.	38.	5.333	2.309	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	3	50.	53.333	60.	50.	33.333	5.774	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	3	439.	440.	450.	431.	91.	9.539	**	**	**	**

** - Less than 9 observations ## - 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: ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	3	8.73	8.257	11.3	4.74	10.926	3.306	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	3	0.6	0.6	0.61	0.59	0.	0.01	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	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: ZION0293

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	2	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	2	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	2	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
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									
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

Annual Analysis for 1973 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	8	15.75	14.188	18.5	6.	22.781	4.773	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	10	582.5	566.	675.	320.	10721.111	103.543	337.	527.5	650.	672.5

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

Annual Analysis for 1974 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	8	18.	17.688	19.	16.	0.924	0.961	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	2	5.5	5.5	7.	4.	4.5	2.121	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	8	700.	715.	800.	690.	1257.143	35.456	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	10	16.25	15.9	18.5	13.5	2.322	1.524	13.55	14.75	17.	18.35
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	10	3.	4.	7.	3.	2.222	1.491	3.	3.	5.25	6.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	10	687.5	652.5	800.	225.	25062.5	158.311	265.	643.75	731.25	795.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	9	17.	16.833	21.	13.	4.25	2.062	13.	16.	17.25	21.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	9	3.	3.667	9.	2.	5.	2.236	2.	2.	4.5	9.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	9	650.	650.556	725.	570.	2671.528	51.687	570.	602.5	690.	725.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	7	17.	16.929	18.	15.5	1.119	1.058	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	7	2.	2.286	3.	2.	0.238	0.488	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	7	670.	670.	710.	650.	425.	20.616	**	**	**	**

** - 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 1978 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	9	16.	16.278	20.	13.5	3.444	1.856	13.5	15.	17.25	20.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	9	8.	21.889	73.	3.	674.111	25.964	3.	4.	45.5	73.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	9	570.	491.333	670.	280.	26131.	161.651	280.	286.	620.	670.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	9	16.	15.167	19.5	10.	11.063	3.326	10.	12.	18.25	19.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	12	12.5	56.667	238.	9.	6939.697	83.305	9.	11.25	76.75	232.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	12	620.	564.583	760.	310.	22597.538	150.325	310.	476.25	685.	745.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	6	17.75	18.417	23.	16.	7.242	2.691	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	7	16.	17.429	32.	13.	43.286	6.579	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	7	630.	581.429	680.	460.	8847.619	94.062	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

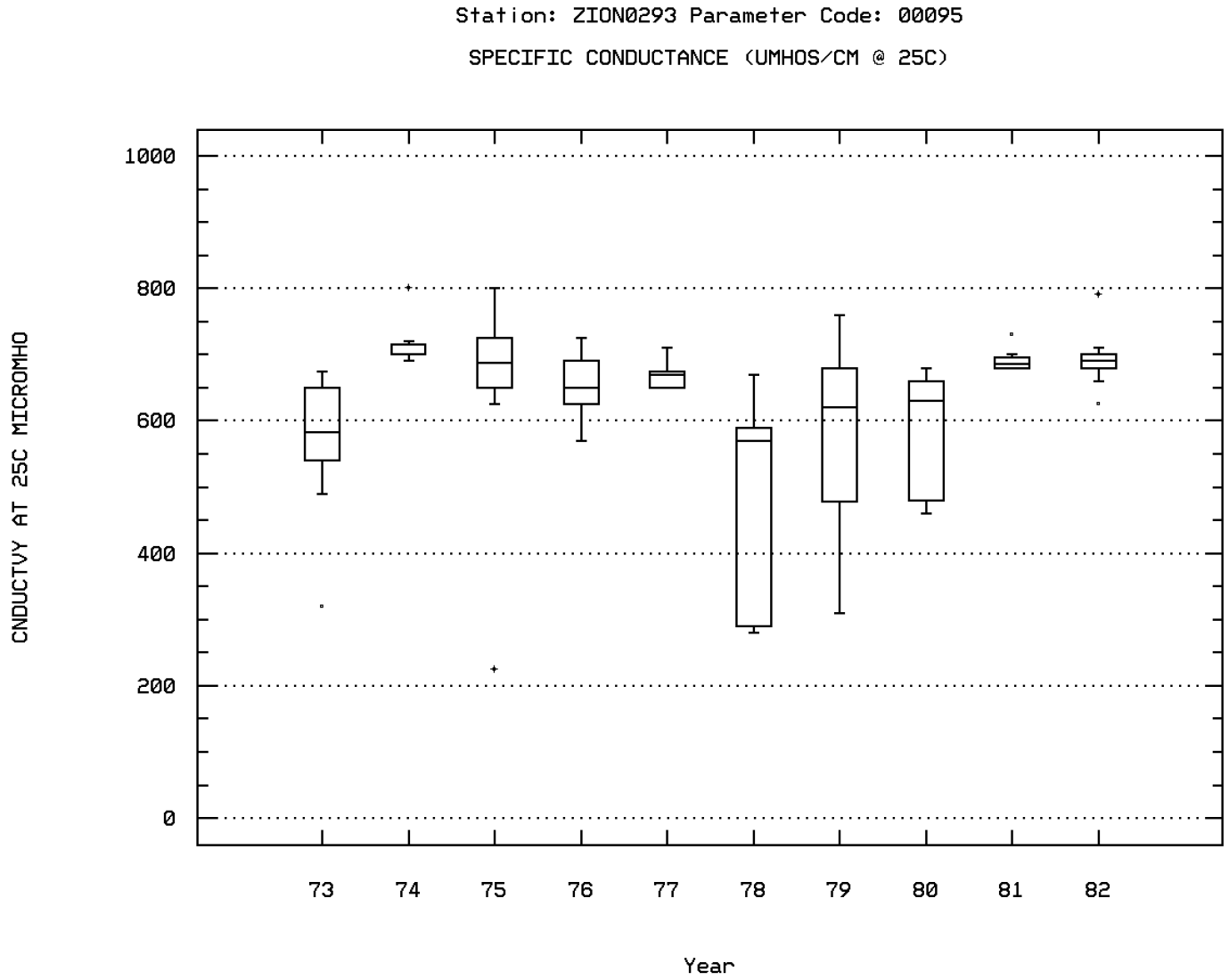
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	11	17.	16.727	17.5	16.	0.218	0.467	16.	16.5	17.	17.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	12	9.	9.75	16.	5.	10.75	3.279	5.6	7.25	11.75	15.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	12	685.	690.	730.	680.	218.182	14.771	680.	680.	697.5	721.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	9	16.5	16.667	17.5	15.5	0.312	0.559	15.5	16.5	17.	17.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	9	5.	6.111	10.	4.	6.611	2.571	4.	4.	9.	10.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	9	690.	692.778	790.	625.	1981.944	44.519	625.	670.	705.	790.

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



ASH CR BLW WEST FIELD DITCH AT TOQUERVI

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	59	17.	16.754	23.	6.	4.451	2.11	15.5	16.	17.5	18.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	54	7.	8.148	42.	2.	42.921	6.551	2.5	3.	12.	15.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	65	675.	653.338	800.	282.	6658.977	81.603	552.	627.5	700.	724.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	16	16.	15.	18.	8.	9.	3.	9.4	12.625	17.	18.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	14	9.5	45.357	238.	2.	6389.17	79.932	2.	3.75	50.5	228.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	17	650.	583.529	700.	290.	17005.515	130.405	306.	485.	680.	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: 5/10 to 6/30 - Station ZION0293

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/26/73-09/09/82	11	17.	16.636	21.	13.5	5.055	2.248	13.5	14.	18.	20.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-09/09/82	9	5.	21.778	88.	2.	882.944	29.714	2.	3.	40.5	88.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/23/73-09/09/82	11	690.	531.364	725.	225.	44475.455	210.892	236.	310.	710.	725.

** - Less than 9 observations ## - Computed 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: ZION0294

NPS Station ID: ZION0294
LAT/LON: 37.330559/-113.280560
Agency: 112WRD
Date Created: / /
Location: SOUTH ASH C NR PINTURA, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09406800
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008022
RF1 Mile Point: 9.450
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.69
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0294

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	12/15/66-12/15/66	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/15/66-12/15/66	1	224.	224.	224.	224.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	12/15/66-12/15/66	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/15/66-12/15/66	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/15/66-12/15/66	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/15/66-12/15/66	1	134.	134.	134.	134.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	12/15/66-12/15/66	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/15/66-12/15/66	1	112.	112.	112.	112.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	12/15/66-12/15/66	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/15/66-12/15/66	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/15/66-12/15/66	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/15/66-12/15/66	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	12/15/66-12/15/66	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/15/66-12/15/66	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	12/15/66-12/15/66	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	12/15/66-12/15/66	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/15/66-12/15/66	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/15/66-12/15/66	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/15/66-12/15/66	1	40.	40.	40.	40.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/15/66-12/15/66	1	152.	152.	152.	152.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	12/15/66-12/15/66	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	12/15/66-12/15/66	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/15/66-12/15/66	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: ZION0294

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0294

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0295

NPS Station ID: ZION0295 LAT/LON: 37.234449/-113.283338 Agency: 21UTDHDW Date Created: 05/26/90
Location: LA VERKIN - ASH CREEK SPRIN FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2700902 /UT4900253002
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.60 On/Off RF1:
RF3 Index: 15010008002204.46 RF3 Mile Point: 4.70 Distance from RF3: 0.00 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-687

Parameter Inventory for Station: ZION0295

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/12/78-03/12/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/78-04/12/78	1	710.	710.	710.	710.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/12/78-03/12/86	2	7.8	7.8	7.9	7.7	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/12/78-03/12/86	2	7.789	7.789	7.9	7.7	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/12/78-03/12/86	2	0.016	0.016	0.02	0.013	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/12/78-04/12/78	1	210.	210.	210.	210.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/12/78-04/12/78	1	256.	256.	256.	256.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/12/78-04/12/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/12/78-04/12/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/12/78-03/12/86	2	1.1	1.1	1.2	1.	0.02	0.141	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/12/78-04/12/78	1	350.	350.	350.	350.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/12/78-04/12/78	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/12/78-04/12/78	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/78-04/12/78	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/12/78-04/12/78	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/12/78-03/12/86	2	16.5	16.5	18.	15.	4.5	2.121	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/12/78-03/12/86	2	157.5	157.5	168.	147.	220.5	14.849	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/12/78-03/12/86	2	0.18	0.18	0.21	0.15	0.002	0.042	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/12/78-04/12/78	1	38.	38.	38.	38.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/12/78-04/12/78	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/12/86-03/12/86	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/12/78-04/12/78	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	03/12/86-03/12/86	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/12/78-04/12/78	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/12/78-04/12/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	03/12/86-03/12/86	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	04/12/78-04/12/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/12/78-04/12/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	03/12/86-03/12/86	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/12/78-04/12/78	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	03/12/86-03/12/86	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: ZION0295

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01046	IRON, DISSOLVED (UG/L AS FE)	04/12/78-04/12/78	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/12/78-04/12/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/12/86-03/12/86	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/12/86-03/12/86	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/78-04/12/78	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/12/78-04/12/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/12/78-04/12/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	03/12/86-03/12/86	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/12/78-04/12/78	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	03/12/86-03/12/86	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/12/78-04/12/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/12/86-03/12/86	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	09/10/85-09/10/85	1	2.	2.	2.	2.	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	04/12/78-03/12/86	2 ##	0.015	0.015	0.025	0.005	0.	0.014	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/12/78-03/12/86	2	464.	464.	468.	460.	32.	5.657	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/12/78-04/12/78	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/12/78-03/12/86	2 ##	0.3	0.3	0.5	0.1	0.08	0.283	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	04/12/78-03/12/86	2 ##	0.233	0.233	0.44	0.025	0.086	0.293	**	**	**	**

** - Less than 9 observations ## - 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: ZION0295

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00				1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED 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						
00946	SULFATE, DISSOLVED (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						
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.	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	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00				1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00				1	0	0.00						
		Drinking Water	1300.	1	0	0.00				1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00				1	0	0.00						
		Drinking Water	15.	1	0	0.00				1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	1	1.00	1	1	1.00									
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						
01075	SILVER, DISSOLVED	Fresh Acute	4.1	1	0	0.00				1	0	0.00						
		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: ZION0295

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
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						
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									
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0296

NPS Station ID: ZION0296
LAT/LON: 37.234726/-113.283338
Agency: 112WRD
Date Created: 02/28/78
Location: (C-41-13)11CAD-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371405113170001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008089100.00
RF3 Mile Point: 0.06
Distance from RF3: 0.07
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0296

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/28/68-10/28/68	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/68-10/28/68	1	773.	773.	773.	773.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/28/68-10/28/68	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/28/68-10/28/68	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/28/68-10/28/68	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/68-10/28/68	1	225.	225.	225.	225.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/28/68-10/28/68	1	274.	274.	274.	274.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/28/68-10/28/68	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/68-10/28/68	1	386.	386.	386.	386.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/28/68-10/28/68	1	161.	161.	161.	161.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/68-10/28/68	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/68-10/28/68	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/28/68-10/28/68	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00933	SODIUM,PLUS POTASSIUM (MG/L)	10/28/68-10/28/68	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/28/68-10/28/68	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/28/68-10/28/68	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/28/68-10/28/68	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/28/68-10/28/68	1	70.	70.	70.	70.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/68-10/28/68	1	544.	544.	544.	544.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/28/68-10/28/68	1	532.	532.	532.	532.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/28/68-10/28/68	1	6.8	6.8	6.8	6.8	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: ZION0296

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0297

NPS Station ID: ZION0297 LAT/LON: 37.234449/-113.283338 Agency: 21UTDHDW Date Created: 05/26/90
Location: HURRICANE - ASH CREEK SPRIN FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2700702 /UT4900221002
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.60 On/Off RF1:
RF3 Index: 15010008002204.46 RF3 Mile Point: 4.70 Distance from RF3: 0.00 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1145 GS NUMBER FOR THIS SITE IS: 371405113170001

Parameter Inventory for Station: ZION0297

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/81-09/16/89	4	0.2	0.225	0.3	0.2	0.002	0.05	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/81-09/16/89	4	743.5	733.	770.	675.	1652.667	40.653	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/06/81-09/16/89	4	8.05	8.	8.1	7.8	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/06/81-09/16/89	4	8.047	7.982	8.1	7.8	0.02	0.143	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/81-09/16/89	4	0.009	0.01	0.016	0.008	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/06/81-09/16/89	4	3.5	3.5	5.	2.	1.667	1.291	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	4	202.5	196.	220.	159.	798.	28.249	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/06/81-09/16/89	4	247.	239.	268.	194.	1190.667	34.506	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/22/81-09/16/89	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	4 ##	0.025	0.02	0.025	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/06/81-09/16/89	4	1.35	1.325	1.6	1.	0.063	0.25	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/06/81-09/16/89	4	365.	358.5	374.	330.	395.667	19.891	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/81-09/16/89	4	82.5	80.	91.	64.	131.333	11.46	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/81-09/16/89	4	38.5	38.5	41.	36.	4.333	2.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/81-09/16/89	4	26.5	26.25	30.	22.	14.917	3.862	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/81-09/16/89	4	3.	2.75	3.	2.	0.25	0.5	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/81-09/16/89	4	18.5	18.25	19.	17.	0.917	0.957	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/81-09/16/89	4	175.	174.75	179.	170.	16.25	4.031	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/06/81-09/16/89	4	0.195	0.205	0.25	0.18	0.001	0.031	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/81-09/16/89	4	42.5	43.5	48.	41.	9.667	3.109	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/06/81-09/16/89	4	2.25	2.125	3.	1.	0.729	0.854	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/06/81-09/16/89	4 ##	0.025	0.031	0.05	0.025	0.	0.013	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/06/81-12/22/81	3	75.	75.	125.	25.	2500.	50.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/06/81-09/16/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/06/81-09/16/89	4 ##	7.5	7.5	10.	5.	8.333	2.887	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/06/81-09/16/89	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/06/81-09/16/89	4 ##	5.	5.625	10.	2.5	9.896	3.146	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/06/81-12/22/81	3 ##	5.	10.	20.	5.	75.	8.66	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/06/81-09/16/89	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0297

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01092	ZINC, TOTAL (UG/L AS ZN)	07/06/81-09/16/89	4 ##	6.25	11.25	30.	2.5	168.75	12.99	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/06/81-09/16/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	07/06/81-09/16/89	3	5.	5.667	8.	4.	4.333	2.082	**	**	**	**
09501	RADIUM 226, TOTAL	12/22/82-09/16/89	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/06/81-09/16/89	4	513.	516.	548.	490.	685.333	26.179	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/06/81-09/16/89	4 ##	0.075	0.075	0.1	0.05	0.001	0.029	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/06/81-09/16/89	4 ##	0.015	0.023	0.05	0.01	0.	0.018	**	**	**	**

** - Less than 9 observations ## - 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: ZION0297

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	4	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00	4	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	4	0	0.00									
		Drinking Water	250.	4	0	0.00	4	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	4	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	4	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	4	0	0.00									
		Drinking Water	50.	4	0	0.00	4	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	4	0	0.00	4	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	4	0	0.00									
		Drinking Water	5.	4	0	0.00	4	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	4	0	0.00									
		Drinking Water	100.	4	0	0.00	4	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	4	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	4	0	0.00									
		Drinking Water	1300.	4	0	0.00	4	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	4	0	0.00									
		Drinking Water	15.	4	0	0.00	4	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	4	0	0.00	4	0	0.00									
		Drinking Water	100.	4	0	0.00	4	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	4	0	0.00	4	0	0.00									
		Drinking Water	5000.	4	0	0.00	4	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	4	0	0.00									
		Drinking Water	50.	4	0	0.00	4	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	4	0	0.00									
		Drinking Water	2.	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

Station Inventory for Station: ZION0298

NPS Station ID: ZION0298
LAT/LON: 37.204726/-113.284171
Agency: 112WRD
Date Created: 01/07/89
Location: LA VERKIN CREEK NEAR LA VERKIN, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09406150
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.70
On/Off RF1:
RF3 Index: 15010008002400.00
RF3 Mile Point: 0.00
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0298

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/13/87-10/03/91	34	14.75	16.647	36.	0.5	75.766	8.704	6.	9.625	23.	29.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/13/87-10/03/91	32	22.	20.047	38.	0.	112.409	10.602	5.45	11.125	27.125	34.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/02/87-10/03/91	35	6.	8.457	96.	0.3	266.319	16.319	0.4	2.	8.	14.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/02/87-10/03/91	29	1240.	1310.69	2150.	840.	132113.793	363.475	920.	1000.	1600.	1810.

** - Less than 9 observations ## - 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: ZION0299

NPS Station ID: ZION0299
LAT/LON: 37.257781/-113.285281
Agency: 21UTAH
Date Created: 06/21/80
Location: ASH CK AT U17 XING N OF TOQUERVILLE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495073
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO R-VIRGIN R DRAINAGE
ECO Region:
RF1 Index: 15010008022
RF1 Mile Point: 3.700
Distance from RF1: 30.70
On/Off RF1: OFF
RF3 Index: 15010008003807.03
RF3 Mile Point: 7.03
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/81-04/24/96	60	16.1	16.645	30.3	6.7	16.139	4.017	12.25	14.925	18.775	21.36
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-01/16/91	2	16.75	16.75	21.5	12.	45.125	6.718	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/28/80-04/24/96	42	7.	15.655	110.	0.2	515.844	22.712	0.95	2.75	20.75	42.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/28/80-04/24/96	54	2.15	78.12	1000.	0.5	54445.104	233.335	0.8	1.1	14.25	219.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/13/81-04/24/96	60	645.5	601.483	788.	282.	15435.678	124.24	344.2	591.	672.25	695.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/80-04/24/96	54	658.	624.463	1002.	235.	19377.8	139.204	387.5	620.	678.25	697.5
00300	OXYGEN, DISSOLVED MG/L	01/13/81-04/24/96	57	8.4	8.411	11.6	5.8	1.112	1.054	7.1	7.85	8.8	9.92
00335	COD, .025N K2CR2O7 MG/L	10/28/80-03/07/90	41 ##	7.	11.049	56.	5.	96.273	9.812	5.	7.	12.75	22.2
00400	PH (STANDARD UNITS)	01/13/81-04/24/96	58	8.2	8.17	8.9	7.	0.116	0.341	7.8	8.	8.4	8.6
00400	CONVERTED PH (STANDARD UNITS)	01/13/81-04/24/96	58	8.2	7.996	8.9	7.	0.147	0.383	7.8	8.	8.4	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/13/81-04/24/96	58	0.006	0.01	0.1	0.001	0.	0.015	0.003	0.004	0.01	0.016
00403	PH, LAB, STANDARD UNITS SU	12/16/86-04/24/96	32	8.2	8.144	8.4	7.6	0.046	0.214	7.83	8.	8.3	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	12/16/86-04/24/96	32	8.2	8.087	8.4	7.6	0.049	0.222	7.83	8.	8.3	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/16/86-04/24/96	32	0.006	0.008	0.025	0.004	0.	0.005	0.004	0.005	0.01	0.015
00405	CARBON DIOXIDE (MG/L AS CO2)	10/28/80-04/24/96	54	2.	1.926	6.	0.	1.277	1.13	1.	1.	2.	3.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	54	170.	158.667	180.	72.	610.	24.698	123.	148.25	175.	177.5
00440	BICARBONATE ION (MG/L AS HCO3)	10/28/80-04/24/96	54	205.5	192.556	220.	88.	885.346	29.755	148.5	181.	212.	216.5
00445	CARBONATE ION (MG/L AS CO3)	10/28/80-04/24/96	54	0.	0.5	5.	0.	1.689	1.299	0.	0.	0.	3.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/25/82-08/28/84	12	31.	187.792	1290.	1.5	145874.112	381.935	1.5	4.125	140.5	1074.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/25/82-04/24/96	42	6.	256.393	4610.	1.5	783495.726	885.153	1.5	1.5	44.75	454.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/28/80-04/24/96	54 ##	0.05	0.056	0.42	0.007	0.004	0.066	0.025	0.025	0.05	0.1
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	27 ##	0.005	0.01	0.05	0.005	0.	0.011	0.005	0.005	0.01	0.026
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/28/80-04/19/88	12 ##	0.005	0.014	0.05	0.005	0.	0.014	0.005	0.005	0.025	0.043
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	27	0.58	0.534	0.8	0.02	0.028	0.167	0.338	0.46	0.64	0.7
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/28/80-04/19/88	12	0.6	0.571	0.8	0.28	0.021	0.146	0.313	0.47	0.685	0.773
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/28/80-03/17/93	52	0.2	0.299	1.6	0.	0.091	0.301	0.05	0.1	0.353	0.7
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/28/80-06/21/83	14	0.525	0.474	0.8	0.01	0.061	0.246	0.085	0.238	0.663	0.8
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-04/24/96	12	0.65	0.65	0.9	0.2	0.039	0.198	0.29	0.525	0.8	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/28/80-04/24/96	54	0.04	0.141	3.15	0.003	0.203	0.45	0.011	0.022	0.08	0.195
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-04/24/96	13	0.015	0.021	0.077	0.005	0.	0.019	0.005	0.01	0.026	0.058
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/28/80-03/07/90	31	0.02	0.108	1.74	0.003	0.113	0.337	0.005	0.014	0.04	0.078
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/28/80-03/07/90	41	1.4	3.162	21.6	0.1	18.697	4.324	0.42	0.5	4.4	9.58
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	54	317.	298.87	510.	117.	5230.794	72.324	167.	290.	325.25	343.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/80-04/24/96	54	76.95	73.904	140.	28.	408.165	20.203	44.	69.25	79.25	87.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/80-04/24/96	54	30.	27.213	42.	7.	56.583	7.522	14.	25.5	31.	32.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/28/80-04/24/96	54	21.	19.22	31.	3.	30.849	5.554	9.85	19.75	22.	23.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/28/80-04/24/96	54	3.	2.964	6.	1.6	0.553	0.744	2.	2.705	3.	4.
00940	CHLORIDE,TOTAL IN WATER MG/L	10/28/80-04/13/89	38	16.	14.145	22.	0.5	22.985	4.794	6.9	13.5	17.	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 time series plot

Parameter Inventory for Station: ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/28/80-04/24/96	30	16.	13.433	19.	0.	28.599	5.348	5.2	9.5	17.	18.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/28/80-04/24/96	54	160.	156.689	390.	0.025	4708.593	68.619	60.5	147.75	174.925	205.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/28/80-04/14/81	4	0.155	0.153	0.16	0.14	0.	0.01	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/28/80-04/14/81	4	41.	40.75	41.	40.	0.25	0.5	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/92-03/17/93	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/28/80-02/27/91	43	2.5	3.07	19.	0.25	11.98	3.461	0.5	2.	3.	5.6
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/20/92-03/17/93	5	52.	51.4	54.	47.	7.3	2.702	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	10/28/80-02/27/91	43	30.	44.316	590.	0.	9404.178	96.975	0.	0.025	40.	90.
01020	BORON, DISSOLVED (UG/L AS B)	10/28/80-04/14/81	4	102.5	100.	115.	80.	250.	15.811	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/92-03/17/93	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/28/80-02/27/91	43 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/92-03/17/93	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/28/80-04/14/81	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/28/80-02/27/91	43 ##	2.5	2.93	10.	2.5	1.888	1.374	2.5	2.5	2.5	5.
01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/92-03/17/93	5 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/28/80-02/27/91	43 ##	10.	11.558	66.	5.	144.824	12.034	5.	5.	10.	15.
01046	IRON, DISSOLVED (UG/L AS FE)	05/20/92-03/17/93	5 ##	10.	16.	40.	10.	180.	13.416	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/20/92-03/17/93	5 ##	2.5	2.1	2.5	1.5	0.3	0.548	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/28/80-02/27/91	43 ##	2.5	3.442	20.	2.5	8.943	2.99	2.5	2.5	2.5	5.6
01055	MANGANESE, TOTAL (UG/L AS MN)	10/28/80-02/27/91	43 ##	5.	98.523	2000.	2.5	119074.523	345.072	2.5	2.5	21.	175.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/92-03/17/93	5 ##	10.	9.44	10.	7.3	1.433	1.197	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	10/28/80-06/21/83	14 ##	5.	7.571	16.	5.	15.648	3.956	5.	5.	10.	15.5
01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/92-03/17/93	5 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	10/28/80-02/27/91	43 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/92-03/17/93	5 ##	10.	14.6	33.	10.	105.8	10.286	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/28/80-02/27/91	43 ##	10.	17.14	94.	2.5	345.909	18.599	6.	10.	20.	36.
01105	ALUMINUM, TOTAL (UG/L AS AL)	04/23/85-04/23/85	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/92-03/17/93	5 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	10/28/80-02/27/91	43 ##	0.25	0.395	2.5	0.25	0.23	0.479	0.25	0.25	0.25	0.5
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	01/08/92-04/08/92	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/80-04/24/96	58	468.	417.655	750.	8.	23259.212	152.51	214.4	374.5	480.	532.6
71830	HYDROXIDE ION (MG/L AS OH)	10/28/80-04/24/96	53	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	10/28/80-04/14/81	4	0.03	0.033	0.05	0.02	0.	0.013	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/20/92-03/17/93	5 ##	0.1	0.28	1.	0.1	0.162	0.402	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/28/80-02/27/91	43 ##	0.1	0.088	0.5	0.05	0.005	0.071	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	10/28/80-02/27/91	43	0.05	0.669	15.	0.01	5.668	2.381	0.01	0.015	0.23	1.212
82702	AS DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	01/08/92-04/08/92	3	50.	43.333	50.	30.	133.333	11.547	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	01/08/92-04/08/92	3	0.1	0.117	0.21	0.04	0.007	0.086	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3	13.	14.	17.	12.	7.	2.646	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	01/08/92-04/08/92	3 ##	10.	10.	10.	10.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0299

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	54	9	0.17	39	7	0.18	10	2	0.20	5	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	57	0	0.00	40	0	0.00	10	0	0.00	7	0	0.00			
00400	PH	Other-Hi Lim.	9.	58	0	0.00	41	0	0.00	10	0	0.00	7	0	0.00			
		Other-Lo Lim.	6.5	58	0	0.00	41	0	0.00	10	0	0.00	7	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	32	0	0.00	24	0	0.00	6	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	32	0	0.00	24	0	0.00	6	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: ZION0299

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	27	0	0.00	21	0	0.00	4	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	9	0	0.00	3	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	27	0	0.00	21	0	0.00	4	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	9	0	0.00	3	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	9	0	0.00	3	0	0.00	2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	12	0	0.00	8	0	0.00	3	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	38	0	0.00	27	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	250.	38	0	0.00	27	0	0.00	7	0	0.00	4	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	30	0	0.00	21	0	0.00	6	0	0.00	3	0	0.00			
		Drinking Water	250.	30	0	0.00	21	0	0.00	6	0	0.00	3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	54	3	0.06	39	2	0.05	10	1	0.10	5	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	50.	5	0	0.00	4	0	0.00				1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	50.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	4	0	0.00				1	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	5.	5	0	0.00	4	0	0.00				1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	5.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	5	0	0.00	4	0	0.00				1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	1300.	5	0	0.00	4	0	0.00				1	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	43	3	0.07	32	2	0.06	7	1	0.14	4	0	0.00			
		Drinking Water	1300.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01049	LEAD, DISSOLVED	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			
01051	LEAD, TOTAL	Fresh Acute	82.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	15.	43	1	0.02	32	0	0.00	7	1	0.14	4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	14	0	0.00	9	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	100.	14	0	0.00	9	0	0.00	3	0	0.00	2	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	100.	5	0	0.00	4	0	0.00				1	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	100.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	5000.	5	0	0.00	4	0	0.00				1	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	5000.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	50.	5	0	0.00	4	0	0.00				1	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	50.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	50.	3	0	0.00	2	0	0.00	1	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	5	0	0.00	4	0	0.00				1	0	0.00			
		Drinking Water	2.	5	0	0.00	4	0	0.00				1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	2.	43	0	0.00	32	0	0.00	7	0	0.00	4	0	0.00			

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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/81-04/24/96	43	15.9	16.307	30.3	6.7	19.414	4.406	11.02	14.8	17.6	21.82
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/28/80-04/24/96	39	2.	73.531	1000.	0.6	51085.351	226.021	0.8	1.1	9.	194.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/13/81-04/24/96	43	651.	620.744	788.	282.	13207.576	114.924	356.2	623.	683.	695.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/80-04/24/96	39	660.	646.974	985.	235.	12779.341	113.046	610.	650.	676.	699.
00300	OXYGEN, DISSOLVED MG/L	01/13/81-04/24/96	40	8.5	8.555	11.6	5.8	1.284	1.133	7.22	8.025	9.05	10.
00335	COD, .025N K2CR2O7 MG/L	10/28/80-03/07/90	30 ##	7.	10.617	56.	5.	114.615	10.706	5.	6.5	10.5	18.7
00400	PH (STANDARD UNITS)	01/13/81-04/24/96	41	8.2	8.12	8.7	7.	0.125	0.354	7.72	7.95	8.35	8.5
00400	CONVERTED PH (STANDARD UNITS)	01/13/81-04/24/96	41	8.2	7.932	8.7	7.	0.161	0.402	7.72	7.95	8.35	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/13/81-04/24/96	41	0.006	0.012	0.1	0.002	0.	0.017	0.003	0.004	0.011	0.019
00405	CARBON DIOXIDE (MG/L AS CO2)	10/28/80-04/24/96	39	2.	2.051	6.	1.	1.313	1.146	1.	1.	3.	3.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	39	172.	161.821	180.	72.	651.783	25.53	124.	158.	176.	178.
00440	BICARBONATE ION (MG/L AS HCO3)	10/28/80-04/24/96	39	208.	196.641	220.	88.	939.71	30.655	152.	192.	214.	217.
00445	CARBONATE ION (MG/L AS CO3)	10/28/80-04/24/96	39	0.	0.41	5.	0.	1.406	1.186	0.	0.	0.	3.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/28/80-04/24/96	39 ##	0.025	0.051	0.25	0.025	0.002	0.047	0.025	0.025	0.05	0.1
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	21 ##	0.005	0.011	0.05	0.005	0.	0.012	0.005	0.005	0.01	0.029
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	21	0.59	0.546	0.8	0.02	0.024	0.155	0.406	0.47	0.63	0.69
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/28/80-03/17/93	39	0.2	0.282	1.6	0.	0.089	0.299	0.05	0.1	0.37	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/28/80-04/24/96	39	0.04	0.092	1.2	0.003	0.037	0.193	0.01	0.022	0.08	0.19
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/28/80-03/07/90	24	0.02	0.061	0.84	0.005	0.028	0.167	0.008	0.015	0.038	0.075
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/28/80-03/07/90	30	0.8	2.678	21.6	0.1	20.684	4.548	0.4	0.5	2.575	10.13
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	39	317.	311.154	510.	117.	3341.555	57.806	284.	309.	326.	350.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/80-04/24/96	39	77.	76.413	140.	28.	343.289	18.528	48.	74.	80.	88.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/80-04/24/96	39	30.6	28.451	39.	7.	39.943	6.32	16.	28.	31.	33.
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/28/80-04/24/96	39	21.	20.11	31.	3.	26.679	5.165	12.	20.	22.	23.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/28/80-04/24/96	39	3.	3.115	6.	2.	0.427	0.653	2.6	3.	3.	4.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/28/80-04/24/96	39	161.	164.79	390.	0.025	3639.538	60.329	73.	160.	176.	207.
01002	ARSENIC, TOTAL (UG/L AS AS)	10/28/80-02/27/91	32	2.5	3.055	15.	0.25	6.975	2.641	0.5	2.	3.	5.7
01007	BARIUM, TOTAL (UG/L AS BA)	10/28/80-02/27/91	32	40.	36.107	230.	0.	2548.617	50.484	0.008	0.025	40.	78.
01027	CADMIUM, TOTAL (UG/L AS CD)	10/28/80-02/27/91	32 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/28/80-02/27/91	32 ##	2.5	2.844	10.	2.5	2.088	1.445	2.5	2.5	2.5	2.5
01042	COPPER, TOTAL (UG/L AS CU)	10/28/80-02/27/91	32 ##	10.	11.125	61.	5.	93.081	9.648	5.	10.	10.	15.
01051	LEAD, TOTAL (UG/L AS PB)	10/28/80-02/27/91	32 ##	2.5	3.141	10.	2.5	2.842	1.686	2.5	2.5	2.5	5.7
01055	MANGANESE, TOTAL (UG/L AS MN)	10/28/80-02/27/91	32 ##	5.	59.563	1100.	2.5	40396.948	200.99	2.5	2.5	13.75	97.
01077	SILVER, TOTAL (UG/L AS AG)	10/28/80-02/27/91	32 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	10/28/80-02/27/91	32 ##	10.	16.453	94.	2.5	281.199	16.769	7.5	10.	20.	28.5
01147	SELENIUM, TOTAL (UG/L AS SE)	10/28/80-02/27/91	32 ##	0.25	0.438	2.5	0.25	0.302	0.55	0.25	0.25	0.438	0.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/80-04/24/96	42	471.	434.333	748.	9.	21631.545	147.077	204.8	457.5	482.	536.2
71830	HYDROXIDE ION (MG/L AS OH)	10/28/80-04/24/96	38	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	10/28/80-02/27/91	32 ##	0.1	0.078	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	10/28/80-02/27/91	32	0.045	0.336	4.9	0.01	0.81	0.9	0.01	0.015	0.145	1.032

** - 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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/81-04/24/96	10	16.2	16.	18.9	12.2	4.489	2.119	12.31	14.125	17.675	18.8
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/28/80-04/24/96	10	12.15	134.07	1000.	0.5	98139.993	313.273	0.51	1.275	97.25	924.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/13/81-04/24/96	10	594.5	534.1	718.	302.	25630.544	160.095	305.6	364.25	676.5	715.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/80-04/24/96	10	600.	569.5	1002.	294.	46370.5	215.338	299.2	375.25	681.5	970.4
00300	OXYGEN, DISSOLVED MG/L	01/13/81-04/24/96	10	8.3	8.44	9.5	7.8	0.205	0.453	7.84	8.2	8.7	9.42
00335	COD, .025N K2CR2O7 MG/L	10/28/80-03/07/90	7 ##	7.5	13.286	26.	5.	74.155	8.611	**	**	**	**
00400	PH (STANDARD UNITS)	01/13/81-04/24/96	10	8.305	8.288	8.9	7.8	0.109	0.331	7.8	8.1	8.45	8.87
00400	CONVERTED PH (STANDARD UNITS)	01/13/81-04/24/96	10	8.305	8.179	8.9	7.8	0.123	0.35	7.8	8.1	8.45	8.87
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/13/81-04/24/96	10	0.005	0.007	0.016	0.001	0.	0.005	0.001	0.004	0.009	0.016
00405	CARBON DIOXIDE (MG/L AS CO2)	10/28/80-04/24/96	10	1.5	1.6	4.	0.	1.6	1.265	0.	0.75	2.25	3.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	10	154.5	150.2	175.	122.	434.844	20.853	122.4	127.5	169.	174.7

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Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00440	BICARBONATE ION (MG/L AS HCO3)	10/28/80-04/24/96	10	186.	181.5	214.	146.	660.056	25.692	146.3	154.25	204.	213.6
00445	CARBONATE ION (MG/L AS CO3)	10/28/80-04/24/96	10	0.	0.8	5.	0.	3.067	1.751	0.	0.	0.75	4.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/28/80-04/24/96	10 ##	0.05	0.082	0.42	0.007	0.015	0.122	0.009	0.025	0.073	0.388
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	4 ##	0.005	0.01	0.025	0.005	0.	0.01	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	4	0.555	0.475	0.7	0.09	0.077	0.277	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/28/80-03/17/93	8	0.2	0.375	1.1	0.1	0.136	0.369	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/28/80-04/24/96	10	0.03	0.38	3.15	0.01	0.959	0.979	0.01	0.018	0.15	2.871
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/28/80-03/07/90	5	0.03	0.367	1.74	0.006	0.589	0.768	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/28/80-03/07/90	7	2.7	4.714	9.1	1.4	11.581	3.403	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	10	284.5	268.7	497.	134.	12531.567	111.944	136.6	161.5	325.	481.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/80-04/24/96	10	71.45	68.37	130.	34.	762.142	27.607	34.8	45.75	78.95	125.18
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/80-04/24/96	10	25.5	23.79	42.	8.	119.93	10.951	8.4	13.5	31.35	41.04
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/28/80-04/24/96	10	18.15	16.96	29.	8.	47.236	6.873	8.17	10.675	22.	28.3
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/28/80-04/24/96	10	2.42	2.644	4.	1.6	0.73	0.854	1.64	2.	3.25	4.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/28/80-04/24/96	10	125.	138.95	390.	40.	10555.672	102.741	40.65	64.875	175.95	368.91
01002	ARSENIC, TOTAL (UG/L AS AS)	10/28/80-02/27/91	7	2.	4.	19.	0.5	44.583	6.677	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	10/28/80-02/27/91	7	0.07	102.878	590.	0.	47285.506	217.452	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/28/80-02/27/91	7 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/28/80-02/27/91	7 ##	2.5	3.214	5.	2.5	1.488	1.22	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/28/80-02/27/91	7 ##	10.	15.857	66.	5.	495.143	22.252	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/28/80-02/27/91	7 ##	2.5	5.357	20.	2.5	42.56	6.524	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/28/80-02/27/91	7	21.	329.286	2000.	5.	548915.571	740.888	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	10/28/80-02/27/91	7 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/28/80-02/27/91	7	10.	25.	85.	10.	825.	28.723	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	10/28/80-02/27/91	7 ##	0.25	0.286	0.5	0.25	0.009	0.094	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/80-04/24/96	10	405.	403.4	750.	238.	25319.156	159.12	239.4	255.	482.5	723.4
71830	HYDROXIDE ION (MG/L AS OH)	10/28/80-04/24/96	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	10/28/80-02/27/91	7 ##	0.05	0.086	0.2	0.05	0.003	0.056	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	10/28/80-02/27/91	7	0.28	2.536	15.	0.015	30.588	5.531	**	**	**	**

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Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/81-04/24/96	7	20.7	19.643	21.4	15.8	4.066	2.016	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	10/28/80-04/24/96	5	1.4	2.02	4.	1.	1.452	1.205	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/13/81-04/24/96	7	643.	579.429	652.	383.	10091.619	100.457	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/28/80-04/24/96	5	536.	558.8	685.	395.	13135.7	114.611	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	01/13/81-04/24/96	7	7.7	7.543	9.	6.4	0.703	0.838	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	10/28/80-03/07/90	4 ##	10.25	10.375	14.	7.	13.229	3.637	**	**	**	**
00400	PH (STANDARD UNITS)	01/13/81-04/24/96	7	8.3	8.3	8.6	8.	0.043	0.208	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/13/81-04/24/96	7	8.3	8.258	8.6	8.	0.045	0.213	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/13/81-04/24/96	7	0.005	0.006	0.01	0.003	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/28/80-04/24/96	5	2.	1.6	2.	1.	0.3	0.548	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	5	152.	151.	175.	113.	562.5	23.717	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/28/80-04/24/96	5	186.	182.8	206.	138.	731.2	27.041	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/28/80-04/24/96	5	0.	0.6	3.	0.	1.8	1.342	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/28/80-04/24/96	5 ##	0.05	0.05	0.1	0.025	0.001	0.031	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/28/80-09/05/90	2	0.535	0.535	0.57	0.5	0.002	0.049	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/28/80-03/17/93	5	0.3	0.312	0.7	0.1	0.055	0.234	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/28/80-04/24/96	5	0.05	0.048	0.08	0.02	0.001	0.024	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/28/80-03/07/90	2 ##	0.031	0.031	0.06	0.003	0.002	0.041	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/28/80-03/07/90	4	3.05	4.075	9.7	0.5	17.109	4.136	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/28/80-04/24/96	5	253.	263.4	326.	172.	4047.8	63.622	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/28/80-04/24/96	5	62.	65.4	80.	46.	203.8	14.276	**	**	**	**

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Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0299

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/28/80-04/24/96	5	24.	24.4	31.	14.	46.3	6.804	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/28/80-04/24/96	5	16.	16.8	22.	10.	21.2	4.604	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/28/80-04/24/96	5	2.	2.42	4.	2.	0.782	0.884	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/28/80-04/24/96	5	120.	128.98	175.	72.	1676.652	40.947	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/28/80-02/27/91	4	1.5	1.563	3.	0.25	1.432	1.197	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	10/28/80-02/27/91	4 ##	0.025	7.513	30.	0.	224.75	14.992	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/28/80-02/27/91	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/28/80-02/27/91	4 ##	2.5	3.125	5.	2.5	1.563	1.25	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/28/80-02/27/91	4 ##	7.5	7.5	10.	5.	8.333	2.887	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/28/80-02/27/91	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	10/28/80-02/27/91	4 ##	6.5	6.375	10.	2.5	10.896	3.301	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	10/28/80-02/27/91	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/28/80-02/27/91	4 ##	7.5	8.875	18.	2.5	46.729	6.836	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	10/28/80-02/27/91	4 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/28/80-04/24/96	6	372.	324.667	470.	8.	29082.667	170.536	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/28/80-04/24/96	5	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/28/80-02/27/91	4 ##	0.075	0.175	0.5	0.05	0.048	0.218	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	10/28/80-02/27/91	4	0.025	0.064	0.19	0.015	0.007	0.084	**	**	**	**

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Station Inventory for Station: ZION0300

NPS Station ID: ZION0300
LAT/LON: 37.203892/-113.286115
Agency: 112WRD
Date Created: 07/17/82
Location: LAVERKIN CREEK AT MOUTH, UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 3712141131710
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008020
RF1 Mile Point: 0.010
Distance from RF1: 21.60
On/Off RF1: OFF
RF3 Index: 15010008084104.52
RF3 Mile Point: 11.15
Distance from RF3: 0.37
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0300

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/07/82-05/07/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/07/82-05/07/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/07/82-05/07/82	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/07/82-05/07/82	1	930.	930.	930.	930.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/07/82-05/07/82	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/07/82-05/07/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/07/82-05/07/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/07/82-05/07/82	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/07/82-05/07/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/07/82-05/07/82	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/07/82-05/07/82	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/07/82-05/07/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/07/82-05/07/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/07/82-05/07/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/07/82-05/07/82	1	480.	480.	480.	480.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/07/82-05/07/82	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/07/82-05/07/82	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/07/82-05/07/82	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/07/82-05/07/82	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	05/07/82-05/07/82	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/07/82-05/07/82	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/07/82-05/07/82	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/07/82-05/07/82	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/07/82-05/07/82	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/07/82-05/07/82	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/07/82-05/07/82	1	90.	90.	90.	90.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	05/07/82-05/07/82	1	654.	654.	654.	654.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	05/07/82-05/07/82	1	33.6	33.6	33.6	33.6	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	05/07/82-05/07/82	1	0.89	0.89	0.89	0.89	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: ZION0300

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400	PH	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
		Drinking Water	250.	1	0	0.00				1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00				1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0301

NPS Station ID: ZION0301
LAT/LON: 37.203059/-113.286115
Agency: 112WRD
Date Created: 12/02/81
Location: LAVERKIN CREEK AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371211113171001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008000600.00
RF3 Mile Point: 0.00
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0301

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	3	25.	21.833	26.	14.5	40.583	6.371	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	3	34.	30.667	34.	24.	33.333	5.774	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	5	673.	673.4	676.	671.	4.3	2.074	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	3	2.	3.	5.	2.	3.	1.732	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	4	1385.	1450.	1930.	1100.	132600.	364.143	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	3	7.3	8.167	10.4	6.8	3.803	1.95	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	3	8.	8.033	8.1	8.	0.003	0.058	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	3	8.	8.031	8.1	8.	0.003	0.058	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	3	0.01	0.009	0.01	0.008	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	3	7.9	7.933	8.1	7.8	0.023	0.153	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	3	7.9	7.916	8.1	7.8	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	3	0.013	0.012	0.016	0.008	0.	0.004	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	3	0.3	0.367	0.6	0.2	0.043	0.208	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-08/25/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	3 ##	0.005	0.003	0.005	0.	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	3	800.	816.667	1000.	650.	30833.333	175.594	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	3	228.	235.	300.	177.	3819.	61.798	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	3	56.	56.333	63.	50.	42.333	6.506	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	3	42.	43.	47.	40.	13.	3.606	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	3	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	3	10.	10.333	12.	9.	2.333	1.528	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	3	4.8	5.033	5.9	4.4	0.603	0.777	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	3	23.	24.	32.	17.	57.	7.55	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	3	630.	693.333	920.	530.	41033.333	202.567	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	3	0.2	0.233	0.3	0.2	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	3	19.	18.667	21.	16.	6.333	2.517	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	3	170.	170.	200.	140.	900.	30.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	1	210.	210.	210.	210.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	3	1090.	1164.	1470.	932.	76468.	276.528	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	3	7.58	9.07	13.1	6.53	12.456	3.529	**	**	**	**

** - Less than 9 observations ## - 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: ZION0301

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	3	1.48	1.583	2.	1.27	0.141	0.376	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	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: ZION0301

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00400	PH	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	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.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	3	1.00	3	3	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
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									
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: ZION0302

NPS Station ID: ZION0302
LAT/LON: 37.215559/-113.286393
Agency: 21UTAH
Date Created: 10/26/96
Location: ASH CK AB CNF/ VIRGIN R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495071
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0302

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/02/96-12/11/96	11	16.8	16.264	19.	11.5	4.581	2.14	12.04	14.3	17.7	18.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/02/96-12/11/96	11	8.	13.727	50.	7.	154.418	12.427	7.	8.	15.	43.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/02/96-12/11/96	11	1.8	13.509	126.	0.7	1394.635	37.345	0.72	1.2	3.8	102.1
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/02/96-12/11/96	11	706.	676.727	733.	402.	8913.418	94.411	450.8	678.	720.	731.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/02/96-12/11/96	11	708.	680.364	747.	407.	8863.255	94.145	456.	689.	723.	744.8
00300	OXYGEN, DISSOLVED MG/L	04/02/96-12/11/96	11	8.7	8.755	10.3	7.8	0.459	0.677	7.86	8.4	9.1	10.12
00400	PH (STANDARD UNITS)	04/02/96-12/11/96	11	8.4	8.355	8.56	8.1	0.017	0.13	8.12	8.3	8.42	8.548
00400	CONVERTED PH (STANDARD UNITS)	04/02/96-12/11/96	11	8.4	8.337	8.56	8.1	0.017	0.131	8.12	8.3	8.42	8.548
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/02/96-12/11/96	11	0.004	0.005	0.008	0.003	0.	0.001	0.003	0.004	0.005	0.008
00403	PH, LAB, STANDARD UNITS SU	04/02/96-12/11/96	11	8.4	8.336	8.5	8.1	0.017	0.129	8.1	8.3	8.4	8.48
00403	CONVERTED PH, LAB, STANDARD UNITS	04/02/96-12/11/96	11	8.4	8.317	8.5	8.1	0.017	0.13	8.1	8.3	8.4	8.48
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/02/96-12/11/96	11	0.004	0.005	0.008	0.003	0.	0.002	0.003	0.004	0.005	0.008
00405	CARBON DIOXIDE (MG/L AS CO2)	04/02/96-12/11/96	11	2.	1.636	3.	1.	0.455	0.674	1.	1.	2.	2.8
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	11	189.	181.727	195.	120.	446.418	21.129	130.8	185.	190.	194.
00440	BICARBONATE ION (MG/L AS HCO3)	04/02/96-12/11/96	11	230.	221.727	238.	147.	656.018	25.613	160.	226.	232.	236.8
00445	CARBONATE ION (MG/L AS CO3)	04/02/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/02/96-12/11/96	11	10.	14.	33.	6.	93.4	9.664	6.2	7.	18.	32.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/02/96-12/11/96	11 ##	0.025	0.03	0.058	0.025	0.	0.012	0.025	0.025	0.025	0.056
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/02/96-12/11/96	11	0.5	0.545	1.	0.1	0.051	0.225	0.16	0.4	0.7	0.94
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/02/96-12/11/96	11	0.02	0.05	0.347	0.01	0.01	0.1	0.01	0.01	0.03	0.29
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/02/96-12/11/96	11 ##	0.005	0.012	0.058	0.005	0.	0.016	0.005	0.005	0.01	0.048
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/02/96-12/11/96	11	335.	321.091	349.	188.	2168.491	46.567	209.2	327.	343.	348.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/02/96-12/11/96	11	78.4	74.555	81.6	46.7	121.841	11.038	49.34	75.7	80.6	81.46
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/02/96-12/11/96	11	34.4	32.845	35.4	17.4	26.671	5.164	20.62	33.5	34.9	35.36
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/02/96-12/11/96	11	21.7	20.836	22.4	10.3	12.317	3.509	12.52	21.6	22.3	22.38
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/02/96-12/11/96	11	2.6	2.603	2.86	2.2	0.03	0.174	2.26	2.51	2.7	2.848
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/02/96-12/11/96	11	17.	16.091	19.	7.	12.291	3.506	8.	17.	18.	18.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/02/96-12/11/96	11	177.1	169.573	191.3	73.1	1056.02	32.496	92.44	175.8	181.2	190.28
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	3	51.	52.	58.	47.	31.	5.568	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	3 ##	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	3 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	3	6.4	5.867	8.7	2.5	9.823	3.134	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0302

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	3	1.	1.	1.	1.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/02/96-12/11/96	11	494.	474.182	522.	276.	4470.764	66.864	316.4	480.	500.	517.6
71830	HYDROXIDE ION (MG/L AS OH)	04/02/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	3 ##	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: ZION0302

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	1	0.09	5	1	0.20	3	0	0.00	3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00400	PH	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	250.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5.	3	0	0.00	2	0	0.00				1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	1300.	3	0	0.00	2	0	0.00				1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	15.	3	0	0.00	2	0	0.00				1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5000.	3	0	0.00	2	0	0.00				1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	2.	3	0	0.00	2	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0303

NPS Station ID: ZION0303
LAT/LON: 37.255559/-113.286948
Agency: 21USU
Date Created: / /
Location: ASH CRK N OF HURRICANE AT U-17
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000208
RMI-Indexes: 1101001 005770 01510
Within Park Boundary: No
RMI-Miles: 0038.65 0013.10 000.34
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008022
RF1 Mile Point: 3.560
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002100.00
RF3 Mile Point: 0.91
Distance from RF3: 0.02
On/Off RF3:
Description:
ASH CREEK 5 MILES NORTH OF HURRICANE ON U-17 AT BRIDGE CROSSING

Parameter Inventory for Station: ZION0303

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	5	17.	16.8	18.	16.	0.7	0.837	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-04/09/74	3	10.	9.333	12.	6.	9.333	3.055	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	0.8	0.85	1.3	0.5	0.137	0.37	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	5	695.	689.4	700.	667.	194.3	13.939	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	5	8.9	8.76	9.4	8.1	0.343	0.586	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	5	1.	0.96	1.8	0.1	0.393	0.627	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/16/74	5	8.3	8.27	8.5	7.9	0.052	0.228	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/16/74	5	8.3	8.217	8.5	7.9	0.056	0.236	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/16/74	5	0.005	0.006	0.013	0.003	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	6.7	10.35	26.	2.	122.89	11.086	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	172.	171.8	177.	167.	12.7	3.564	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	103.	102.25	103.	100.	2.25	1.5	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	209.	208.	210.	204.	8.	2.828	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	5	1.	0.96	2.	0.	0.508	0.713	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.065	0.072	0.122	0.016	0.002	0.04	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.002	0.002	0.004	0.001	0.	0.001	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.61	122.27	609.	0.51	74033.157	272.09	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	5	0.01	0.013	0.02	0.005	0.	0.007	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	5	0.056	0.072	0.18	0.025	0.004	0.063	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	4	2.	8.5	30.	0.	207.	14.387	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	5	38.	38.7	42.5	34.	12.7	3.564	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	4	39.5	142.75	458.	34.	44176.917	210.183	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	324.	327.2	352.	312.	219.2	14.805	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	5	83.	83.6	94.	77.	41.3	6.427	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	5	29.	28.8	30.	28.	0.7	0.837	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	5	20.	19.8	22.	18.	2.2	1.483	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	5	2.	1.8	3.	1.	0.7	0.837	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	5	18.	17.4	18.	16.	0.8	0.894	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	5	171.	176.4	200.	168.	177.3	13.315	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.14	0.293	0.8	0.09	0.115	0.339	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	42.	42.	43.	41.	0.667	0.816	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	5	0.	6.	20.	0.	80.	8.944	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	5	40.	60.	140.	0.	3850.	62.048	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	5	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: ZION0303

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	5	0.	1.	3.	0.	2.	1.414	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	5	0.	2.	10.	0.	20.	4.472	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	95.	97.5	200.	0.	11491.667	107.199	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	5	0.	6.	20.	0.	80.	8.944	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	5	0.	112.	550.	0.	59970.	244.888	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	5	0.	4.	10.	0.	30.	5.477	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	5	0.	1.6	8.	0.	12.8	3.578	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	5	930.	1598.	4300.	230.	2995670.	1730.8	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/16/74	5	2.968	2.937	3.633	2.362	0.332	0.576	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			865.819								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5 ##	15.	40.8	93.	1.5	2301.075	47.97	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5 ##	1.176	1.093	1.968	0.176	0.805	0.897	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			12.389								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	5	2.05	2.2	3.65	0.	2.204	1.485	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	5	464.	473.6	504.	456.	382.8	19.565	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0303

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	2	0.40	3	1	0.33	1	0	0.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0304

NPS Station ID: ZION0304
LAT/LON: 37.203615/-113.287782
Agency: 112WRD
Date Created: 12/02/81
Location: ASH CREEK AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371213113171601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.70
On/Off RF1:
RF3 Index: 15010008002000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0304

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	18.5	18.	20.	15.	5.167	2.273	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	4	31.25	30.25	34.5	24.	24.75	4.975	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	5	672.	673.4	676.	671.	5.8	2.408	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	4	11.	10.5	13.	7.	6.333	2.517	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	4	770.	771.25	840.	705.	3306.25	57.5	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	4	7.75	8.075	9.4	7.4	0.809	0.9	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	4	8.15	8.125	8.4	7.8	0.063	0.25	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	4	8.147	8.07	8.4	7.8	0.067	0.258	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.007	0.009	0.016	0.004	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	4	8.1	8.1	8.2	8.	0.007	0.082	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	4	8.1	8.094	8.2	8.	0.007	0.082	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	4	0.008	0.008	0.01	0.006	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	4	0.75	0.675	0.9	0.3	0.069	0.263	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/25/81-09/02/82	3	0.06	0.05	0.06	0.03	0.	0.017	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	4	0.015	0.014	0.02	0.005	0.	0.008	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	4	375.	372.5	400.	340.	625.	25.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	4	87.	88.25	97.	82.	40.25	6.344	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	4	37.5	36.75	39.	33.	6.917	2.63	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	4	25.	24.25	26.	21.	5.583	2.363	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	4	0.6	0.575	0.6	0.5	0.002	0.05	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	4	12.	12.25	13.	12.	0.25	0.5	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	4	3.05	3.	3.4	2.5	0.14	0.374	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	4	18.5	17.	20.	11.	16.667	4.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	4	205.	202.5	220.	180.	291.667	17.078	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	4	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	4	39.5	39.5	41.	38.	1.667	1.291	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	4	65.	67.5	80.	60.	91.667	9.574	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	4	537.	531.	558.	492.	784.667	28.012	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	4	15.2	14.95	18.8	10.6	11.53	3.396	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	4	0.73	0.722	0.76	0.67	0.001	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0304

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						

& - 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: ZION0305

NPS Station ID: ZION0305
LAT/LON: 37.202226/-113.290282
Agency: 112WRD
Date Created: 12/19/81
Location: VIRGIN R. BELOW ASH CREEK, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371208113172501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008004
RF1 Mile Point: 2.450
Distance from RF1: 2.50
On/Off RF1: ON
RF3 Index: 15010008031500.00
RF3 Mile Point: 3.30
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0305

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/81-09/02/82	5	13.5	16.7	29.	5.5	86.075	9.278	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/25/81-09/02/82	5	25.	23.9	39.	2.5	196.3	14.011	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/25/81-09/02/82	5	673.	674.6	678.	673.	5.3	2.302	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/25/81-09/02/82	5	128.	210.2	540.	55.	38782.7	196.933	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/25/81-09/02/82	5	2290.	2327.	3700.	905.	1088520.	1043.322	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/25/81-09/02/82	5	9.5	8.98	11.4	6.3	3.617	1.902	**	**	**	**
00400	PH (STANDARD UNITS)	08/25/81-09/02/82	5	7.8	7.76	7.9	7.6	0.013	0.114	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/25/81-09/02/82	5	7.8	7.748	7.9	7.6	0.013	0.115	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	5	0.016	0.018	0.025	0.013	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/25/81-09/02/82	5	7.9	7.94	8.3	7.7	0.053	0.23	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/25/81-09/02/82	5	7.9	7.897	8.3	7.7	0.055	0.235	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/25/81-09/02/82	5	0.013	0.013	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/25/81-09/02/82	5	0.6	0.54	0.7	0.3	0.023	0.152	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/07/82-09/02/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/25/81-09/02/82	5 ##	0.01	0.01	0.02	0.005	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/25/81-09/02/82	5	610.	596.	850.	290.	45280.	212.791	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/25/81-09/02/82	5	160.	163.8	240.	84.	3582.2	59.851	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/25/81-09/02/82	5	52.	45.2	60.	19.	255.7	15.991	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/25/81-09/02/82	5	260.	267.6	450.	68.	20818.8	144.287	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/25/81-09/02/82	5	4.6	4.62	6.7	1.8	3.387	1.84	**	**	**	**
00932	SODIUM, PERCENT	08/25/81-09/02/82	5	47.	45.6	52.	33.	55.3	7.436	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/25/81-09/02/82	5	20.	20.94	36.	5.7	125.268	11.192	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/25/81-09/02/82	5	370.	384.	670.	100.	45680.	213.729	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/25/81-09/02/82	5	390.	392.	630.	130.	32920.	181.439	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/25/81-09/02/82	5	0.5	0.42	0.5	0.2	0.017	0.13	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/25/81-09/02/82	5	14.	14.52	20.	8.6	16.952	4.117	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	09/02/82-09/02/82	1	31.	31.	31.	31.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/25/81-09/02/82	5	540.	592.	1000.	160.	107720.	328.207	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	09/02/82-09/02/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	09/02/82-09/02/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/02/82-09/02/82	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	09/02/82-09/02/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/02/82-09/02/82	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	09/02/82-09/02/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	09/02/82-09/02/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/25/81-09/02/82	5	1410.	1442.2	2280.	531.	422514.2	650.011	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/25/81-09/02/82	5	487.	562.2	787.	340.	42449.7	206.033	**	**	**	**

** - 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 time series plot

Parameter Inventory for Station: ZION0305

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/25/81-09/02/82	5	1.92	1.962	3.1	0.72	0.783	0.885	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	09/02/82-09/02/82	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

EPA Water Quality Criteria Analysis for Station: ZION0305

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
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									
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: ZION0306

NPS Station ID: ZION0306
LAT/LON: 37.381309/-113.297392
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA504R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_05 /5075807
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the New Harmony UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0306

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	1	590.	590.	590.	590.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/80-07/11/80	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	1	250.	250.	250.	250.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	1	14.6	14.6	14.6	14.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	1	29.82	29.82	29.82	29.82	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/11/80-07/11/80	1	170.	170.	170.	170.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	1	7.	7.	7.	7.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	1	2.92	2.92	2.92	2.92	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/11/80-07/11/80	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/11/80-07/11/80	1	27.	27.	27.	27.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/11/80-07/11/80	1	75.7	75.7	75.7	75.7	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	1	7200.	7200.	7200.	7200.	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: ZION0306

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0307

NPS Station ID: ZION0307
LAT/LON: 37.198616/-113.301393
Agency: 112WRD
Date Created: 11/18/75
Location: VIRGIN RIVER UPPER SECT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 391155113180501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002417.40
RF3 Mile Point: 19.20
Distance from RF3: 0.04
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0307

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/75-02/03/75	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/75-02/03/75	1	2060.	2060.	2060.	2060.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	1	253.	253.	253.	253.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/03/75-02/03/75	1	309.	309.	309.	309.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	02/03/75-02/03/75	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/03/75-02/03/75	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/03/75-02/03/75	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	1	530.	530.	530.	530.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/03/75-02/03/75	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/75-02/03/75	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/75-02/03/75	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/75-02/03/75	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	02/03/75-02/03/75	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	02/03/75-02/03/75	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/75-02/03/75	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/03/75-02/03/75	1	320.	320.	320.	320.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	02/03/75-02/03/75	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/75-02/03/75	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/03/75-02/03/75	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/03/75-02/03/75	1	470.	470.	470.	470.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	02/03/75-02/03/75	1	1260.	1260.	1260.	1260.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	02/03/75-02/03/75	1	1.71	1.71	1.71	1.71	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0307

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	1	1.00	1	1	1.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0308

NPS Station ID: ZION0308
LAT/LON: 37.173892/-113.308060
Agency: 21UTAH
Date Created: 03/24/79
Location: HURRICANE LAGOONS EFFLUENT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495040
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN R
ECO Region:
RF1 Index: 15010008003
RF1 Mile Point: 2.180
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008004300.00
RF3 Mile Point: 0.10
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0308

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/07/78-02/24/82	18	14.3	15.339	32.	7.	50.634	7.116	7.72	8.875	19.5	27.14
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/12/78-12/16/81	4	0.2	0.275	0.6	0.1	0.049	0.222	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/21/79-04/14/81	2	7.65	7.65	11.	4.3	22.445	4.738	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/21/79-02/24/82	13	1061.	1062.462	1400.	291.	71499.603	267.394	566.6	992.5	1235.5	1344.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/21/79-02/21/79	1	1180.	1180.	1180.	1180.	0.	0.	**	**	**	**
00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	06/16/81-02/24/82	4	3.	3.	3.	3.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/19/79-02/24/82	12	14.85	12.908	20.	2.2	40.541	6.367	2.83	7.325	18.875	19.76
00310	BOD, 5 DAY, 20 DEG C MG/L	01/10/78-02/24/82	26	35.5	110.923	1900.	4.	133622.394	365.544	14.1	27.25	52.	83.3
00335	COD, .025N K2CR2O7 MG/L	01/10/78-02/20/80	8	166.	178.125	368.	62.	9427.839	97.097	**	**	**	**
00400	PH (STANDARD UNITS)	01/10/78-02/24/82	19	8.5	8.553	9.7	7.5	0.212	0.46	8.2	8.3	8.8	9.1
00400	CONVERTED PH (STANDARD UNITS)	01/10/78-02/24/82	19	8.5	8.327	9.7	7.5	0.265	0.515	8.2	8.3	8.8	9.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/10/78-02/24/82	19	0.003	0.005	0.032	0.	0.	0.007	0.001	0.002	0.005	0.006
00403	PH, LAB, STANDARD UNITS SU	01/10/78-02/24/82	22	9.1	8.959	10.2	7.1	0.453	0.673	7.81	8.775	9.325	9.57
00403	CONVERTED PH, LAB, STANDARD UNITS	01/10/78-02/24/82	22	9.1	8.232	10.2	7.1	1.007	1.004	7.81	8.775	9.325	9.57
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/10/78-02/24/82	22	0.001	0.006	0.079	0.	0.	0.017	0.	0.	0.002	0.019
00405	CARBON DIOXIDE (MG/L AS CO2)	02/21/79-02/21/79	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	1	251.	251.	251.	251.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/21/79-02/21/79	1	306.	306.	306.	306.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	02/21/79-02/21/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	01/10/78-02/24/82	23	53.	75.239	425.	0.5	8090.679	89.948	7.4	20.	95.	175.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-02/24/82	15	42.	48.233	168.	0.5	1918.888	43.805	2.	16.	68.	121.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/10/78-02/24/82	17	8.2	9.771	23.1	0.8	47.108	6.864	1.36	4.4	16.	21.34
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	1	0.72	0.72	0.72	0.72	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	1	0.72	0.72	0.72	0.72	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/10/78-02/24/82	17	16.8	18.018	32.6	6.9	58.95	7.678	7.54	11.65	23.15	30.92
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	01/10/78-02/24/82	16	0.325	0.33	0.8	0.05	0.054	0.233	0.05	0.113	0.488	0.765
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/10/78-02/24/82	17	4.9	4.954	9.65	1.45	5.168	2.273	2.25	3.225	6.025	8.97
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/21/79-02/21/79	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/10/78-02/21/79	5	35.	34.4	36.	32.	3.3	1.817	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	1	320.	320.	320.	320.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/21/79-02/21/79	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/21/79-02/21/79	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/21/79-02/21/79	1	108.	108.	108.	108.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/21/79-02/21/79	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/21/79-02/21/79	1	97.	97.	97.	97.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-02/21/79	1	97.	97.	97.	97.	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: ZION0308

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/21/79-10/28/80	2	96.1	96.1	188.	4.2	16891.22	129.966	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/21/79-02/21/79	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/21/79-02/21/79	1	48.	48.	48.	48.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	02/21/79-02/21/79	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/21/79-02/21/79	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/21/79-02/21/79	1	540.	540.	540.	540.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-02/21/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-02/21/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/21/79-02/21/79	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-02/21/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	02/21/79-02/21/79	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-02/21/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/10/78-12/16/81	22	2400.	144946.182	2400000.	23.260549604	135.108	510440.598	25.1	230.	17250.	240000.
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/10/78-12/16/81	22	3.38	3.406	6.38	1.362	1.917	1.385	1.396	2.362	4.227	5.38
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			2545.93								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/10/78-12/16/81	22	590.	133312.5	2400000.	40.261177073	247.024	511054.863	90.	141.25	9300.	240000.
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/10/78-12/16/81	22	2.754	3.203	6.38	1.602	1.631	1.277	1.954	2.147	3.968	5.38
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1594.579								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/21/79-02/21/79	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
50051	FLOW, RATE, INSTANTANEOUS MGD	04/02/80-01/13/81	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	02/07/78-07/12/78	3	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/10/78-04/19/79	10	802.	804.8	954.	512.	18299.733	135.277	533.4	727.5	918.	954.
71830	HYDROXIDE ION (MG/L AS OH)	02/21/79-02/21/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-02/21/79	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	02/21/79-02/21/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/21/79-02/21/79	1	0.06	0.06	0.06	0.06	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: ZION0308

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00	1	0	0.00						
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	12	1	0.08	7	1	0.14	3	0	0.00	2	0	0.00			
00400	PH	Other-Hi Lim.	9.	19	4	0.21	12	2	0.17	5	2	0.40	2	0	0.00			
		Other-Lo Lim.	6.5	19	0	0.00	12	0	0.00	5	0	0.00	2	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	22	14	0.64	13	8	0.62	6	4	0.67	3	2	0.67			
		Other-Lo Lim.	6.5	22	0	0.00	13	0	0.00	6	0	0.00	3	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	9	0	0.00	4	0	0.00	3	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									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		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: ZION0308

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	22	13	0.59	13	8	0.62	6	4	0.67	3	1	0.33			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	22	16	0.73	13	11	0.85	6	3	0.50	3	2	0.67			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	3	0	0.00	2	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0309

NPS Station ID: ZION0309
LAT/LON: 37.488059/-113.320281
Agency: 112WRD
Date Created: 02/28/78
Location: (C-38-13)16BDB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372917113191301
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008078400.00
RF3 Mile Point: 1.93
Distance from RF3: 0.09
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0309

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/64-03/16/64	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/16/64-03/16/64	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/16/64-03/16/64	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/16/64-03/16/64	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/16/64-03/16/64	1	148.	148.	148.	148.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/16/64-03/16/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/64-03/16/64	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/64-03/16/64	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/64-03/16/64	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/16/64-03/16/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/64-03/16/64	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/16/64-03/16/64	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/64-03/16/64	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/16/64-03/16/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/64-03/16/64	1	57.	57.	57.	57.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/16/64-03/16/64	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/16/64-03/16/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/16/64-03/16/64	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/16/64-03/16/64	1	120.	120.	120.	120.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/16/64-03/16/64	1	244.	244.	244.	244.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/64-03/16/64	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	03/16/64-03/16/64	1	30.	30.	30.	30.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	03/16/64-03/16/64	1	30.	30.	30.	30.	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: ZION0309

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
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									

& - 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: ZION0309

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	1	1.00	1	1	1.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0310

NPS Station ID: ZION0310
LAT/LON: 37.191670/-113.325005
Agency: 112WRD
Date Created: 12/02/81
Location: GOULD WASH AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371130113193001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.80
On/Off RF1:
RF3 Index: 15010008000500.00
RF3 Mile Point: 2.08
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0310

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/28/81-05/07/82	2	21.75	21.75	28.	15.5	78.125	8.839	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/28/81-05/07/82	2	30.25	30.25	39.	21.5	153.125	12.374	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/28/81-05/07/82	2	667.	667.	670.	664.	18.	4.243	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/28/81-05/07/82	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/81-05/07/82	2	737.5	737.5	900.	575.	52812.5	229.81	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/28/81-05/07/82	2	7.35	7.35	8.6	6.1	3.125	1.768	**	**	**	**
00400	PH (STANDARD UNITS)	08/28/81-05/07/82	2	8.35	8.35	8.5	8.2	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/28/81-05/07/82	2	8.325	8.325	8.5	8.2	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-05/07/82	2	0.005	0.005	0.006	0.003	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/28/81-05/07/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/28/81-05/07/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/81-05/07/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/28/81-05/07/82	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/28/81-05/07/82	2	0.305	0.305	0.46	0.15	0.048	0.219	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/28/81-05/07/82	2	0.1	0.1	0.15	0.05	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/28/81-05/07/82	2	310.	310.	350.	270.	3200.	56.569	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/81-05/07/82	2	87.	87.	92.	82.	50.	7.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/81-05/07/82	2	23.	23.	29.	17.	72.	8.485	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/81-05/07/82	2	34.	34.	51.	17.	578.	24.042	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/28/81-05/07/82	2	0.9	0.9	1.3	0.5	0.32	0.566	**	**	**	**
00932	SODIUM, PERCENT	08/28/81-05/07/82	2	18.	18.	24.	12.	72.	8.485	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/81-05/07/82	2	5.9	5.9	8.9	2.9	18.	4.243	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/28/81-05/07/82	2	36.5	36.5	56.	17.	760.5	27.577	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/28/81-05/07/82	2	160.	160.	200.	120.	3200.	56.569	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/28/81-05/07/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/81-05/07/82	2	11.5	11.5	14.	9.	12.5	3.536	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/28/81-05/07/82	2	55.	55.	80.	30.	1250.	35.355	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/28/81-05/07/82	2	468.	468.	567.	369.	19602.	140.007	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/28/81-05/07/82	2	2.25	2.25	2.39	2.11	0.039	0.198	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/28/81-05/07/82	2	0.635	0.635	0.77	0.5	0.036	0.191	**	**	**	**

** - Less than 9 observations ## - 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: ZION0310

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0311

NPS Station ID: ZION0311 LAT/LON: 37.363892/-113.333338 Agency: 113FORS4 Date Created: 04/02/83
Location: SOUTH ASH CREEK - NEAR USGS GAGING STATION FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 070106A /15010008106A/015070106A /EE63
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: LOWER COLORADO RIVER - VIRGIN RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 18.20 On/Off RF1:
RF3 Index: 15010008083300.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0311

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/77-08/05/77	2	19.8	19.8	20.4	19.2	0.72	0.849	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/14/77-08/05/77	2	8.4	8.4	10.5	6.3	8.82	2.97	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/14/77-08/05/77	2	133.	133.	136.	130.	18.	4.243	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/14/77-08/05/77	2	11.5	11.5	12.5	10.5	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	06/14/77-08/05/77	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/14/77-08/05/77	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/14/77-08/05/77	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/14/77-08/05/77	2	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/77-08/05/77	2	116.	116.	118.	114.	8.	2.828	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/14/77-08/05/77	2	141.5	141.5	144.	139.	12.5	3.536	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/14/77-08/05/77	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/14/77-08/05/77	2	1.23	1.23	2.4	0.06	2.738	1.655	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	06/14/77-08/05/77	2	0.1	0.1	0.16	0.04	0.007	0.085	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	06/14/77-08/05/77	2 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/77-08/05/77	2	116.	116.	118.	114.	8.	2.828	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/14/77-08/05/77	2	4.	4.	4.	4.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/77-08/05/77	2	3.15	3.15	3.3	3.	0.045	0.212	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/77-08/05/77	2	0.145	0.145	0.16	0.13	0.	0.021	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/77-08/05/77	2 ##	2.75	2.75	5.	0.5	10.125	3.182	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/14/77-08/05/77	2	35.	35.	40.	30.	50.	7.071	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/77-08/05/77	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/77-08/05/77	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/77-08/05/77	2	3.5	3.5	5.	2.	4.5	2.121	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/14/77-08/05/77	2	70.	70.	104.	36.	2312.	48.083	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/77-08/05/77	2	12.	12.	20.	4.	128.	11.314	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/77-08/05/77	2	7.	7.	7.	7.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/14/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	06/14/77-08/05/77	2	5.	5.	8.	2.	18.	4.243	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	06/14/77-08/05/77	2	0.602	0.602	0.903	0.301	0.181	0.426	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			4.								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/77-08/05/77	2	142.	142.	154.	130.	288.	16.971	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/14/77-08/05/77	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0311

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	1	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	0.2	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			
00946	SULFATE, DISSOLVED (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			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	50.	2	0	0.00	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			
01025	CADMIUM, DISSOLVED	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			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	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			
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
		Drinking Water	15.	2	1	0.50	1	0	0.00				1	1	1.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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			
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			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	1	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	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

Station Inventory for Station: ZION0312

NPS Station ID: ZION0312 LAT/LON: 37.363892/-113.333615 Agency: 21UTAH Date Created: 11/24/90
Location: SOUTH ASH CK AT USGS 09406700 BL CNFL/MILL/CKS/ FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 495075
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.90 On/Off RF1:
RF3 Index: 15010008002914.54 RF3 Mile Point: 17.03 Distance from RF3: 0.08 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0312

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/25/93-06/25/93	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/25/93-06/25/93	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/25/93-06/25/93	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/25/93-06/25/93	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/25/93-06/25/93	1	153.	153.	153.	153.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/25/93-06/25/93	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/25/93-06/25/93	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/25/93-06/25/93	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/25/93-06/25/93	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/25/93-06/25/93	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/25/93-06/25/93	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/25/93-06/25/93	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/25/93-06/25/93	1	64.	64.	64.	64.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/25/93-06/25/93	1	79.	79.	79.	79.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/25/93-06/25/93	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/25/93-06/25/93	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/25/93-06/25/93	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/25/93-06/25/93	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/25/93-06/25/93	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/25/93-06/25/93	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/25/93-06/25/93	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/25/93-06/25/93	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/25/93-06/25/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	06/25/93-06/25/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/25/93-06/25/93	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/25/93-06/25/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/25/93-06/25/93	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/25/93-06/25/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/25/93-06/25/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/25/93-06/25/93	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/25/93-06/25/93	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/25/93-06/25/93	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/25/93-06/25/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/25/93-06/25/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/25/93-06/25/93	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/25/93-06/25/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/25/93-06/25/93	1	94.	94.	94.	94.	0.	0.	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	06/25/93-06/25/93	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: ZION0312

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/25/93-06/25/93	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: ZION0312

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
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			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00							1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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			
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			
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: ZION0313

NPS Station ID: ZION0313 LAT/LON: 37.363892/-113.333615 Agency: 112WRD Date Created: / /
Location: SOUTH ASH CR BLW MILL CR NR PINTURA UTAH FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 09406700
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008002417.40 RF3 Mile Point: 18.87 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0313

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/03/82	81	9.	9.568	23.	0.	31.648	5.626	2.	5.	14.75	17.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-05/11/82	2	19.	19.	29.	9.	200.	14.142	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/11/82	2	626.	626.	630.	622.	32.	5.657	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	08/02/71-08/26/74	19	3.	5.079	26.	0.6	50.003	7.071	0.9	1.	4.	23.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/74-08/03/82	65	3.	6.932	48.	0.5	86.562	9.304	1.	2.	8.5	20.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/03/82	83	220.	206.639	300.	2.	3075.965	55.461	155.	180.	240.	260.
00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/11/82	2	9.35	9.35	10.5	8.2	2.645	1.626	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-05/11/82	2	8.35	8.35	8.6	8.1	0.125	0.354	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-05/11/82	2	8.282	8.282	8.6	8.1	0.134	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/11/82	2	0.005	0.005	0.008	0.003	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/11/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-05/11/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/11/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/11/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/11/82	2	0.06	0.06	0.12	0.	0.007	0.085	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/11/82	2	0.02	0.02	0.04	0.	0.001	0.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/11/82	2	83.	83.	92.	74.	162.	12.728	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/11/82	2	23.5	23.5	26.	21.	12.5	3.536	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/11/82	2	5.9	5.9	6.5	5.3	0.72	0.849	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/11/82	2	4.1	4.1	4.4	3.8	0.18	0.424	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-05/11/82	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-05/11/82	2	9.5	9.5	10.	9.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/11/82	2	0.45	0.45	0.6	0.3	0.045	0.212	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/11/82	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/11/82	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/11/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/11/82	2	23.5	23.5	25.	22.	4.5	2.121	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/11/82	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-08/17/81	1	56.	56.	56.	56.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-08/17/81	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-08/17/81	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

EPA Water Quality Criteria Analysis for Station: ZION0313

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00				1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
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			

& - 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 3/19 - Station ZION0313

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/03/82	54	8.5	9.667	23.	0.	42.491	6.518	1.	4.	16.	18.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/74-08/03/82	41	2.	3.217	19.	0.5	12.771	3.574	0.84	1.	3.	7.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/03/82	54	225.	207.704	300.	2.	3716.175	60.96	147.5	185.	241.25	257.5

** - 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 #2: 3/20 to 5/09 - Station ZION0313

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/03/82	14	8.	8.107	15.	4.	8.93	2.988	4.5	5.75	9.5	13.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/74-08/03/82	12	8.	14.808	48.	0.7	245.823	15.679	0.79	4.25	28.5	44.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/03/82	15	225.	225.333	300.	150.	2090.952	45.727	165.	185.	270.	288.

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0313

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/03/82	13	10.	10.731	17.	5.	9.651	3.107	6.2	8.75	12.5	16.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/74-08/03/82	12	9.	11.75	26.	2.	66.932	8.181	2.9	6.	20.5	25.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/03/82	14	180.	182.5	250.	130.	964.423	31.055	142.5	163.75	190.	245.

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

Station Inventory for Station: ZION0314

NPS Station ID: ZION0314
LAT/LON: 37.350309/-113.349004
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA503R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_03 /5075806
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Pintura UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0314

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	1	620.	620.	620.	620.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/80-07/11/80	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	1	15.9	15.9	15.9	15.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	1	24.72	24.72	24.72	24.72	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/11/80-07/11/80	1	111.	111.	111.	111.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	1	1.694	1.694	1.694	1.694	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/11/80-07/11/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
50761	INVALID PARAMETER	07/11/80-07/11/80	1	52.6	52.6	52.6	52.6	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	1	6900.	6900.	6900.	6900.	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: ZION0314

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0315

NPS Station ID: ZION0315
LAT/LON: 37.191670/-113.354171
Agency: 112WRD
Date Created: 10/31/81
Location: VIRGIN RIVER LOWER SECT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371100113211501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008002
RF1 Mile Point: 2.000
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008001203.98
RF3 Mile Point: 4.78
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0315

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/75-02/03/75	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/03/75-02/03/75	1	2000.	2000.	2000.	2000.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/03/75-02/03/75	1	281.	281.	281.	281.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	02/03/75-02/03/75	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/03/75-02/03/75	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/03/75-02/03/75	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/03/75-02/03/75	1	500.	500.	500.	500.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/03/75-02/03/75	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/03/75-02/03/75	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/03/75-02/03/75	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/03/75-02/03/75	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	02/03/75-02/03/75	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	02/03/75-02/03/75	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/03/75-02/03/75	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/03/75-02/03/75	1	310.	310.	310.	310.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	02/03/75-02/03/75	1	320.	320.	320.	320.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/03/75-02/03/75	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/03/75-02/03/75	1	17.	17.	17.	17.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/03/75-02/03/75	1	440.	440.	440.	440.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	02/03/75-02/03/75	1	1200.	1200.	1200.	1200.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	02/03/75-02/03/75	1	1.63	1.63	1.63	1.63	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: ZION0315

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	1	1.00	1	1	1.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0316

NPS Station ID: ZION0316
LAT/LON: 37.267503/-113.369727
Agency: 21UTAH
Date Created: 10/26/96
Location: LEEDS CK AT FS BNDY
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495034
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0316

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/03/96-12/11/96	11	15.5	14.027	18.8	7.7	13.12	3.622	7.84	10.3	16.3	18.38
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/03/96-12/11/96	11	4.	8.109	52.	0.2	216.571	14.716	0.56	2.	4.	43.4
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/03/96-12/11/96	11	2.9	5.073	19.4	0.6	31.728	5.633	0.68	1.5	4.8	17.86
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/03/96-12/11/96	11	297.	301.727	345.	279.	399.218	19.98	280.	288.	316.	341.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/03/96-12/11/96	11	299.	301.545	330.	274.	284.073	16.854	276.	294.	315.	329.4
00300	OXYGEN, DISSOLVED MG/L	04/03/96-12/11/96	11	8.5	8.809	11.2	7.7	1.043	1.021	7.74	8.	9.5	10.88
00400	PH (STANDARD UNITS)	04/03/96-12/11/96	11	8.48	8.481	8.75	8.2	0.023	0.15	8.232	8.4	8.6	8.73
00400	CONVERTED PH (STANDARD UNITS)	04/03/96-12/11/96	11	8.48	8.457	8.75	8.2	0.023	0.152	8.232	8.4	8.6	8.73
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/03/96-12/11/96	11	0.003	0.003	0.006	0.002	0.	0.001	0.002	0.003	0.004	0.006
00403	PH, LAB, STANDARD UNITS SU	04/03/96-12/11/96	11	8.4	8.391	8.6	7.9	0.035	0.187	7.98	8.3	8.5	8.58
00403	CONVERTED PH, LAB, STANDARD UNITS	04/03/96-12/11/96	11	8.4	8.345	8.6	7.9	0.037	0.193	7.98	8.3	8.5	8.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/03/96-12/11/96	11	0.004	0.005	0.013	0.003	0.	0.003	0.003	0.003	0.005	0.011
00405	CARBON DIOXIDE (MG/L AS CO2)	04/03/96-12/11/96	11	1.	1.273	4.	1.	0.818	0.905	1.	1.	1.	3.4
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	11	149.	149.545	162.	140.	37.873	6.154	140.6	144.	153.	160.6
00440	BICARBONATE ION (MG/L AS HCO3)	04/03/96-12/11/96	11	182.	182.364	198.	170.	58.255	7.632	170.8	176.	186.	196.2
00445	CARBONATE ION (MG/L AS CO3)	04/03/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/03/96-12/11/96	11	11.	12.	24.	2.	39.	6.245	2.8	6.	16.	22.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/03/96-12/11/96	11 ##	0.025	0.034	0.077	0.025	0.	0.019	0.025	0.025	0.025	0.075
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/03/96-12/11/96	11	0.02	0.032	0.08	0.01	0.001	0.025	0.01	0.01	0.05	0.078
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/03/96-12/11/96	11	0.04	0.044	0.085	0.02	0.	0.02	0.02	0.03	0.06	0.08
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/03/96-12/11/96	11	0.02	0.022	0.036	0.01	0.	0.007	0.012	0.02	0.03	0.035
00900	HARDNESS, TOTAL (MG/L AS CACO3)	04/03/96-12/11/96	11	144.	146.909	167.	135.	73.891	8.596	136.	142.	152.	164.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/03/96-12/11/96	11	37.3	37.791	44.5	35.	6.847	2.617	35.08	36.2	39.2	43.44
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/03/96-12/11/96	11	12.7	12.8	14.	11.6	0.664	0.815	11.62	12.1	13.6	13.94
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/03/96-12/11/96	11	7.33	7.433	8.36	6.8	0.271	0.521	6.814	7.1	7.7	8.348
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/03/96-12/11/96	11 ##	0.5	0.823	1.64	0.5	0.163	0.403	0.5	0.5	1.1	1.554
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/03/96-12/11/96	11	3.	3.136	5.	0.25	2.592	1.61	0.25	3.	4.	5.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/03/96-12/11/96	11 ##	5.	7.127	13.1	5.	9.386	3.064	5.	5.	10.1	12.5
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/22/96-10/30/96	3	37.	37.333	40.	35.	6.333	2.517	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/22/96-10/30/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/22/96-10/30/96	3 ##	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/22/96-10/30/96	3 ##	10.	16.	28.	10.	108.	10.392	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/22/96-10/30/96	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/22/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/22/96-10/30/96	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0316

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/22/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/22/96-10/30/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/03/96-12/11/96	11	196.	193.818	202.	180.	55.564	7.454	180.8	188.	202.	202.
71830	HYDROXIDE ION (MG/L AS OH)	04/03/96-12/11/96	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/22/96-10/30/96	3 ##	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: ZION0316

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00400	PH	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	250.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	2	0	0.00				1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5.	3	0	0.00	2	0	0.00				1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	1300.	3	0	0.00	2	0	0.00				1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	15.	3	0	0.00	2	0	0.00				1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	100.	3	0	0.00	2	0	0.00				1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	5000.	3	0	0.00	2	0	0.00				1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	50.	3	0	0.00	2	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water	2.	3	0	0.00	2	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0317

NPS Station ID: ZION0317
LAT/LON: 37.267503/-113.370004
Agency: 112WRD
Date Created: / /
Location: LEEDS CREEK NEAR LEEDS UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09408000
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008004700.50
RF3 Mile Point: 2.32
Distance from RF3: 0.00
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0317

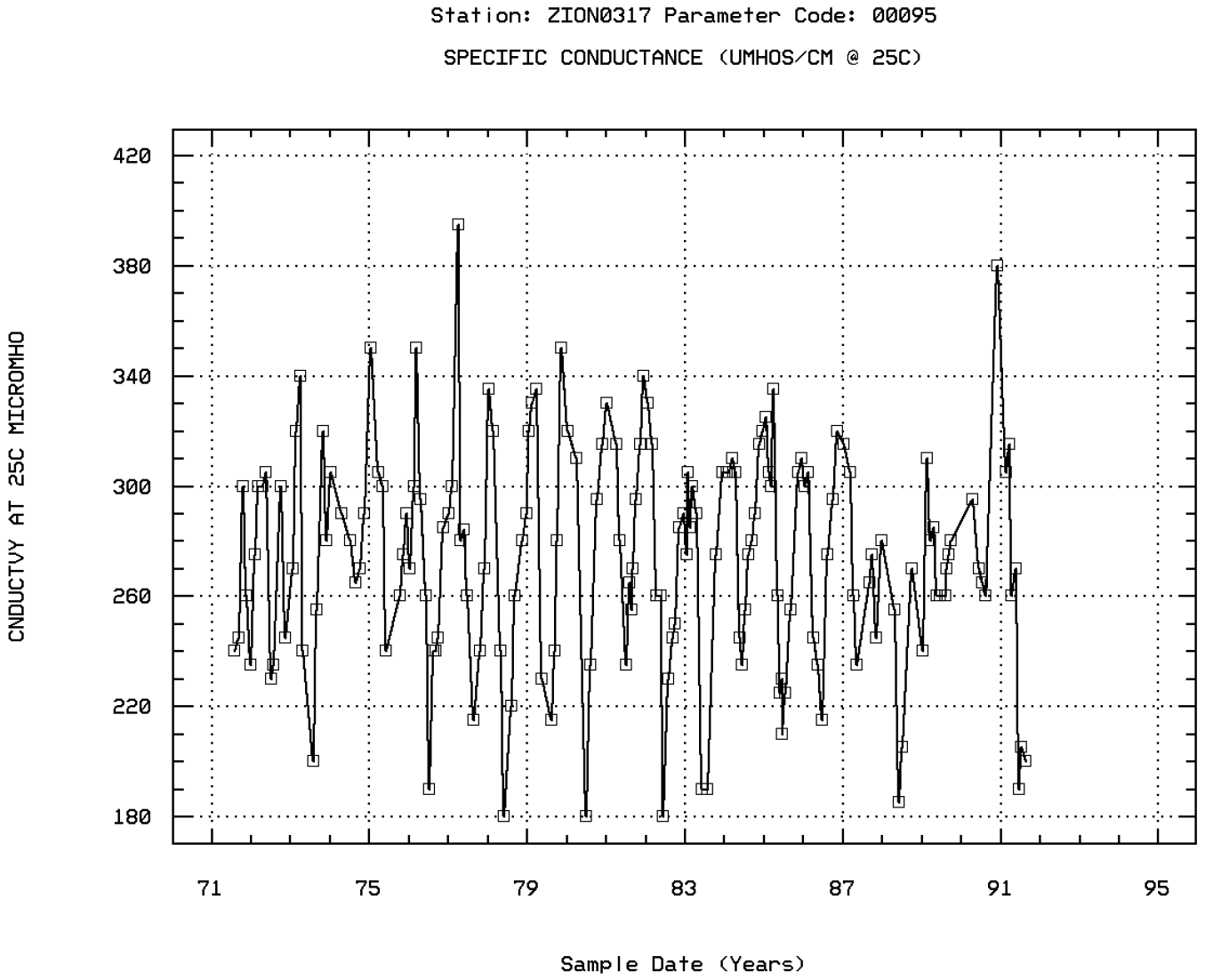
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	169	10.	10.444	28.	0.	39.605	6.293	2.5	5.25	15.	19.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	70	19.25	19.399	36.	1.	80.551	8.975	4.05	14.	26.25	30.
00025	BAROMETRIC PRESSURE (MM OF HG)	08/24/81-08/24/81	1	656.	656.	656.	656.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	08/02/71-08/26/74	27	4.	5.407	28.	2.	29.558	5.437	2.	3.	5.	11.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	151	5.	6.192	35.	2.	27.796	5.272	3.	3.	7.	10.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	170	275.	274.171	395.	180.	1638.841	40.483	220.5	245.	305.	320.
00300	OXYGEN, DISSOLVED MG/L	08/24/81-08/24/81	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-08/24/81	1	8.25	8.25	8.25	8.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-08/24/81	1	8.25	8.25	8.25	8.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/24/81	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-08/24/81	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-08/24/81	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-08/24/81	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-08/24/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/24/81-08/24/81	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-08/24/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-08/24/81	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-08/24/81	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-08/24/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-08/24/81	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-08/24/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-08/24/81	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-08/24/81	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-08/24/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-08/24/81	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-08/24/81	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-08/24/81	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-08/24/81	1	40.	40.	40.	40.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-08/24/81	1	175.	175.	175.	175.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-08/24/81	1	1.41	1.41	1.41	1.41	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-08/24/81	1	0.24	0.24	0.24	0.24	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: ZION0317

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

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



LEEDS CREEK NEAR LEEDS UTAH

Annual Analysis for 1971 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	3	6.	10.333	19.	6.	56.333	7.506	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	4	252.5	261.25	300.	240.	739.583	27.195	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	11	8.	10.5	22.	0.	58.3	7.635	0.7	4.	17.5	21.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	9	275.	269.444	305.	230.	1077.778	32.83	230.	235.	300.	305.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	8	8.75	7.875	14.	3.	14.196	3.768	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	8	275.	278.125	340.	200.	2213.839	47.051	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	6	15.	14.833	28.	3.5	85.767	9.261	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	6	285.	283.333	305.	265.	216.667	14.72	**	**	**	**

** - 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 1975 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	7	4.5	5.5	15.	0.	24.333	4.933	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	7	3.	4.	7.	2.	3.333	1.826	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	7	290.	288.571	350.	240.	1255.952	35.439	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	9	11.5	11.167	23.	1.	41.875	6.471	1.	6.	15.	23.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	10	3.5	3.6	5.	3.	0.489	0.699	3.	3.	4.	4.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	10	265.	267.5	350.	190.	1890.278	43.477	195.	240.	296.25	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 1977 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	8	13.	12.063	22.5	1.5	84.174	9.175	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	9	2.	2.556	4.	2.	0.528	0.726	2.	2.	3.	4.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	9	280.	281.556	395.	215.	2505.528	50.055	215.	250.	295.	395.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	5	7.	7.4	12.5	1.5	23.425	4.84	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	8	6.	9.25	21.	2.	53.643	7.324	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	8	270.	265.625	335.	180.	2667.411	51.647	**	**	**	**

** - 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 1979 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	8	11.25	9.938	17.	1.5	35.031	5.919	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	8	7.	9.375	19.	5.	25.696	5.069	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	8	300.	287.5	350.	215.	2842.857	53.318	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	6	8.75	10.417	18.	5.5	23.142	4.811	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	6	11.	14.	35.	5.	124.4	11.153	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	6	302.5	275.833	320.	180.	3174.167	56.34	**	**	**	**

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

Annual Analysis for 1981 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	11	8.	10.864	22.	3.	33.105	5.754	3.6	7.	16.5	21.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	1	23.4	23.4	23.4	23.4	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	12	3.5	4.333	7.	3.	2.606	1.614	3.	3.	5.75	7.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	10	287.5	290.	340.	235.	1194.444	34.561	237.	262.5	318.75	339.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	10	7.5	9.25	18.	3.	27.569	5.251	3.05	5.	14.5	17.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	10	5.	5.	10.	3.	5.111	2.261	3.	3.	6.25	9.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	10	260.	264.5	330.	180.	1874.722	43.298	185.	241.25	296.25	328.5

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

Annual Analysis for 1983 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	7	5.	6.786	11.5	3.5	12.071	3.474	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	2	12.	12.	19.5	4.5	112.5	10.607	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	9	10.	14.444	29.	5.	89.778	9.475	5.	6.5	24.5	29.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	9	285.	268.333	305.	190.	2100.	45.826	190.	232.5	302.5	305.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	12	14.5	13.125	25.	1.	52.097	7.218	1.6	6.5	18.875	23.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	11	17.5	18.318	32.	2.	89.914	9.482	2.4	14.	27.	31.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	12	4.	4.333	7.	3.	2.061	1.435	3.	3.	5.75	6.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	12	297.5	286.667	320.	235.	824.242	28.71	238.	260.	308.75	318.5

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

Annual Analysis for 1985 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	12	9.25	9.542	21.	1.	40.794	6.387	1.3	4.125	13.625	20.55
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	12	19.	18.917	36.	6.	81.583	9.032	6.6	11.125	25.	33.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	12	6.	6.083	10.	3.	5.174	2.275	3.	4.25	8.	9.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	12	280.	273.75	335.	210.	1964.205	44.319	214.5	226.25	308.75	332.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	8	11.25	10.938	20.	2.5	38.103	6.173	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	8	18.	16.875	28.	3.	63.268	7.954	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	8	5.	6.	9.	4.	5.143	2.268	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	8	285.	273.75	320.	215.	1433.929	37.867	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	9	12.	9.778	17.	1.	32.944	5.74	1.	4.	14.5	17.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	9	19.	16.444	27.	3.	76.278	8.734	3.	8.	24.	27.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	9	5.	5.556	9.	3.	4.028	2.007	3.	4.	7.	9.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	8	270.	272.5	315.	235.	757.143	27.516	**	**	**	**

** - 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 1988 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	5	13.	11.3	14.5	6.	11.45	3.384	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	5	29.	24.6	33.	12.	90.3	9.503	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	5	11.	11.4	21.	4.	47.3	6.877	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	4	230.	228.75	270.	185.	1622.917	40.285	**	**	**	**

** - 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 1989 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	10	13.	13.35	24.5	5.	35.892	5.991	5.1	8.25	17.25	23.85
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	10	23.	21.65	31.5	2.	72.669	8.525	3.2	17.75	27.	31.35
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	10	4.	3.8	6.	2.	1.733	1.317	2.	2.75	5.	5.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	10	272.5	272.	310.	240.	356.667	18.886	242.	260.	281.25	307.5

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

Annual Analysis for 1990 - Station ZION0317

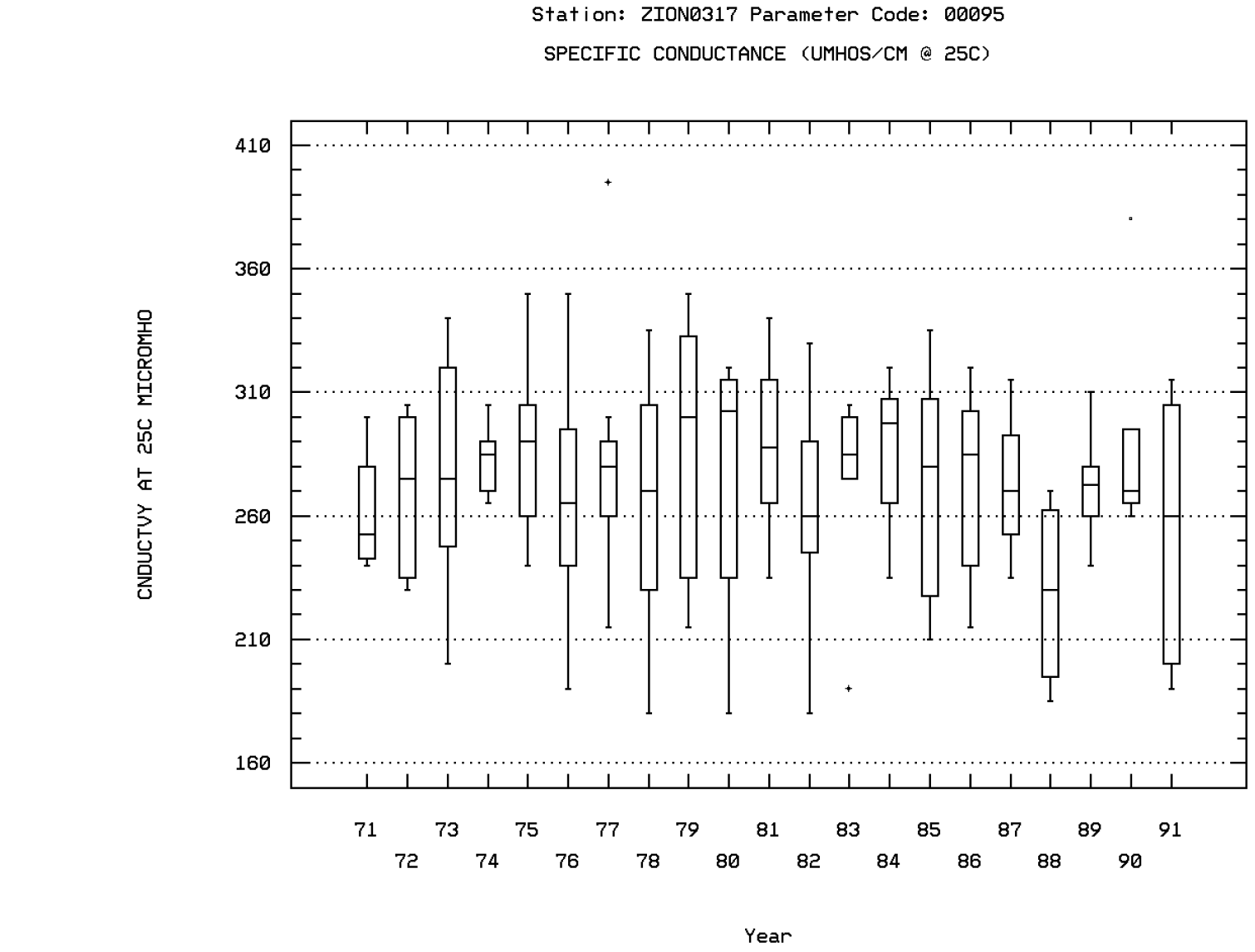
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	6	13.5	13.167	22.	3.	42.167	6.494	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	6	25.5	22.833	30.	11.	58.967	7.679	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	6	3.	2.667	3.	2.	0.267	0.516	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	5	270.	294.	380.	260.	2492.5	49.925	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	8	8.25	9.5	24.	1.	50.929	7.136	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	6	21.25	20.417	35.	1.	150.442	12.265	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	8	5.	5.5	10.	2.	8.857	2.976	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	7	260.	249.286	315.	190.	2645.238	51.432	**	**	**	**

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



LEEDS CREEK NEAR LEEDS UTAH

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	121	8.5	10.	28.	0.	45.296	6.73	2.	4.	14.75	20.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	47	19.	17.764	35.	1.	90.561	9.516	3.	11.	26.	29.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	105	4.	5.19	35.	2.	20.56	4.534	2.	3.	6.	8.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	120	280.	277.5	380.	180.	1483.193	38.512	225.5	251.25	305.	320.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	25	8.5	8.66	16.5	1.5	14.14	3.76	3.3	6.	10.75	15.2
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	10	18.	17.6	25.	12.	18.711	4.326	12.	13.5	20.	24.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	23	6.	7.783	21.	2.	29.087	5.393	2.4	4.	9.	18.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	27	290.	291.481	395.	240.	1232.336	35.105	244.	260.	310.	336.

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

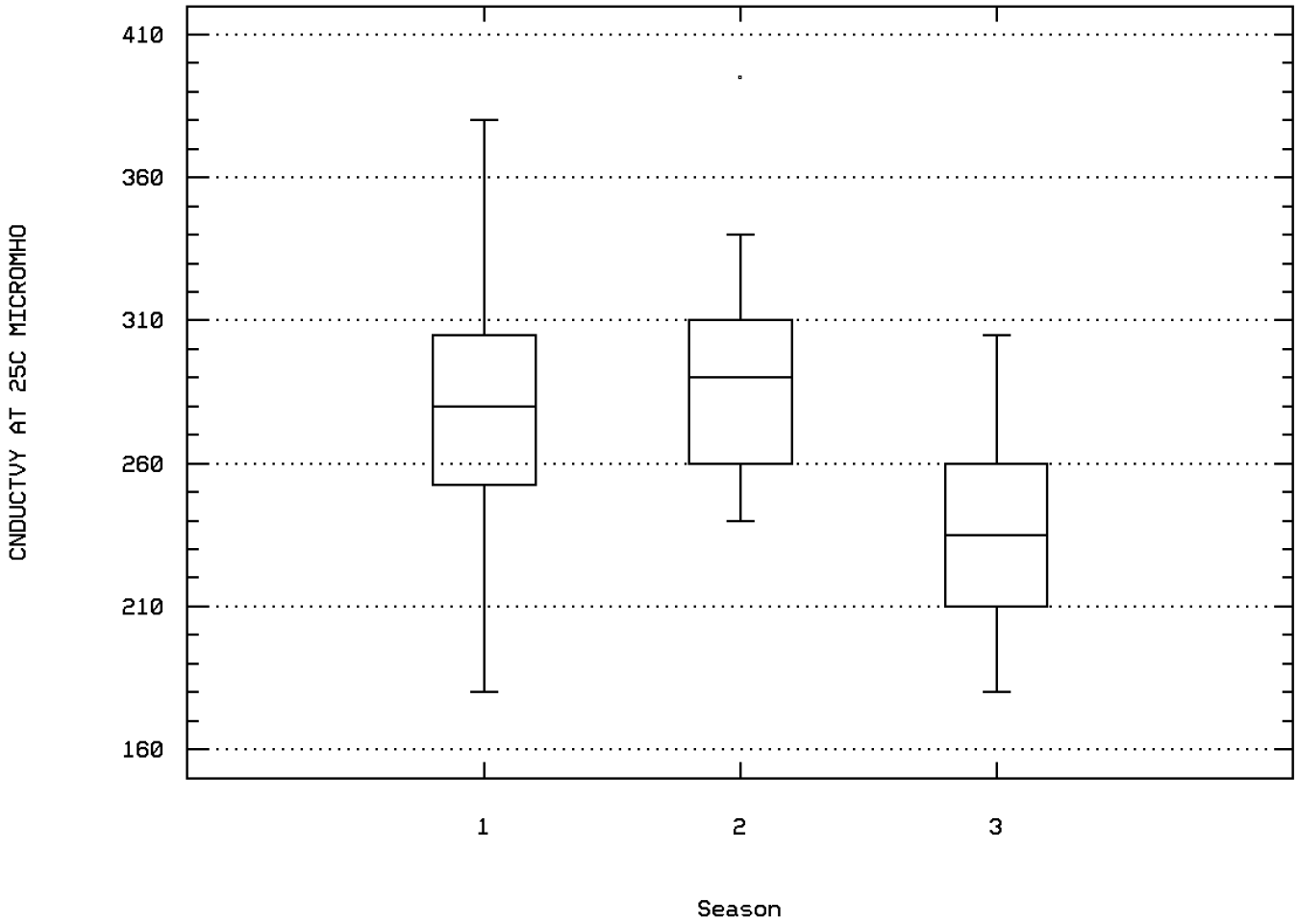
Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0317

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/71-08/20/91	23	14.	14.717	25.	8.	16.155	4.019	10.2	11.	17.	21.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-08/20/91	13	27.	26.692	36.	17.5	31.189	5.585	18.1	22.	31.75	34.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/20/91	23	7.	9.174	29.	2.	46.514	6.82	3.4	5.	10.	21.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/02/71-08/20/91	23	235.	236.478	305.	180.	1196.625	34.592	182.	210.	260.	278.4

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

Station: ZION0317 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



LEEDS CREEK NEAR LEEDS UTAH

Station Inventory for Station: ZION0318

NPS Station ID: ZION0318
LAT/LON: 37.178337/-113.376393
Agency: 112WRD
Date Created: 12/02/81
Location: VIRGIN R. ABOVE LEEDS CREEK, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371042113223501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008002
RF1 Mile Point: 0.140
Distance from RF1: 10.20
On/Off RF1: ON
RF3 Index: 15010008048500.00
RF3 Mile Point: 0.82
Distance from RF3: 0.54
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0318

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/31/81-08/23/82	5	12.5	16.	27.5	9.	58.625	7.657	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/23/82	5	21.5	22.	33.5	8.5	109.5	10.464	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/31/81-08/23/82	5	683.	683.	693.	674.	51.5	7.176	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/31/81-08/23/82	5	153.	222.4	550.	69.	36302.8	190.533	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/31/81-08/23/82	5	2110.	2067.	3140.	815.	842095.	917.657	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/31/81-08/23/82	5	9.3	9.04	10.8	6.7	2.893	1.701	**	**	**	**
00400	PH (STANDARD UNITS)	08/31/81-08/23/82	5	8.	7.96	8.	7.9	0.003	0.055	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/31/81-08/23/82	5	8.	7.957	8.	7.9	0.003	0.055	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/31/81-08/23/82	5	0.01	0.011	0.013	0.01	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/31/81-08/23/82	5	8.	7.94	8.1	7.7	0.023	0.152	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/31/81-08/23/82	5	8.	7.917	8.1	7.7	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/31/81-08/23/82	5	0.01	0.012	0.02	0.008	0.	0.005	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/31/81-08/23/82	5	0.6	0.54	0.8	0.3	0.038	0.195	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/11/82-05/07/82	2	0.045	0.045	0.06	0.03	0.	0.021	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/31/81-08/23/82	5 ##	0.01	0.01	0.02	0.005	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/31/81-08/23/82	5	630.	764.	1700.	300.	300730.	548.389	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/31/81-08/23/82	5	170.	236.6	610.	86.	45546.8	213.417	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/31/81-08/23/82	5	43.	42.	55.	21.	169.	13.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/31/81-08/23/82	5	160.	198.	380.	60.	14020.	118.406	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/31/81-08/23/82	5	3.5	3.38	6.1	1.6	3.447	1.857	**	**	**	**
00932	SODIUM, PERCENT	08/31/81-08/23/82	5	42.	36.8	52.	17.	183.7	13.554	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/31/81-08/23/82	5	16.	15.98	28.	4.9	68.052	8.249	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/31/81-08/23/82	5	220.	306.6	660.	83.	47942.8	218.958	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/31/81-08/23/82	5	310.	520.	1500.	130.	309650.	556.462	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/31/81-08/23/82	5	0.4	0.36	0.5	0.2	0.013	0.114	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/31/81-08/23/82	5	14.	13.76	20.	9.8	15.588	3.948	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/31/81-08/23/82	5	370.	450.	920.	130.	86650.	294.364	**	**	**	**
39251	PCNS IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/31/81-08/31/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39389	ENDOSULFAN IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	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: ZION0318

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/81-08/31/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39481	METHOXYCHLOR IN BOTTOM DEPOSITS (UG/KG DRY SOL.)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39758	MIREX, BOTTOM MATERIAL (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/31/81-08/23/82	5	1360.	1478.2	2680.	511.	680136.2	824.704	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/31/81-08/23/82	5	592.	651.8	1110.	339.	90007.7	300.013	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/31/81-08/23/82	5	1.85	2.01	3.64	0.69	1.258	1.121	**	**	**	**
81886	PERTHANE IN SEDIMENT DRY WEIGHT UG/KG	08/31/81-08/31/81	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0318

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	2	0.40	4	2	0.50	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	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: ZION0319

NPS Station ID: ZION0319 LAT/LON: 37.179726/-113.378337 Agency: 21UTAH Date Created: 05/17/86
Location: VIRGIN R AT QUAIL CK BYPASS (DIVERTED-PIPED WTR) FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 495039
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: UPPER COLORADO RIVER ECO Region:
RF1 Index: 15010008023 RF1 Mile Point: 0.010 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 15010008083500.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:
UTAH STATE CLASSIFICATION-1C,3C,4 USGS 7.5 QUADRANGLE-HURRICANE 29400

Parameter Inventory for Station: ZION0319

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: ZION0320

NPS Station ID: ZION0320
LAT/LON: 37.427003/-113.379003
Agency: 11NPSWRD
Date Created: 08/09/97
Location: CDCA505R
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): ZION_NURE_06 /5075808
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: MIDDLE COLORADO RIVER
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:
The monitoring station is located on the Grass Valley UT 7.5 minute series (topographic) quadrangle. The site is at a stream and is outside Zion National Park. Samples were filtered through a 0.8 um filter at the site. Data are from the "U.S. Geological Survey National Geochemical Database: National Uranium Resource Evaluation Data for the Conterminous United States" 1994 CD-ROM by J.D. Hoffman and K. Buttleman (USGS Digital Data Series DDS-18-A). The database includes sediment; soil; surface water; and ground water data. The "UNIQID" field entry was used to create the secondary station name. The "SRLID" field entry (Savannah River Laboratory sample number) was used to create the station location. The samples were analyzed by Savannah River Laboratory. Data processed and uploaded to STORET by J. Chris Echohawk; National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516; fax. 970-225-9965).

Parameter Inventory for Station: ZION0320

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/80-07/11/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/11/80-07/11/80	1	590.	590.	590.	590.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/11/80-07/11/80	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/80-07/11/80	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/11/80-07/11/80	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/11/80-07/11/80	1	9.9	9.9	9.9	9.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/11/80-07/11/80	1	25.58	25.58	25.58	25.58	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	07/11/80-07/11/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	07/11/80-07/11/80	1	1.57	1.57	1.57	1.57	0.	0.	**	**	**	**
50700	INVALID PARAMETER	07/11/80-07/11/80	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
50760	INVALID PARAMETER	07/11/80-07/11/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
82041	HELIUM, DISSOLVED IN WATER (UG/L AS HE)	07/11/80-07/11/80	1	6200.	6200.	6200.	6200.	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: ZION0320

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0321

NPS Station ID: ZION0321
LAT/LON: 37.178615/-113.379449
Agency: 112WRD
Date Created: 12/19/81
Location: LEEDS CREEK AT MOUTH, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 371043113224601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 15.680
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008001200.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0321

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-08/23/82	4	19.25	19.625	29.5	10.5	86.396	9.295	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/19/81-08/23/82	4	26.5	25.5	33.5	15.5	79.333	8.907	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/19/81-08/23/82	5	684.	683.6	692.	677.	35.3	5.941	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-08/23/82	4	2.	1.75	2.	1.	0.25	0.5	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/81-08/23/82	4	1505.	1500.	1540.	1450.	1400.	37.417	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/81-08/23/82	4	8.6	8.475	9.6	7.1	1.303	1.141	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-08/23/82	4	8.	8.	8.1	7.9	0.007	0.082	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-08/23/82	4	8.	7.994	8.1	7.9	0.007	0.082	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-08/23/82	4	0.01	0.01	0.013	0.008	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-08/23/82	4	7.85	7.85	7.9	7.8	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-08/23/82	4	7.847	7.847	7.9	7.8	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-08/23/82	4	0.014	0.014	0.016	0.013	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-08/23/82	4	0.6	0.65	0.9	0.5	0.037	0.191	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/20/81-05/07/82	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/81-08/23/82	4 ##	0.01	0.009	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-08/23/82	4	775.	775.	820.	730.	1366.667	36.968	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-08/23/82	4	172.	171.	180.	160.	70.667	8.406	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-08/23/82	4	84.5	85.	90.	81.	14.	3.742	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-08/23/82	4	64.5	63.5	65.	60.	5.667	2.38	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-08/23/82	4	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-08/23/82	4	15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-08/23/82	4	4.95	5.025	5.4	4.8	0.069	0.263	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/81-08/23/82	4	35.	35.5	41.	31.	17.	4.123	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-08/23/82	4	550.	575.	670.	530.	4100.	64.031	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/19/81-08/23/82	4	0.4	0.4	0.5	0.3	0.007	0.082	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-08/23/82	4	27.5	28.	30.	27.	2.	1.414	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/19/81-08/23/82	4	265.	262.5	280.	240.	291.667	17.078	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/19/81-08/23/82	4	1105.	1112.5	1200.	1040.	4358.333	66.018	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/19/81-08/23/82	4	4.805	4.723	5.69	3.59	0.746	0.864	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/19/81-08/23/82	4	1.505	1.513	1.63	1.41	0.008	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0321

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	4	1.00	3	3	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0322

NPS Station ID: ZION0322
LAT/LON: 37.180838/-113.380282
Agency: 21UTAH
Date Created: 05/17/86
Location: QUAIL CK RES 001
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495035
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: UPPER COLORADO RIVER
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 15.080
Distance from RF1: 4.90
On/Off RF1: ON
RF3 Index: 15010008044000.00
RF3 Mile Point: 2.66
Distance from RF3: 0.17
On/Off RF3:
Description:
UTAH STATE CLASSIFICATION-1C,2B,3B,4
USGS 7.5 QUADRANGLE-HURRICANE 29400

Parameter Inventory for Station: ZION0322

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	35	17.	17.774	27.2	8.6	31.523	5.614	10.82	12.7	24.4	25.14
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/08/91-08/08/91	4	28.	28.	28.	28.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/09/95	14	1.	3.336	13.	0.3	19.662	4.434	0.35	0.7	4.75	12.
00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	11	4.2	4.182	6.3	2.3	1.74	1.319	2.32	3.	5.2	6.08
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	35	926.	956.743	1306.	771.	19152.373	138.392	782.6	862.	1034.	1196.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	8	1051.	1088.375	1260.	995.	11555.411	107.496	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	35	7.5	6.911	20.	0.	10.676	3.267	2.58	5.9	7.9	8.96
00335	COD, .025N K2CR2O7 MG/L	08/19/86-05/31/89	13 ##	7.	7.538	20.	5.	14.769	3.843	5.	6.	7.	14.8
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	35	7.9	7.846	8.7	6.5	0.157	0.396	7.42	7.6	8.1	8.2
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	35	7.9	7.576	8.7	6.5	0.231	0.481	7.42	7.6	8.1	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	35	0.013	0.027	0.316	0.002	0.003	0.055	0.006	0.008	0.025	0.039
00403	PH, LAB, STANDARD UNITS SU	06/23/87-08/08/91	7	8.1	8.	8.2	7.8	0.027	0.163	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/23/87-08/08/91	7	8.1	7.973	8.2	7.8	0.027	0.166	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/87-08/08/91	7	0.008	0.011	0.016	0.006	0.	0.004	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/08/91	11	2.	2.636	5.	1.	2.055	1.433	1.	2.	4.	5.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	15	139.	145.8	185.	114.	507.6	22.53	118.2	127.	166.	178.4
00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/08/91	11	195.	183.182	226.	139.	939.364	30.649	140.8	154.	211.	223.4
00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/08/91	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	14 ##	1.75	8.321	31.	1.5	144.331	12.014	1.5	1.5	12.	30.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	35 ##	0.025	0.044	0.3	0.025	0.003	0.053	0.025	0.025	0.05	0.077
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-05/31/89	13 ##	0.005	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.015	0.026
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	4 ##	0.005	0.011	0.03	0.005	0.	0.013	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-05/31/89	13	0.28	0.354	0.74	0.16	0.039	0.197	0.164	0.185	0.535	0.684
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	4	0.445	0.505	0.74	0.39	0.026	0.161	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	19	0.19	0.25	1.2	0.05	0.098	0.314	0.05	0.05	0.22	1.
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	22	0.1	0.132	0.3	0.01	0.013	0.115	0.01	0.01	0.225	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	35 ##	0.005	0.08	0.72	0.003	0.039	0.197	0.003	0.005	0.015	0.556
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/22/91-08/09/95	22 ##	0.005	0.007	0.015	0.005	0.	0.004	0.005	0.005	0.006	0.014
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-05/31/89	13 ##	0.003	0.013	0.09	0.003	0.001	0.025	0.003	0.003	0.008	0.07
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-05/31/89	13	1.9	2.269	4.4	1.6	0.662	0.814	1.6	1.75	2.6	3.96
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	16	426.5	454.75	626.	366.	6201.667	78.751	376.5	393.25	524.	600.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/09/95	16	115.	125.063	190.	89.	832.329	28.85	94.6	102.5	149.75	173.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/09/95	16	34.	34.75	41.	32.	4.733	2.176	32.	34.	35.	38.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/09/95	15	48.	48.333	59.	42.	22.667	4.761	42.6	45.	51.	57.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/09/95	15	4.2	4.573	6.	3.8	0.529	0.727	3.92	4.	5.	6.
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	8	49.5	48.5	56.	43.	22.571	4.751	**	**	**	**

** - Less than 9 observations ## - 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: ZION0322

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/08/91-08/09/95	6	41.5	43.667	53.	37.	46.267	6.802	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/09/95	15	315.	348.9	480.	248.	5232.609	72.337	269.9	300.	416.	466.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/08/91-08/08/91	2	10.05	10.05	11.2	8.9	2.645	1.626	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/09/95	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/08/91	10 ##	0.5	0.9	2.5	0.25	0.586	0.766	0.25	0.438	1.25	2.45
01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/08/91	10	55.	62.5	140.	25.	1345.833	36.686	25.	25.	90.	135.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/09/95	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/08/91	10 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/08/91	10 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/09/95	2 ##	8.	8.	10.	6.	8.	2.828	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/08/91	10 ##	10.	10.	10.	10.	0.	0.	10.	10.	10.	10.
01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/09/95	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/08/91	10 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/08/91	10	20.	160.259	1110.	0.04	116591.865	341.456	0.041	1.888	161.25	1020.
01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/08/91	10 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/08/91	10	10.	13.5	25.	5.	50.278	7.091	5.	8.75	20.	24.5
01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/09/95	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/08/91	10 ##	0.25	0.85	4.	0.25	1.725	1.313	0.25	0.25	0.813	3.85
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/22/91-08/08/91	2 ##	19.	19.	36.	2.	578.	24.042	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/22/91-08/08/91	2 ##	0.929	0.929	1.556	0.301	0.788	0.888	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			8.485								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/22/91-08/08/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	2 ##	5.	5.	8.	2.	18.	4.243	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/22/91-08/08/91	2 ##	0.602	0.602	0.903	0.301	0.181	0.426	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			4.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	8	0.65	0.85	2.1	0.1	0.489	0.699	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	14	696.	554.	992.	0.	139671.5	373.727	0.75	2.625	802.5	952.
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	08/08/91-08/09/95	5	2.	3.2	8.	1.	8.7	2.95	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/08/91	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/09/95	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/08/91	10 ##	0.1	0.08	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	33	10.	13.942	49.	0.	242.426	15.57	0.	0.	20.	43.52
74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/08/91	10	0.065	0.112	0.43	0.01	0.016	0.125	0.011	0.034	0.145	0.406

** - Less than 9 observations ## - 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: ZION0322

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	14	0	0.00	8	0	0.00				6	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	35	5	0.14	17	3	0.18				18	2	0.11			
00400	PH	Other-Hi Lim.	9.	35	0	0.00	17	0	0.00				18	0	0.00			
		Other-Lo Lim.	6.5	35	1	0.03	17	1	0.06				18	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	7	0	0.00	3	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	7	0	0.00	3	0	0.00				4	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	13	0	0.00	5	0	0.00				8	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00							4	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	13	0	0.00	5	0	0.00				8	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00							4	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	22	0	0.00	12	0	0.00				10	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	8	0	0.00	4	0	0.00				4	0	0.00			
		Drinking Water	250.	8	0	0.00	4	0	0.00				4	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	6	0	0.00	4	0	0.00				2	0	0.00			
		Drinking Water	250.	6	0	0.00	4	0	0.00				2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	15	14	0.93	9	8	0.89				6	6	1.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									

& - 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: ZION0322

Parameter				Total	Exceed	Prop.	7/01-3/19			3/20-5/09			5/10-6/30			n/a		
		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	50.	10	0	0.00	6	0	0.00				4	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	10	0	0.00	6	0	0.00				4	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	2	0	0.00									
		Drinking Water	5.	2	0	0.00	2	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	5.	10	0	0.00	6	0	0.00				4	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	10	0	0.00	6	0	0.00				4	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									
01042	COPPER, TOTAL	Fresh Acute	18.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	1300.	10	0	0.00	6	0	0.00				4	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	15.	10	0	0.00	6	0	0.00				4	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	100.	10	0	0.00	6	0	0.00				4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	5000.	10	0	0.00	6	0	0.00				4	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	50.	10	0	0.00	6	0	0.00				4	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	1	0	0.00				1	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	2.	10	0	0.00	6	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0322

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	17	20.8	19.759	27.2	10.7	36.46	6.038	11.1	14.	25.1	25.92
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	17	926.	966.588	1230.	866.	11069.382	105.211	870.	891.	1027.	1186.
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	17	7.4	6.788	20.	0.	17.487	4.182	0.96	4.35	7.8	10.32
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	17	7.9	7.765	8.2	6.5	0.174	0.417	7.14	7.55	8.1	8.12
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	17	7.9	7.457	8.2	6.5	0.275	0.524	7.14	7.55	8.1	8.12
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	17	0.013	0.035	0.316	0.006	0.005	0.073	0.008	0.008	0.028	0.103
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	9	127.	141.111	185.	114.	670.361	25.891	114.	123.5	169.	185.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	17 ##	0.025	0.055	0.3	0.025	0.004	0.066	0.025	0.025	0.052	0.14
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	17 ##	0.005	0.151	0.72	0.005	0.072	0.268	0.005	0.005	0.282	0.64
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	10	427.	460.7	590.	382.	5331.344	73.016	382.7	401.75	527.75	584.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/09/95	10	116.	127.2	166.	97.	668.4	25.853	97.3	107.5	152.	165.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/09/95	10	34.	34.9	41.	32.	6.322	2.514	32.1	33.75	35.5	40.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/09/95	9	46.	48.778	59.	42.	34.694	5.89	42.	44.	54.	59.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/09/95	9	5.	4.833	6.	3.8	0.635	0.797	3.8	4.1	5.5	6.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/09/95	9	330.	356.767	458.	248.	5714.59	75.595	248.	295.45	428.	458.
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	17	7.	12.518	44.	0.	251.63	15.863	0.	0.	19.5	43.04

** - 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 box-and-whisker plot

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0322

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	18	16.1	15.9	24.4	8.6	21.072	4.59	9.41	11.8	18.95	23.32
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	18	888.	947.444	1306.	771.	27698.026	166.427	771.9	794.5	1077.	1236.7
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	18	7.6	7.028	9.3	0.2	4.863	2.205	3.17	6.5	8.325	9.21
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	18	7.9	7.922	8.7	6.9	0.137	0.37	7.53	7.775	8.2	8.34
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	18	7.9	7.731	8.7	6.9	0.176	0.419	7.53	7.775	8.2	8.34
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	18	0.013	0.019	0.126	0.002	0.001	0.028	0.005	0.006	0.017	0.035
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	6	150.	152.833	174.	138.	249.767	15.804	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	18 ##	0.025	0.033	0.17	0.025	0.001	0.034	0.025	0.025	0.025	0.04
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	18 ##	0.005	0.012	0.05	0.003	0.	0.015	0.003	0.004	0.01	0.045
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/09/95	6	426.5	444.833	626.	366.	8819.767	93.914	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/09/95	6	115.	121.5	190.	89.	1269.5	35.63	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/09/95	6	34.5	34.5	37.	32.	2.7	1.643	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/09/95	6	48.5	47.667	51.	44.	7.067	2.658	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/09/95	6	4.	4.183	5.	4.	0.162	0.402	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/09/95	6	309.05	337.1	480.	284.5	5229.48	72.315	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	16	12.	15.456	49.	0.	244.024	15.621	0.	1.5	22.5	46.2

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

Station Inventory for Station: ZION0323

NPS Station ID: ZION0323
LAT/LON: 37.165837/-113.382504
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-14) 1BCB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370957113225701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 4.10
On/Off RF1:
RF3 Index: 15010008044000.00
RF3 Mile Point: 0.22
Distance from RF3: 0.07
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0323

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/07/65-10/07/65	1	23.3	23.3	23.3	23.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/07/65-10/07/65	1	1640.	1640.	1640.	1640.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/07/65-10/07/65	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/07/65-10/07/65	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/07/65-10/07/65	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/07/65-10/07/65	1	182.	182.	182.	182.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/07/65-10/07/65	1	795.	795.	795.	795.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/07/65-10/07/65	1	646.	646.	646.	646.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/07/65-10/07/65	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/07/65-10/07/65	1	72.	72.	72.	72.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/07/65-10/07/65	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/07/65-10/07/65	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/07/65-10/07/65	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/07/65-10/07/65	1	64.	64.	64.	64.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/07/65-10/07/65	1	667.	667.	667.	667.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/07/65-10/07/65	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/07/65-10/07/65	1	450.	450.	450.	450.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/07/65-10/07/65	1	1180.	1180.	1180.	1180.	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: ZION0323

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0324

NPS Station ID: ZION0324
LAT/LON: 37.189727/-113.385837
Agency: 21UTAH
Date Created: 05/17/86
Location: QUAIL CK RES 003
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495037
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: UPPER COLORADO RIVER
ECO Region:
RF1 Index: 15010008023
RF1 Mile Point: 1.090
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008084700.00
RF3 Mile Point: 3.35
Distance from RF3: 0.15
On/Off RF3:
Description:
UTAH STATE CLASSIFICATION-1C,2B,3B,4
USGS 7.5 QUADRANGLE-HURRICANE 29400

Parameter Inventory for Station: ZION0324

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	24	21.95	21.175	27.5	10.7	22.757	4.77	14.35	17.65	25.375	26.4
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/03/90-08/08/91	3	28.	29.	31.	28.	3.	1.732	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/03/90	7	1.	1.971	5.4	0.9	2.836	1.684	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	10	3.25	3.43	5.4	2.	1.429	1.195	2.04	2.4	4.425	5.34
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	24	958.5	948.625	1177.	774.	10557.636	102.75	810.	865.75	1020.25	1099.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	6	1049.	1042.333	1070.	986.	1037.467	32.21	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	24	7.65	6.942	9.2	2.2	3.944	1.986	3.35	5.325	7.975	9.1
00335	COD, .025N K2CR2O7 MG/L	08/19/86-10/05/88	8 ##	6.	7.5	19.	5.	22.571	4.751	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	24	8.	7.912	8.7	6.8	0.162	0.403	7.35	7.625	8.2	8.3
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	24	8.	7.687	8.7	6.8	0.215	0.464	7.35	7.625	8.2	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	24	0.01	0.021	0.158	0.002	0.001	0.032	0.005	0.006	0.024	0.045
00403	PH, LAB, STANDARD UNITS SU	06/23/87-08/03/90	5	8.	8.02	8.1	7.9	0.007	0.084	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/23/87-08/03/90	5	8.	8.013	8.1	7.9	0.007	0.084	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/87-08/03/90	5	0.01	0.01	0.013	0.008	0.	0.002	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/03/90	9	2.	1.778	2.	1.	0.194	0.441	1.	1.5	2.	2.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	9	137.	138.667	167.	121.	265.5	16.294	121.	125.5	154.	167.
00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/03/90	9	167.	169.444	204.	148.	392.528	19.812	148.	153.5	188.	204.
00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/03/90	9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	13 ##	1.5	3.885	12.	1.5	14.798	3.847	1.5	1.5	6.5	11.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	24 ##	0.025	0.031	0.08	0.	0.	0.016	0.025	0.025	0.044	0.05
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	12 ##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	12	0.17	0.202	0.49	0.02	0.025	0.159	0.02	0.045	0.358	0.46
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	2	0.355	0.355	0.39	0.32	0.002	0.049	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	16	0.1	0.128	0.23	0.05	0.006	0.075	0.05	0.05	0.2	0.223
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	12 ##	0.015	0.089	0.3	0.01	0.013	0.114	0.01	0.01	0.175	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	24	0.007	0.011	0.03	0.	0.	0.008	0.005	0.005	0.018	0.022
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	16 ##	0.005	0.006	0.028	0.003	0.	0.006	0.003	0.003	0.005	0.012
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-10/05/88	8 ##	0.003	0.009	0.05	0.003	0.	0.017	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-10/05/88	8	2.35	2.175	2.7	1.5	0.188	0.433	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	10	470.	465.3	531.	389.	2586.233	50.855	392.	419.	520.5	530.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/03/90	10	134.	129.	154.	100.	399.333	19.983	101.	110.	150.	153.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/03/90	10	34.5	34.8	38.	33.	2.4	1.549	33.	33.75	36.	37.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/03/90	10	47.5	48.3	57.	44.	18.011	4.244	44.1	45.	50.25	56.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/03/90	10	5.	4.7	6.	4.	0.456	0.675	4.	4.	5.	5.9
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	6	44.	45.5	50.	43.	9.9	3.146	**	**	**	**

** - Less than 9 observations ## - 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: ZION0324

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-08/03/90	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/03/90	10	348.	360.7	440.	290.	2890.011	53.759	290.	313.25	411.75	437.7
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/04/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/03/90	9 ##	0.5	0.944	2.5	0.25	0.872	0.934	0.25	0.25	2.	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/03/90	9	80.	60.	100.	25.	1137.5	33.727	25.	25.	90.	100.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/04/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/03/90	9 ##	0.5	0.556	1.	0.5	0.028	0.167	0.5	0.5	0.5	1.
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/03/90	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/04/93	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/03/90	9 ##	10.	10.	10.	10.	0.	0.	10.	10.	10.	10.
01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/04/93	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/03/90	9 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/03/90	9	13.	22.693	110.	0.04	1218.144	34.902	0.04	2.6	27.5	110.
01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/03/90	9 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/03/90	9 ##	10.	12.	30.	5.	76.	8.718	5.	5.	16.5	30.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/04/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/03/90	9 ##	0.25	0.528	2.5	0.25	0.554	0.744	0.25	0.25	0.375	2.5
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	08/08/91-08/08/91	1	700.	700.	700.	700.	0.	0.	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	08/08/91-08/08/91	1	2.845	2.845	2.845	2.845	0.	0.	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			700.								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/22/91-08/08/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/22/91-08/08/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			2.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	8	1.	0.913	1.8	0.1	0.333	0.577	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	13	694.	509.385	830.	1.5	126409.715	355.541	1.5	3.5	763.	820.4
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	06/02/93-08/09/95	4	2.	1.75	3.	0.	1.583	1.258	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/03/90	9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/04/93	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/03/90	9 ##	0.1	0.078	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	23	6.	6.057	16.6	0.	35.376	5.948	0.	0.	11.7	15.6
74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/03/90	9 ##	0.015	0.043	0.17	0.01	0.003	0.051	0.01	0.013	0.055	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0324

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	7	0	0.00	5	0	0.00				2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	24	3	0.13	16	3	0.19				8	0	0.00			
00400	PH	Other-Hi Lim.	9.	24	0	0.00	16	0	0.00				8	0	0.00			
		Other-Lo Lim.	6.5	24	0	0.00	16	0	0.00				8	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00				2	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00				2	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	12	0	0.00	10	0	0.00				2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00							2	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	12	0	0.00	10	0	0.00				2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00							2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	12	0	0.00	6	0	0.00				6	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	4	0	0.00				2	0	0.00			
		Drinking Water	250.	6	0	0.00	4	0	0.00				2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	10	10	1.00	8	8	1.00				2	2	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.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	50.	9	0	0.00	7	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: ZION0324

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01007	BARIUM, TOTAL	Drinking Water	2000.	9	0	0.00	7	0	0.00				2	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	5.	9	0	0.00	7	0	0.00				2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	9	0	0.00	7	0	0.00				2	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	1300.	9	0	0.00	7	0	0.00				2	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	15.	9	0	0.00	7	0	0.00				2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	100.	9	0	0.00	7	0	0.00				2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	5000.	9	0	0.00	7	0	0.00				2	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.	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	50.	9	0	0.00	7	0	0.00				2	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	1	0	0.00	1	0	0.00									
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	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									
71900	MERCURY, TOTAL	Fresh Acute	2.4	9	0	0.00	7	0	0.00				2	0	0.00			
		Drinking Water	2.	9	0	0.00	7	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 3/19 - Station ZION0324

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	16	25.05	22.663	27.5	14.	18.257	4.273	14.91	19.375	25.9	26.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	16	973.5	980.375	1177.	864.	8764.783	93.62	864.	887.	1028.75	1160.2
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	16	7.4	6.181	8.	2.2	3.959	1.99	2.83	4.575	7.7	7.93
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	16	7.85	7.788	8.2	6.8	0.153	0.391	7.15	7.525	8.1	8.2
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	16	7.847	7.577	8.2	6.8	0.201	0.448	7.15	7.525	8.1	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	16	0.014	0.027	0.158	0.006	0.001	0.038	0.006	0.008	0.03	0.083
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	9 ##	1.5	3.833	12.	1.5	14.	3.742	1.5	1.5	6.5	12.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	16 ##	0.025	0.035	0.08	0.	0.	0.019	0.018	0.025	0.05	0.059
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	16	0.007	0.009	0.021	0.	0.	0.006	0.004	0.005	0.013	0.02
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	9	746.	589.5	830.	1.5	112602.25	335.563	1.5	349.	789.	830.
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	16	5.	6.006	16.6	0.	38.241	6.184	0.	0.	11.375	16.18

** - 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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0324

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	18.05	18.2	24.5	10.7	20.477	4.525	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	869.5	885.125	1045.	774.	8995.268	94.843	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	8.65	8.463	9.2	7.3	0.511	0.715	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	8.15	8.163	8.7	7.6	0.097	0.311	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	8	8.147	8.062	8.7	7.6	0.108	0.329	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	8	0.007	0.009	0.025	0.002	0.	0.007	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	4 ##	1.75	4.	11.	1.5	21.833	4.673	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8 ##	0.008	0.013	0.03	0.005	0.	0.01	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	4	318.5	329.125	678.	1.5	142786.063	377.87	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	7	9.5	6.171	12.	0.	34.089	5.839	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0325

NPS Station ID: ZION0325
LAT/LON: 37.161392/-113.386670
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-14) 2DAB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370941113231201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.50
On/Off RF1:
RF3 Index: 15010008002911.34
RF3 Mile Point: 12.98
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0325

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/68-08/20/68	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/68-08/20/68	1	1600.	1600.	1600.	1600.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/68-08/20/68	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/68-08/20/68	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/68-08/20/68	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/20/68-08/20/68	1	154.	154.	154.	154.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	08/20/68-08/20/68	1	188.	188.	188.	188.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	08/20/68-08/20/68	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/68-08/20/68	1	800.	800.	800.	800.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	08/20/68-08/20/68	1	646.	646.	646.	646.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/68-08/20/68	1	172.	172.	172.	172.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/68-08/20/68	1	90.	90.	90.	90.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/68-08/20/68	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00933	SODIUM,PLUS POTASSIUM (MG/L)	08/20/68-08/20/68	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/68-08/20/68	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/68-08/20/68	1	562.	562.	562.	562.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/68-08/20/68	1	24.	24.	24.	24.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/20/68-08/20/68	1	1300.	1300.	1300.	1300.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/68-08/20/68	1	1050.	1050.	1050.	1050.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/20/68-08/20/68	1	19.	19.	19.	19.	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: ZION0325

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0326

NPS Station ID: ZION0326
LAT/LON: 37.179448/-113.389171
Agency: 21UTAH
Date Created: 05/17/86
Location: QUAIL CK RES 002
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495036
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: UPPER COLORADO RIVER
ECO Region:
RF1 Index: 15010008023
RF1 Mile Point: 0.450
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008002300.00
RF3 Mile Point: 0.11
Distance from RF3: 0.01
On/Off RF3:
Description:
UTAH STATE CLASSIFICATION-1C,2B,3B,4
USGS 7.5 QUADRANGLE-HURRICANE 29400

Parameter Inventory for Station: ZION0326

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	30	18.8	19.077	27.4	10.	23.238	4.821	13.23	14.725	23.35	25.85
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/08/91-08/08/91	2	28.	28.	28.	28.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-05/22/91	9	1.1	1.556	3.5	0.7	0.788	0.888	0.7	0.95	2.	3.5
00078	TRANSPARENCY, SECCHI DISC (METERS)	08/19/86-08/09/95	11	4.2	3.909	5.7	2.	1.773	1.332	2.08	2.5	5.2	5.64
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	30	950.5	966.167	1174.	786.	14178.282	119.073	800.7	873.5	1053.25	1159.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-06/23/87	6	1020.5	1030.167	1070.	995.	1142.167	33.796	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	30	7.3	6.277	9.4	0.2	7.26	2.694	1.32	4.525	8.125	8.9
00335	COD, .025N K2CR2O7 MG/L	08/19/86-05/31/89	12	## 7.	10.25	42.	5.	114.386	10.695	5.	5.	7.	35.1
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	30	8.	7.817	8.6	6.8	0.196	0.443	7.12	7.475	8.2	8.2
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	30	8.	7.567	8.6	6.8	0.26	0.51	7.12	7.475	8.2	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	30	0.01	0.027	0.158	0.003	0.001	0.036	0.006	0.006	0.034	0.077
00403	PH, LAB, STANDARD UNITS SU	06/23/87-05/22/91	9	8.	7.922	8.1	7.2	0.079	0.282	7.2	7.9	8.1	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	06/23/87-05/22/91	9	8.	7.802	8.1	7.2	0.096	0.31	7.2	7.9	8.1	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/87-05/22/91	9	0.01	0.016	0.063	0.008	0.	0.018	0.008	0.008	0.013	0.063
00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-05/22/91	13	2.	3.231	19.	1.	23.026	4.799	1.	1.5	2.	13.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-05/22/91	13	147.	143.923	172.	121.	313.077	17.694	121.8	125.5	159.	169.2
00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-05/22/91	13	180.	175.769	210.	148.	470.026	21.68	148.8	153.	194.5	206.4
00445	CARBONATE ION (MG/L AS CO3)	08/19/86-05/22/91	13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	15	## 1.5	2.033	7.	1.5	2.052	1.433	1.5	1.5	2.	4.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	30	## 0.025	0.032	0.1	0.025	0.	0.016	0.025	0.025	0.025	0.05
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	16	## 0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	2	## 0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	16	0.225	0.256	0.54	0.02	0.025	0.158	0.048	0.125	0.35	0.498
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/23/87-06/23/87	2	0.41	0.41	0.47	0.35	0.007	0.085	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-08/08/91	22	0.1	0.12	0.5	0.05	0.012	0.111	0.05	0.05	0.1	0.3
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	14	0.2	0.156	0.3	0.01	0.018	0.134	0.01	0.01	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	30	0.007	0.009	0.022	0.003	0.	0.006	0.003	0.005	0.013	0.02
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	18	## 0.005	0.006	0.011	0.003	0.	0.002	0.005	0.005	0.005	0.011
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-05/31/89	12	## 0.003	0.003	0.003	0.003	0.	0.	0.003	0.003	0.003	0.003
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-05/31/89	12	1.9	1.975	2.4	1.5	0.097	0.311	1.5	1.825	2.325	2.4
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-05/22/91	14	477.5	465.071	531.	373.	2192.379	46.823	387.5	435.	498.25	529.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-05/22/91	14	135.5	129.357	150.	100.	253.478	15.921	105.	117.5	140.	150.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-05/22/91	14	34.	34.5	38.	30.	5.038	2.245	30.5	33.75	36.25	37.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-05/22/91	14	49.	49.571	57.	45.	15.341	3.917	45.	46.75	52.	56.5
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-05/22/91	14	5.	4.714	6.	3.9	0.375	0.613	3.95	4.	5.	5.5
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-06/23/87	6	45.	45.667	50.	43.	7.867	2.805	**	**	**	**

** - Less than 9 observations ## - 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: ZION0326

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-05/22/91	3	52.	52.667	56.	50.	9.333	3.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-05/22/91	14	350.	353.	440.	240.	3897.538	62.43	250.	305.	412.75	435.
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/22/91-05/22/91	2	9.45	9.45	9.6	9.3	0.045	0.212	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	08/04/93-08/04/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-05/22/91	12 ##	0.75	1.167	2.5	0.25	0.902	0.949	0.25	0.25	2.	2.5
01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-05/22/91	12	90.	78.75	120.	25.	1250.568	35.363	25.	36.25	105.	120.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	08/04/93-08/04/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-05/22/91	12 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-05/22/91	12 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01040	COPPER, DISSOLVED (UG/L AS CU)	08/04/93-08/04/93	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-05/22/91	12 ##	10.	10.833	20.	10.	8.333	2.887	10.	10.	10.	17.
01049	LEAD, DISSOLVED (UG/L AS PB)	08/04/93-08/04/93	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-05/22/91	12 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-05/22/91	12	12.5	46.458	350.	2.5	9595.475	97.956	2.5	5.	32.5	268.7
01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-05/22/91	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-05/22/91	12 ##	10.	10.833	20.	5.	26.515	5.149	5.	6.25	13.75	20.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	08/04/93-08/04/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-05/22/91	12 ##	0.25	0.938	4.	0.25	1.683	1.297	0.25	0.25	1.938	3.55
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/22/91-08/08/91	2 ##	13.	13.	24.	2.	242.	15.556	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/22/91-08/08/91	2 ##	0.841	0.841	1.38	0.301	0.582	0.763	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			6.928								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-08/08/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/22/91-08/08/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-08/08/91	2 ##	2.	2.	2.	2.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/22/91-08/08/91	2 ##	0.301	0.301	0.301	0.301	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			2.								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/05/88-08/09/95	10	1.2	1.15	3.6	0.	1.325	1.151	0.01	0.1	1.525	3.49
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	16	738.	565.844	840.	1.5	116047.024	340.657	1.5	156.75	789.	835.8
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/22/91-08/09/95	5	2.	2.6	8.	0.	9.8	3.13	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-05/22/91	13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	08/04/93-08/04/93	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-05/22/91	12 ##	0.1	0.083	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	28	7.5	9.818	36.	0.	116.556	10.796	0.	0.	16.5	25.1
74010	IRON, TOTAL (MG/L AS FE)	08/19/86-05/22/91	12 ##	0.023	0.025	0.05	0.01	0.	0.016	0.01	0.01	0.038	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0326

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	9	0	0.00	5	0	0.00				4	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	30	6	0.20	18	6	0.33				12	0	0.00			
00400	PH	Other-Hi Lim.	9.	30	0	0.00	18	0	0.00				12	0	0.00			
		Other-Lo Lim.	6.5	30	0	0.00	18	0	0.00				12	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	9	0	0.00	5	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	9	0	0.00	5	0	0.00				4	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	16	0	0.00	12	0	0.00				4	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00							2	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	16	0	0.00	12	0	0.00				4	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00							2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	14	0	0.00	6	0	0.00				8	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	4	0	0.00				2	0	0.00			
		Drinking Water	250.	6	0	0.00	4	0	0.00				2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	14	13	0.93	10	10	1.00				4	3	0.75			
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									

& - 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: ZION0326

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01002	ARSENIC, TOTAL	Fresh Acute	360.	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	50.	12	0	0.00	9	0	0.00				3	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	12	0	0.00	9	0	0.00				3	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	5.	12	0	0.00	9	0	0.00				3	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	12	0	0.00	9	0	0.00				3	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	12	1	0.08	9	1	0.11				3	0	0.00			
		Drinking Water	1300.	12	0	0.00	9	0	0.00				3	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	15.	12	0	0.00	9	0	0.00				3	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	100.	12	0	0.00	9	0	0.00				3	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	5000.	12	0	0.00	9	0	0.00				3	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.	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	50.	12	0	0.00	9	0	0.00				3	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	2	0	0.00	1	0	0.00				1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	2	0	0.00	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									
71900	MERCURY, TOTAL	Fresh Acute	2.4	12	0	0.00	9	0	0.00				3	0	0.00			
		Drinking Water	2.	12	0	0.00	9	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 3/19 - Station ZION0326

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	18	20.	20.35	27.4	11.6	24.85	4.985	13.67	15.25	25.175	26.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	18	971.	994.333	1174.	798.	13627.176	116.735	862.8	894.5	1115.	1171.3
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	18	6.05	5.161	8.1	0.2	8.07	2.841	0.29	2.925	7.65	8.01
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	18	7.8	7.711	8.2	6.8	0.182	0.427	7.07	7.375	8.1	8.2
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	18	7.789	7.498	8.2	6.8	0.23	0.48	7.07	7.375	8.1	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	18	0.016	0.032	0.158	0.006	0.001	0.038	0.006	0.008	0.042	0.087
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	11 ##	1.5	2.045	7.	1.5	2.723	1.65	1.5	1.5	1.5	6.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	18 ##	0.025	0.036	0.1	0.025	0.	0.02	0.025	0.025	0.05	0.056
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	18	0.007	0.008	0.022	0.003	0.	0.005	0.005	0.005	0.011	0.016
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	11	760.	633.364	840.	1.5	99683.205	315.726	1.5	682.	808.	838.8
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	18	9.5	11.278	36.	0.	144.448	12.019	0.	0.	22.25	35.1

** - 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 #3: 5/10 to 6/30 - Station ZION0326

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	12	17.55	17.167	23.	10.	16.226	4.028	10.96	13.575	20.2	23.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	12	900.5	923.917	1111.	786.	13073.356	114.339	787.5	830.	1026.	1110.4
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	12	8.35	7.95	9.4	5.5	1.577	1.256	5.71	6.9	8.9	9.34
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	12	8.05	7.975	8.6	6.9	0.189	0.435	7.08	7.825	8.2	8.51
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	12	8.047	7.698	8.6	6.9	0.273	0.522	7.08	7.825	8.2	8.51
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	12	0.009	0.02	0.126	0.003	0.001	0.034	0.003	0.006	0.015	0.098
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	4 ##	1.75	2.	3.	1.5	0.5	0.707	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	12 ##	0.025	0.025	0.025	0.025	0.	0.	0.025	0.025	0.025	0.025
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	12 ##	0.008	0.01	0.021	0.003	0.	0.007	0.003	0.005	0.018	0.021
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	5	618.	417.3	748.	1.5	145849.7	381.903	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	08/19/86-08/09/95	10	5.	7.19	22.	0.	64.885	8.055	0.	0.	13.275	21.6

** - 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

Station Inventory for Station: ZION0327

NPS Station ID: ZION0327
Location: QUAIL CREEK AT I-15 BRIDGE
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes: 1101001 005770 01410
RMI-Miles: 0038.65 0012.30 000.10
HUC: 15010008
Major Basin: COLORADO RIVER BASIN
Minor Basin: LOWER COLORADO RIVER
RF1 Index: 15010008023
RF3 Index: 15010008001900.00
Description:
QUAIL CREEK AT I-15 CROSSING.

LAT/LON: 37.205837/-113.393892

Depth of Water: 0
Elevation: 0

RF1 Mile Point: 2.000
RF3 Mile Point: 0.00

Agency: 21USU
FIPS State/County: 49053 UTAH/WASHINGTON
STORET Station ID(s): 00210A
Within Park Boundary: No

Aquifer:
Water Body Id:
ECO Region:
Distance from RF1: 0.00
Distance from RF3: 0.03

Date Created: / /

On/Off RF1: OFF
On/Off RF3:

Parameter Inventory for Station: ZION0327

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: ZION0328

NPS Station ID: ZION0328
LAT/LON: 37.205837/-113.393892
Agency: 21USU
Date Created: / /
Location: QUAIL CREEK AT I-15 BRIDGE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000210A
RMI-Indexes: 1101001 005770 01410
Within Park Boundary: No
RMI-Miles: 0038.65 0012.30 000.10
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008023
RF1 Mile Point: 2.000
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002911.34
RF3 Mile Point: 14.90
Distance from RF3: 0.04
On/Off RF3:
Description:
QUAIL CREEK AT I-15 CROSSING.

Parameter Inventory for Station: ZION0328

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/09/74-05/28/74	2	18.75	18.75	24.5	13.	66.125	8.132	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/09/74-04/09/74	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/28/74-05/28/74	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/09/74-05/28/74	2	1757.5	1757.5	2000.	1515.	117612.5	342.947	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/09/74-05/28/74	2	8.7	8.7	9.4	8.	0.98	0.99	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/09/74-05/28/74	2	1.4	1.4	1.6	1.2	0.08	0.283	**	**	**	**
00400	PH (STANDARD UNITS)	04/09/74-05/28/74	2	8.1	8.1	8.2	8.	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/09/74-05/28/74	2	8.089	8.089	8.2	8.	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/09/74-05/28/74	2	0.008	0.008	0.01	0.006	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/09/74-05/28/74	2	6.5	6.5	9.	4.	12.5	3.536	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/09/74-05/28/74	2	210.5	210.5	229.	192.	684.5	26.163	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	04/09/74-05/28/74	2	126.	126.	137.	115.	242.	15.556	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/09/74-05/28/74	2	256.5	256.5	279.	234.	1012.5	31.82	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/09/74-05/28/74	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	2	0.111	0.111	0.128	0.094	0.001	0.024	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	2 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	04/09/74-05/28/74	2	0.018	0.018	0.03	0.006	0.	0.017	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	04/09/74-05/28/74	2	0.007	0.007	0.009	0.004	0.	0.004	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/09/74-05/28/74	2	0.028	0.028	0.03	0.025	0.	0.004	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/09/74-05/28/74	2	3.5	3.5	6.	1.	12.5	3.536	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	04/09/74-05/28/74	2	51.	51.	59.	43.	128.	11.314	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	04/09/74-05/28/74	2	54.5	54.5	60.	49.	60.5	7.778	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/28/74-05/28/74	1	960.	960.	960.	960.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/09/74-05/28/74	2	178.	178.	208.	148.	1800.	42.426	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/09/74-05/28/74	2	92.5	92.5	107.	78.	420.5	20.506	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/09/74-05/28/74	2	110.	110.	130.	90.	800.	28.284	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/09/74-05/28/74	2	17.5	17.5	28.	7.	220.5	14.849	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/09/74-05/28/74	2	27.	27.	30.	24.	18.	4.243	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/09/74-05/28/74	2	770.	770.	1000.	540.	105800.	325.269	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/09/74-05/28/74	2	0.24	0.24	0.34	0.14	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/09/74-05/28/74	2	25.5	25.5	28.	23.	12.5	3.536	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	04/09/74-05/28/74	2	315.	315.	420.	210.	22050.	148.492	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/09/74-05/28/74	2	3.	3.	6.	0.	18.	4.243	**	**	**	**

** - Less than 9 observations ## - 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: ZION0328

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/09/74-05/28/74	2	1.	1.	2.	0.	2.	1.414	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/28/74-05/28/74	1	180.	180.	180.	180.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/09/74-05/28/74	2	40.	40.	60.	20.	800.	28.284	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/09/74-05/28/74	2	55.	55.	100.	10.	4050.	63.64	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/09/74-05/28/74	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	04/09/74-05/28/74	2	120.	120.	220.	20.	20000.	141.421	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/09/74-05/28/74	2	6750.	6750.	12000.	1500.	55125000.	7424.621	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/09/74-05/28/74	2	3.628	3.628	4.079	3.176	0.408	0.639	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			4242.641								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-05/28/74	2	215.	215.	230.	200.	450.	21.213	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/09/74-05/28/74	2	2.331	2.331	2.362	2.301	0.002	0.043	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			214.476								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	04/09/74-05/28/74	2 ##	3.653	3.653	3.655	3.65	0.	0.004	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/09/74-05/28/74	2	1460.	1460.	1748.	1172.	165888.	407.294	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/09/74-05/28/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0328

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00				1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
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			
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	2	1.00				1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00				1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				1	0	0.00	1	0	0.00			
		Drinking Water	50.	2	0	0.00				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			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	1	0.50				1	0	0.00	1	1	1.00			
		Drinking Water	5.	2	1	0.50				1	0	0.00	1	1	1.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	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			
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			
01049	LEAD, DISSOLVED	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			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	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			
01090	ZINC, DISSOLVED	Fresh Acute	120.	2	1	0.50				1	0	0.00	1	1	1.00			
		Drinking Water	5000.	2	0	0.00				1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00				1	0	0.00	1	0	0.00			
		Drinking Water	50.	2	0	0.00				1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	2	1.00				1	1	1.00	1	1	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	2	2	1.00				1	1	1.00	1	1	1.00			
71900	MERCURY, TOTAL	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

Station Inventory for Station: ZION0329

NPS Station ID: ZION0329
LAT/LON: 37.186115/-113.394171
Agency: 21UTAH
Date Created: 10/26/96
Location: QUAIL CK ST PARK SWIM BEACH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/LAKE
STORET Station ID(s): 495033
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0329

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/16/96-09/03/96	8	28.5	51.625	193.	2.	3972.554	63.028	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	07/16/96-09/03/96	8	1.455	1.392	2.286	0.301	0.411	0.641	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			24.64								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/23/96-09/03/96	7	2.	3.643	10.	0.5	16.393	4.049	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	07/23/96-09/03/96	7	0.301	0.322	1.	-0.301	0.243	0.493	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			2.1								

** - 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: ZION0329

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	8	0	0.00	8	0	0.00									
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	7	0	0.00	7	0	0.00									

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

Station Inventory for Station: ZION0330

NPS Station ID: ZION0330
LAT/LON: 37.162781/-113.394726
Agency: 21UTAH
Date Created: 04/10/82
Location: VIRGIN R AT U-15 XING W OF HURRICANE
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495032
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN R DRAINAGE
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 14.030
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008004300.00
RF3 Mile Point: 0.10
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	101	16.2	15.646	31.4	3.3	40.63	6.374	7.72	9.9	19.65	24.18
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/05/90-09/18/91	5	15.5	16.08	29.	0.	125.907	11.221	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/29/95	59	163.	288.983	2000.	47.	125399.431	354.118	75.	91.	304.	730.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	101	49.	195.542	6900.	0.	495470.794	703.897	3.22	12.5	155.	374.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	101	1970.	2084.941	4410.	209.	678913.496	823.962	934.	1509.	2685.	3210.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	99	2130.	2168.323	4380.	605.	647249.18	804.518	1000.	1650.	2778.	3190.
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	97	8.5	8.648	19.9	6.	3.135	1.771	6.96	7.5	9.45	10.4
00310	BOD, 5 DAY, 20 DEG C MG/L	05/21/85-03/10/88	2 ##	6.75	6.75	13.	0.5	78.125	8.839	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	02/24/82-06/13/90	49 ##	7.5	12.531	51.	5.	90.921	9.535	7.	7.	15.	26.
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	99	8.	8.006	9.2	6.8	0.112	0.335	7.6	7.8	8.2	8.31
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	99	8.	7.858	9.2	6.8	0.135	0.367	7.6	7.8	8.2	8.31
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	99	0.01	0.014	0.158	0.001	0.	0.018	0.005	0.006	0.016	0.025
00403	PH, LAB, STANDARD UNITS SU	05/21/85-12/11/96	81	7.8	7.847	8.3	7.3	0.055	0.235	7.6	7.7	8.	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	05/21/85-12/11/96	81	7.8	7.784	8.3	7.3	0.059	0.243	7.6	7.7	8.	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/85-12/11/96	81	0.016	0.016	0.05	0.005	0.	0.009	0.006	0.01	0.02	0.025
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	101	5.	5.515	21.	0.	11.952	3.457	2.	3.	7.	10.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	101	203.	197.604	258.	0.	1159.202	34.047	161.8	185.	220.5	228.8
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	101	248.	241.119	315.	0.	1726.926	41.556	197.2	226.	269.5	279.8
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	101	0.	0.01	1.	0.	0.01	0.1	0.	0.	0.	0.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	02/24/82-08/28/84	12	1250.	2021.25	7220.	26.	5179304.75	2275.809	47.3	142.25	3350.	6530.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	91	119.	391.505	4920.	6.	585001.319	764.854	22.4	48.	383.	903.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	100	0.069	0.078	0.4	0.	0.004	0.061	0.025	0.025	0.1	0.146
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	33 ##	0.005	0.013	0.16	0.005	0.001	0.028	0.005	0.005	0.005	0.026
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/04/87-04/19/88	11 ##	0.005	0.026	0.16	0.005	0.002	0.046	0.005	0.005	0.02	0.136
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	33	0.57	11.499	361.	0.005	3936.552	62.742	0.29	0.47	0.76	0.89
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/04/87-04/19/88	11	0.56	0.572	1.21	0.005	0.096	0.31	0.05	0.41	0.77	1.124
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	66	0.4	0.848	25.9	0.	9.901	3.147	0.107	0.208	0.7	0.93
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-03/13/96	36	0.415	0.411	0.8	0.18	0.022	0.148	0.214	0.28	0.498	0.612
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/16/91-12/11/96	26	0.55	0.708	2.4	0.3	0.293	0.541	0.3	0.4	0.7	1.89
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	101	0.08	0.18	1.5	0.003	0.078	0.28	0.015	0.029	0.177	0.404
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	27 ##	0.005	0.018	0.236	0.005	0.002	0.044	0.005	0.005	0.012	0.025
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/01/84-06/13/90	40	0.014	0.063	0.6	0.003	0.014	0.118	0.003	0.006	0.082	0.167
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/24/82-06/13/90	49	2.1	7.258	60.	0.25	181.19	13.461	0.9	1.3	3.95	27.6
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	101	593.	583.089	1229.	191.	31480.722	177.428	339.2	474.	667.	764.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	101	160.	155.575	430.	55.	3055.4	55.276	85.2	120.	180.	200.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	101	49.	47.373	81.	13.	156.265	12.501	30.	41.	55.	63.
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	101	248.	238.641	592.	5.	15171.071	123.171	76.	148.	330.	400.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	101	18.7	18.968	53.	3.8	91.147	9.547	7.	12.	25.5	32.

** - Less than 9 observations ## - 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: ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	44	298.5	324.795	812.	29.	40322.911	200.806	95.	137.25	463.	623.5
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	67	275.	303.731	670.	0.	32071.048	179.084	52.4	153.	460.	552.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	101	478.7	467.931	1100.	96.5	37136.289	192.708	192.68	330.	575.	694.72
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/19/92-10/30/96	23	13.	13.935	34.	2.5	50.893	7.134	2.5	10.	20.	21.2
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	55	15.	16.555	41.	2.5	95.469	9.771	5.6	9.	20.	33.
01005	BARIUM, DISSOLVED (UG/L AS BA)	05/19/92-10/30/96	23	80.	83.043	180.	47.	732.316	27.061	56.4	67.	92.	116.
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	55	60.	70.283	680.	0.	9735.003	98.666	0.	0.05	90.	124.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/19/92-10/30/96	23 ##	0.5	0.522	1.	0.5	0.011	0.104	0.5	0.5	0.5	0.5
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	55 ##	0.5	0.991	20.	0.5	6.977	2.641	0.5	0.5	0.5	1.4
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/19/92-10/30/96	23 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	55 ##	2.5	4.182	50.	2.5	46.864	6.846	2.5	2.5	2.5	6.4
01040	COPPER, DISSOLVED (UG/L AS CU)	05/19/92-10/30/96	23 ##	10.	8.826	15.	6.	5.514	2.348	6.	6.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	55 ##	10.	15.818	150.	5.	427.818	20.684	5.	10.	10.	33.
01046	IRON, DISSOLVED (UG/L AS FE)	05/19/92-10/30/96	23 ##	10.	20.087	70.	10.	251.083	15.846	10.	10.	31.	44.
01049	LEAD, DISSOLVED (UG/L AS PB)	05/19/92-10/30/96	23 ##	1.5	1.674	2.5	1.5	0.15	0.388	1.5	1.5	1.5	2.5
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	55 ##	2.5	5.764	50.	2.5	93.712	9.68	2.5	2.5	2.5	15.8
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	55	55.	361.2	5000.	5.	792567.2	890.262	28.6	37.	230.	766.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/19/92-10/30/96	23	22.	24.239	70.	5.	199.639	14.129	8.68	15.	32.	39.8
01067	NICKEL, TOTAL (UG/L AS NI)	02/24/82-06/21/83	10	13.	12.5	22.	5.	39.611	6.294	5.	5.	17.75	21.8
01075	SILVER, DISSOLVED (UG/L AS AG)	05/19/92-10/30/96	23 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	55 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/19/92-10/30/96	23 ##	15.	21.261	110.	10.	438.474	20.94	12.	15.	15.	42.2
01092	ZINC, TOTAL (UG/L AS ZN)	02/24/82-09/18/91	55 ##	10.	21.327	170.	2.5	682.669	26.128	5.	10.	25.	44.8
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	10/19/94-10/30/96	9 ##	15.	36.667	190.	15.	3350.	57.879	15.	15.	25.	190.
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/19/92-10/30/96	23 ##	1.	1.413	3.	0.5	0.947	0.973	0.5	0.5	2.5	2.8
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	55 ##	0.25	0.523	2.5	0.25	0.459	0.677	0.25	0.25	0.5	2.2
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	09/03/85-10/13/92	9	15.	18.222	50.	1.	341.694	18.485	1.	1.5	36.5	50.
03501	BETA, TOTAL	09/03/85-10/13/92	9	17.	38.944	189.	2.5	3450.528	58.741	2.5	6.5	44.	189.
07000	TRITIUM (1H3),TOTAL (PICOCURIES/LITER)	08/19/86-08/19/86	1	500.	500.	500.	500.	0.	0.	**	**	**	**
09501	RADIUM 226, TOTAL	09/03/85-06/04/91	7	1.	2.679	8.	0.	11.348	3.369	**	**	**	**
11501	RADIUM 228, TOTAL	08/19/86-08/19/86	1	1.	1.	1.	1.	0.	0.	**	**	**	**
30191	DINOSEB, WATER, WHOLE, RECOVERABLE UG/L	06/04/91-09/18/91	2 ##	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
30218	DICHLORVOS, WATER, WHOLE, RECOVERABLE UG/L	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/21/85-05/21/85	1	200.	200.	200.	200.	0.	0.	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/21/85-05/21/85	1	2.301	2.301	2.301	2.301	0.	0.	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			200.								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/21/85-05/21/85	1	0.	0.	0.	0.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/21/85-05/21/85	1	0.	0.	0.	0.	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			1.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/21/85-05/21/85	1	300.	300.	300.	300.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/21/85-05/21/85	1	2.477	2.477	2.477	2.477	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			300.								
34351	ENDOSULFAN SULFATE TOTWUG/L	09/16/87-09/18/91	6 ##	0.033	0.033	0.033	0.033	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	09/16/87-09/18/91	6 ##	0.002	0.008	0.02	0.002	0.	0.009	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	09/16/87-09/18/91	6 ##	0.007	0.011	0.02	0.007	0.	0.007	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	09/16/87-09/18/91	6 ##	0.012	0.014	0.02	0.012	0.	0.004	**	**	**	**
34671	PCB - 1016 TOTWUG/L	09/16/87-09/18/91	6 ##	0.141	0.141	0.25	0.033	0.014	0.119	**	**	**	**
38442	DICAMBA (BANVEL) WATER,DISSUG/L	06/04/91-09/18/91	2 ##	1.25	1.25	1.5	1.	0.125	0.354	**	**	**	**
39023	PHORATE, FLAME IONIZATION, WATER SAMPLE (UG/L)	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	06/04/91-06/04/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39053	ALDICARB IN WHOLE WATER (UG/L)	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39055	SIMAZINE IN WHOLE WATER (UG/L)	06/04/91-06/04/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.006	0.01	0.02	0.006	0.	0.007	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	8 ##	0.003	0.007	0.02	0.002	0.	0.008	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.002	0.007	0.02	0.002	0.	0.009	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/16/87-09/18/91	6 ##	0.003	0.008	0.02	0.002	0.	0.009	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/19/86-09/18/91	7 ##	0.002	0.007	0.02	0.	0.	0.009	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/02/90-09/18/91	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/19/86-09/18/91	7 ##	0.014	0.094	0.25	0.007	0.013	0.115	**	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.01	0.011	0.02	0.006	0.	0.006	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.001	0.007	0.02	0.001	0.	0.009	**	**	**	**
39388	ENDOSULFAN IN WHOLE WATER SAMPLE (UG/L)	08/19/86-08/19/86	1	0.014	0.014	0.014	0.014	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: ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	8 ##	0.003	0.007	0.02	0.002	0.	0.008	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	8 ##	0.12	0.156	0.25	0.025	0.007	0.082	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.002	0.007	0.02	0.002	0.	0.009	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	7 ##	0.042	0.041	0.083	0.02	0.	0.021	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	7 ##	0.01	0.076	0.25	0.005	0.009	0.094	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	6 ##	0.141	0.141	0.25	0.033	0.014	0.119	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	6 ##	0.141	0.141	0.25	0.033	0.014	0.119	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	6 ##	0.033	0.105	0.25	0.033	0.013	0.112	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	6 ##	0.141	0.141	0.25	0.033	0.014	0.119	**	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/16/87-09/18/91	6 ##	0.141	0.141	0.25	0.033	0.014	0.119	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/03/85-09/18/91	7 ##	0.033	0.125	0.25	0.025	0.014	0.117	**	**	**	**
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	08/19/86-09/18/91	2 ##	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/16/87-09/18/91	6 ##	0.5	1.25	5.	0.5	3.375	1.837	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/18/91	8 ##	0.05	0.133	0.5	0.01	0.027	0.166	**	**	**	**
39770	DACTHAL (DCPA) IN WHOLE WATER SAMPLE (UG/L)	08/03/88-09/06/88	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	09/03/85-09/06/88	4 ##	0.002	0.002	0.002	0.001	0.	0.001	**	**	**	**
46323	DELTA-BHC IN WHOLE WATER SMAPLE (UG/L)	09/16/87-09/18/91	6 ##	0.003	0.008	0.02	0.002	0.	0.009	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	100	1496.	1453.44	2964.	362.	305753.461	552.95	625.2	1098.	1857.	2180.4
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71890	MERCURY, DISSOLVED (UG/L AS HG)	05/19/92-10/30/96	23 ##	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	55 ##	0.1	0.088	0.5	0.	0.004	0.065	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	55	0.42	2.443	40.55	0.04	37.746	6.144	0.12	0.24	2.1	5.96
77700	CARBARYL WHOLE WATER,UG/L	09/18/91-09/18/91	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
77825	ALACHLOR WHOLE WATER,UG/L	06/04/91-06/04/91	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
78008	ENDRIN KETONE IN WATER UG/L	09/16/87-09/06/88	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81284	TRIFLURALIN(C13H16F3N3O4) WHOLE WATER SAMPLE UG/L	06/04/91-06/04/91	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
81405	CARBOFURAN (EURADAN) WHOLE WATER SAMPLE UG/L	09/18/91-09/18/91	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
81888	DISULFOTON IN WHOLE WATER SAMPLE UG/L	09/18/91-09/18/91	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82702	AS DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4	15.	13.75	20.	5.	56.25	7.5	**	**	**	**
82703	BA DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	115.	112.5	130.	90.	291.667	17.078	**	**	**	**
82705	CD DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82706	CR DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82708	CU DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	10.	12.75	21.	10.	30.25	5.5	**	**	**	**
82710	FE DECNT FLD ACID WTR MG/L	10/29/91-04/08/92	4	1.6	1.655	2.6	0.82	0.559	0.748	**	**	**	**
82711	PB DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
82712	MN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4	98.5	106.25	180.	48.	3645.583	60.379	**	**	**	**
82713	HG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82716	AG DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
82719	ZN DECNT FLD ACID WTR UG/L	10/29/91-04/08/92	4 ##	17.	17.75	27.	10.	81.583	9.032	**	**	**	**

** - 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: ZION0330

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	100 &	49	0.49	69	34	0.49	15	8	0.53	16	7	0.44			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	97	0	0.00	66	0	0.00	15	0	0.00	16	0	0.00			
00400	PH	Other-Hi Lim.	9.	99	1	0.01	68	1	0.01	15	0	0.00	16	0	0.00			
		Other-Lo Lim.	6.5	99	0	0.00	68	0	0.00	15	0	0.00	16	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	81	0	0.00	55	0	0.00	12	0	0.00	14	0	0.00			
		Other-Lo Lim.	6.5	81	0	0.00	55	0	0.00	12	0	0.00	14	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	33	0	0.00	25	0	0.00	3	0	0.00	5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	33	1	0.03	25	1	0.04	3	0	0.00	5	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	8	0	0.00	2	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	36	0	0.00	25	0	0.00	5	0	0.00	6	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	26	0	0.00	17	0	0.00	4	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

EPA Water Quality Criteria Analysis for Station: ZION0330

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	44	0	0.00	32	0	0.00	6	0	0.00	6	0	0.00			
		Drinking Water	250.	44	24	0.55	32	20	0.63	6	1	0.17	6	3	0.50			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	67	0	0.00	44	0	0.00	11	0	0.00	12	0	0.00			
		Drinking Water	250.	67	41	0.61	44	30	0.68	11	5	0.45	12	6	0.50			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	101	88	0.87	70	69	0.99	15	7	0.47	16	12	0.75			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	50.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	5.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	55	1	0.02	39	1	0.03	8	0	0.00	8	0	0.00			
		Drinking Water	5.	55	1	0.02	39	1	0.03	8	0	0.00	8	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	1300.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	55	10	0.18	39	7	0.18	8	0	0.00	8	3	0.38			
		Drinking Water	1300.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	15.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	15.	55	5	0.09	39	2	0.05	8	1	0.13	8	2	0.25			
01067	NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	6	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	100.	10	0	0.00	6	0	0.00	2	0	0.00	2	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	100.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	100.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	5000.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	55	1	0.02	39	1	0.03	8	0	0.00	8	0	0.00			
		Drinking Water	5000.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	50.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
07000	TRITIUM, TOTAL	Drinking Water	20000.	1	0	0.00	1	0	0.00									
30191	DINOSEB, WATER, WHOLE RECOVERABLE	Drinking Water	7.	2	0	0.00	1	0	0.00				1	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	1	0	0.00							1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			
34356	ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
34361	ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
39033	ATRAZINE IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39053	ALDICARB IN WHOLE WATER	Drinking Water	3.	1	0	0.00	1	0	0.00									
39055	SIMAZINE IN WHOLE WATER	Drinking Water	4.	1	0	0.00							1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	0.2	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	7	0	0.00	5	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: ZION0330

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39388	ENDOSULFAN IN WHOLE WATER SAMPLE	Fresh Acute	0.22	1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	3.	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	0.4	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	0.2	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
39782	LINDANE IN WHOLE WATER SAMPLE	Fresh Acute	2.	4	0	0.00	4	0	0.00									
		Drinking Water	0.2	4	0	0.00	4	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	2.	23	0	0.00	18	0	0.00	3	0	0.00	2	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	2.	55	0	0.00	39	0	0.00	8	0	0.00	8	0	0.00			
81405	CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	Drinking Water	40.	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

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	70	11.95	14.7	31.4	3.3	48.701	6.979	7.11	9.2	19.75	24.39
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/29/95	42	112.	225.952	2000.	47.	116559.803	341.409	60.8	79.75	207.25	541.8
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	70	50.5	131.371	1000.	0.	43317.47	208.128	4.03	15.	120.	417.5
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	70	2195.	2247.	4410.	209.	592294.029	769.606	1333.5	1796.	2747.5	3274.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	68	2266.	2306.691	4380.	605.	530161.948	728.122	1533.5	1789.25	2781.	3198.3
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	66	8.6	8.909	19.9	6.1	3.892	1.973	6.94	7.675	9.925	10.56
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	68	8.	7.983	9.2	7.2	0.12	0.346	7.5	7.8	8.2	8.337
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	68	8.	7.856	9.2	7.2	0.136	0.369	7.5	7.8	8.2	8.337
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	68	0.01	0.014	0.063	0.001	0.	0.012	0.005	0.006	0.016	0.032
00403	PH, LAB, STANDARD UNITS SU	05/21/85-12/11/96	55	7.8	7.815	8.2	7.4	0.046	0.216	7.56	7.7	8.	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	05/21/85-12/11/96	55	7.8	7.764	8.2	7.4	0.049	0.222	7.56	7.7	8.	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/85-12/11/96	55	0.016	0.017	0.04	0.006	0.	0.008	0.008	0.01	0.02	0.028
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	70	6.	5.871	16.	0.	9.186	3.031	3.	3.	7.	10.
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	70	205.5	197.9	258.	0.	1562.787	39.532	155.2	184.5	224.	233.7
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	70	250.5	241.486	315.	0.	2329.123	48.261	189.3	225.5	272.25	285.6
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	62	127.5	334.194	4920.	11.	477452.027	690.979	26.6	61.5	293.5	786.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	69	0.08	0.089	0.4	0.025	0.004	0.067	0.025	0.025	0.1	0.2
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	25 ##	0.005	0.013	0.16	0.005	0.001	0.031	0.005	0.005	0.005	0.024
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	25	0.6	15.028	361.	0.005	5195.213	72.078	0.39	0.49	0.815	1.03
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	48	0.405	1.007	25.9	0.	13.575	3.684	0.1	0.223	0.7	1.
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-03/13/96	25	0.45	0.469	0.8	0.22	0.017	0.132	0.254	0.4	0.56	0.644
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	70	0.08	0.169	1.181	0.005	0.06	0.244	0.02	0.034	0.176	0.405
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	18 ##	0.005	0.022	0.236	0.005	0.003	0.054	0.005	0.005	0.014	0.056
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	70	618.5	626.	1229.	191.	28588.812	169.082	452.4	513.	693.	796.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	70	160.	168.659	430.	55.	3123.63	55.889	114.6	137.5	180.	219.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	70	49.75	49.871	81.	13.	121.271	11.012	38.2	42.	56.	64.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	70	257.	252.953	592.	5.	14192.89	119.134	110.1	173.	330.	405.4
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	70	19.5	19.971	53.	4.1	86.763	9.315	8.02	13.75	25.25	32.
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	32	357.	360.969	812.	29.	36952.418	192.23	116.5	231.25	463.	653.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	44	292.5	317.977	595.	0.	28983.232	170.245	51.5	209.25	463.75	553.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	70	503.5	513.549	1100.	145.	31051.827	176.215	308.02	367.8	594.75	727.73
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	39	16.	18.192	41.	2.5	103.89	10.193	6.	11.	22.	38.
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	39	70.	75.139	680.	0.	12170.054	110.318	0.	0.09	90.	120.
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	39 ##	0.5	1.141	20.	0.5	9.776	3.127	0.5	0.5	0.5	2.
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	39 ##	2.5	4.218	50.	2.5	58.642	7.658	2.5	2.5	2.5	6.
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	39 ##	10.	16.513	150.	5.	559.835	23.661	5.	10.	10.	31.
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	39 ##	2.5	4.859	50.	2.5	77.578	8.808	2.5	2.5	2.5	9.
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	39	55.	430.513	5000.	5.	1084572.888	1041.428	28.	37.	230.	825.
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	39 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
01092	ZINC, TOTAL (UG/L AS ZN)	02/24/82-09/18/91	39 ##	10.	20.551	170.	5.	811.366	28.484	5.	10.	25.	35.
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	39 ##	0.25	0.558	2.5	0.25	0.525	0.724	0.25	0.25	0.5	2.5
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	69	1552.	1553.246	2964.	362.	246485.071	496.473	998.	1172.	1864.	2184.
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	39 ##	0.1	0.077	0.1	0.	0.001	0.029	0.05	0.05	0.1	0.1
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	39	0.41	2.445	40.55	0.04	49.686	7.049	0.12	0.22	1.9	3.3

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	15	17.	15.433	20.	8.7	13.065	3.615	9.06	13.1	18.1	19.58
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/29/95	8	494.5	597.25	1300.	133.	157816.5	397.261	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	15	73.	570.007	6900.	2.4	3080439.858	1755.118	2.94	12.	250.	2952.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	15	1081.	1450.533	3340.	630.	663199.552	814.371	634.2	860.	2070.	2818.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	15	1160.	1552.267	3375.	650.	638931.781	799.332	668.	941.	2206.	2847.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	15	8.5	8.513	10.1	7.	0.581	0.762	7.3	8.1	9.	9.56
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	15	8.2	8.145	8.5	7.8	0.025	0.159	7.92	8.	8.2	8.38
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	15	8.2	8.118	8.5	7.8	0.026	0.162	7.92	8.	8.2	8.38
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	15	0.006	0.008	0.016	0.003	0.	0.003	0.004	0.006	0.01	0.012
00403	PH, LAB, STANDARD UNITS SU	05/21/85-12/11/96	12	8.05	8.017	8.3	7.6	0.047	0.217	7.63	7.85	8.2	8.27
00403	CONVERTED PH, LAB, STANDARD UNITS	05/21/85-12/11/96	12	8.047	7.963	8.3	7.6	0.05	0.224	7.63	7.85	8.2	8.27
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/85-12/11/96	12	0.009	0.011	0.025	0.005	0.	0.006	0.005	0.006	0.014	0.024
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	15	3.	3.6	10.	1.	5.114	2.261	1.6	2.	5.	7.6
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	15	195.	196.933	221.	169.	237.924	15.425	175.6	186.	209.	220.4
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	15	238.	240.267	270.	206.	351.638	18.752	214.4	227.	252.	269.4
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	15	0.	0.067	1.	0.	0.067	0.258	0.	0.	0.	0.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	14	184.5	600.071	2810.	20.	791992.379	889.94	22.	37.25	932.75	2543.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	15 ##	0.05	0.051	0.1	0.	0.001	0.034	0.015	0.025	0.096	0.1
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	3	0.02	0.022	0.04	0.005	0.	0.018	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	3	0.25	0.32	0.56	0.15	0.046	0.214	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	9	0.4	0.468	1.1	0.1	0.107	0.326	0.1	0.155	0.7	1.1
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-03/13/96	5	0.28	0.278	0.43	0.18	0.01	0.099	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	15	0.1	0.267	1.5	0.003	0.19	0.436	0.007	0.015	0.26	1.254
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	4 ##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	15	366.	434.2	775.	259.	22253.171	149.175	271.6	298.	527.	690.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	15	98.	112.6	200.	71.	1430.4	37.821	72.8	78.	135.	176.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	15	33.	37.213	67.	20.	181.887	13.487	21.8	25.	46.3	61.
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	15	110.	160.267	410.	33.	12582.924	112.174	34.8	76.	248.	350.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	15	10.	13.073	33.	3.8	69.274	8.323	3.92	6.	18.7	27.
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	6	101.5	121.833	282.	32.	7114.567	84.348	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	11	165.	235.545	612.	32.	36501.073	191.053	34.4	77.	434.	580.6
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	15	235.2	304.2	720.	122.1	30041.81	173.326	123.84	170.	443.6	606.
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	8	7.5	11.375	30.	3.	84.554	9.195	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	8	55.	51.259	120.	0.	2354.259	48.521	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	8 ##	0.5	0.688	2.	0.5	0.281	0.53	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	8 ##	2.5	2.813	5.	2.5	0.781	0.884	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	8 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	8 ##	2.5	5.	20.	2.5	37.5	6.124	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	8	92.5	213.125	775.	23.	70517.839	265.552	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	02/24/82-09/18/91	8	17.	21.25	55.	10.	234.214	15.304	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	8 ##	0.25	0.313	0.5	0.25	0.013	0.116	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	15	786.	1011.333	2286.	430.	290844.952	539.3	432.4	606.	1428.	1928.4
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	8 ##	0.1	0.15	0.5	0.05	0.022	0.149	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	8	1.64	2.413	7.4	0.1	7.063	2.658	**	**	**	**

** - Less than 9 observations ## - Computed 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: 5/10 to 6/30 - Station ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/24/82-12/11/96	16	18.4	19.981	27.8	16.2	10.378	3.221	16.55	17.95	22.525	25.28
00061	FLOW, STREAM, INSTANTANEOUS CFS	02/24/82-08/29/95	9	264.	309.111	839.	86.	57345.611	239.469	86.	127.	430.	839.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/24/82-12/11/96	16	31.95	125.225	1000.	0.9	64086.475	253.153	1.53	2.9	93.	566.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/24/82-12/11/96	16	2061.	1970.688	3210.	702.	643592.763	802.242	861.6	1242.75	2672.5	3023.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/24/82-12/11/96	16	2319.5	2157.813	3455.	694.	797864.296	893.232	869.7	1232.5	2828.75	3332.5
00300	OXYGEN, DISSOLVED MG/L	02/24/82-12/11/96	16	7.3	7.7	10.8	6.	1.379	1.174	6.35	7.	8.5	9.33
00400	PH (STANDARD UNITS)	02/24/82-12/11/96	16	8.1	7.976	8.4	6.8	0.153	0.391	7.36	7.825	8.275	8.33
00400	CONVERTED PH (STANDARD UNITS)	02/24/82-12/11/96	16	8.1	7.709	8.4	6.8	0.228	0.478	7.36	7.825	8.275	8.33
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/24/82-12/11/96	16	0.008	0.02	0.158	0.004	0.001	0.038	0.005	0.005	0.015	0.065
00403	PH, LAB, STANDARD UNITS SU	05/21/85-12/11/96	14	7.85	7.829	8.3	7.3	0.075	0.273	7.35	7.675	8.	8.2

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

Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0330

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	CONVERTED PH, LAB, STANDARD UNITS	05/21/85-12/11/96	14	7.847	7.744	8.3	7.3	0.082	0.287	7.35	7.675	8.	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/21/85-12/11/96	14	0.014	0.018	0.05	0.005	0.	0.013	0.006	0.01	0.021	0.045
00405	CARBON DIOXIDE (MG/L AS CO2)	02/24/82-12/11/96	16	4.	5.75	21.	2.	28.333	5.323	2.	2.25	5.75	17.5
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	16	197.5	196.938	226.	167.	315.796	17.771	168.4	185.25	212.75	220.4
00440	BICARBONATE ION (MG/L AS HCO3)	02/24/82-12/11/96	16	241.	240.313	276.	204.	468.629	21.648	206.1	225.5	259.5	269.
00445	CARBONATE ION (MG/L AS CO3)	02/24/82-12/11/96	16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/24/82-12/11/96	15	68.	433.733	3655.	6.	885017.924	940.754	8.4	16.	402.	2058.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/24/82-12/11/96	16	0.055	0.061	0.2	0.025	0.002	0.045	0.025	0.025	0.078	0.13
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	5 ##	0.005	0.008	0.02	0.005	0.	0.007	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/01/84-09/05/90	5	0.55	0.562	0.75	0.35	0.021	0.145	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/24/82-03/17/93	9	0.3	0.384	0.7	0.2	0.031	0.177	0.2	0.25	0.55	0.7
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/24/82-03/13/96	6	0.265	0.278	0.42	0.2	0.006	0.077	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/24/82-12/11/96	16	0.08	0.149	1.027	0.01	0.061	0.247	0.014	0.021	0.158	0.504
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/05/90-12/11/96	5	0.01	0.011	0.022	0.005	0.	0.007	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/24/82-12/11/96	16	596.5	534.938	704.	253.	24359.263	156.075	292.9	388.25	657.	698.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/24/82-12/11/96	16	155.	138.625	180.	66.	1713.45	41.394	68.8	102.5	171.5	180.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/24/82-12/11/96	16	51.05	45.969	62.	19.	179.704	13.405	22.5	34.25	56.5	60.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/24/82-12/11/96	16	271.	249.5	430.	49.	16884.933	129.942	67.9	107.5	363.75	395.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/24/82-12/11/96	16	21.25	20.106	34.	4.5	103.051	10.151	6.25	9.175	29.25	33.3
00940	CHLORIDE,TOTAL IN WATER MG/L	02/24/82-10/18/89	6	324.	334.833	622.	110.	52629.767	229.412	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/24/82-12/11/96	12	287.5	314.	670.	62.	40369.273	200.921	76.4	118.5	497.5	631.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/24/82-12/11/96	16	501.25	421.85	680.	96.5	37913.811	194.715	138.15	212.65	571.95	666.
01002	ARSENIC, TOTAL (UG/L AS AS)	02/24/82-09/18/91	8	12.5	13.75	22.	7.	33.357	5.776	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/24/82-09/18/91	8	47.5	65.636	220.	0.	6108.675	78.158	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/24/82-09/18/91	8 ##	0.5	0.563	1.	0.5	0.031	0.177	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/24/82-09/18/91	8 ##	2.5	5.375	20.	2.5	38.625	6.215	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/24/82-09/18/91	8 ##	10.	18.25	39.	5.	213.071	14.597	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/24/82-09/18/91	8 ##	2.5	10.938	40.	2.5	228.46	15.115	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/24/82-09/18/91	8	63.	171.375	760.	30.	62884.268	250.767	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/24/82-09/18/91	8 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	02/24/82-09/18/91	8 ##	15.	25.188	67.	2.5	607.138	24.64	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/24/82-09/18/91	8 ##	0.25	0.563	2.5	0.25	0.621	0.788	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/24/82-12/11/96	16	1653.	1437.5	2268.	434.	387567.2	622.549	550.2	768.5	1901.	2185.4
71830	HYDROXIDE ION (MG/L AS OH)	02/24/82-12/11/96	16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71900	MERCURY, TOTAL (UG/L AS HG)	02/24/82-09/18/91	8 ##	0.1	0.081	0.1	0.05	0.001	0.026	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/24/82-09/18/91	8	0.51	2.468	8.6	0.09	14.392	3.794	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0331

NPS Station ID: ZION0331
LAT/LON: 37.162503/-113.395004
Agency: 112WRD
Date Created: / /
Location: VIRGIN RIVER NR HURRICANE UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09408150
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 14.030
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008081700.00
RF3 Mile Point: 0.26
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	252	16.6	16.151	30.	3.	41.955	6.477	7.	11.	21.	24.85
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/13/91	29	22.	19.983	39.	0.	117.473	10.838	4.	9.5	27.5	35.
00025	BAROMETRIC PRESSURE (MM OF HG)	08/31/81-08/23/82	5	683.	683.6	695.	674.	60.3	7.765	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	137	224.	698.985	8950.	48.	1889003.47	1374.41	77.2	134.5	600.5	1632.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	125	140.	175.704	905.	40.	21373.371	146.196	58.6	77.5	199.	374.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	134	2025.	2145.522	4450.	270.	667614.763	817.077	1100.	1600.	2752.5	3280.
00300	OXYGEN, DISSOLVED MG/L	08/31/81-08/23/82	4	8.5	8.475	10.3	6.6	2.523	1.588	**	**	**	**
00400	PH (STANDARD UNITS)	03/07/67-08/23/82	5	7.9	7.96	8.1	7.9	0.008	0.089	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/07/67-08/23/82	5	7.9	7.953	8.1	7.9	0.008	0.09	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/07/67-08/23/82	5	0.013	0.011	0.013	0.008	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/31/81-08/23/82	4	7.9	7.95	8.3	7.7	0.07	0.265	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/31/81-08/23/82	4	7.889	7.896	8.3	7.7	0.074	0.272	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/31/81-08/23/82	4	0.013	0.013	0.02	0.005	0.	0.007	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/07/67-03/07/67	1	290.	290.	290.	290.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/07/67-03/07/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/31/81-08/23/82	4	0.55	0.575	0.9	0.3	0.063	0.25	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/31/81-05/06/82	2	0.09	0.09	0.12	0.06	0.002	0.042	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/31/81-08/23/82	4 ##	0.013	0.018	0.04	0.005	0.	0.017	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/07/67-08/23/82	5	590.	778.	1700.	300.	289120.	537.699	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/07/67-03/07/67	1	352.	352.	352.	352.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/07/67-08/23/82	5	168.	242.8	620.	86.	45965.2	214.395	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/07/67-08/23/82	5	45.	43.	59.	21.	196.	14.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/07/67-08/23/82	5	230.	218.	400.	65.	15507.5	124.529	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/07/67-08/23/82	5	4.4	3.74	6.5	1.6	4.343	2.084	**	**	**	**
00932	SODIUM, PERCENT	08/31/81-08/23/82	4	38.5	36.75	54.	16.	282.25	16.8	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/07/67-08/23/82	5	17.	16.72	27.	5.6	59.392	7.707	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/07/67-08/23/82	5	330.	311.4	590.	87.	34254.8	185.081	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/07/67-08/23/82	5	416.	605.2	1500.	140.	274055.2	523.503	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/07/67-08/23/82	5	0.4	0.42	0.7	0.2	0.037	0.192	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/07/67-08/23/82	5	12.	15.38	23.	9.9	33.072	5.751	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/07/67-08/23/82	5	450.	476.	950.	140.	88580.	297.624	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/07/67-03/07/67	1	1400.	1400.	1400.	1400.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/31/81-08/23/82	4	1655.	1626.	2670.	524.	848024.	920.882	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/07/67-08/23/82	5	706.	709.	1120.	439.	72360.	268.998	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/07/67-08/23/82	5	1.9	2.148	3.63	0.71	1.197	1.094	**	**	**	**
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	113	20.	22.947	68.	3.	208.729	14.447	5.	12.	35.5	43.
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	114	25.5	28.57	80.	4.	286.088	16.914	8.	14.75	41.25	53.5
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	95	42.	45.779	97.	8.	525.983	22.934	15.6	30.	62.	79.4

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Parameter Inventory for Station: ZION0331

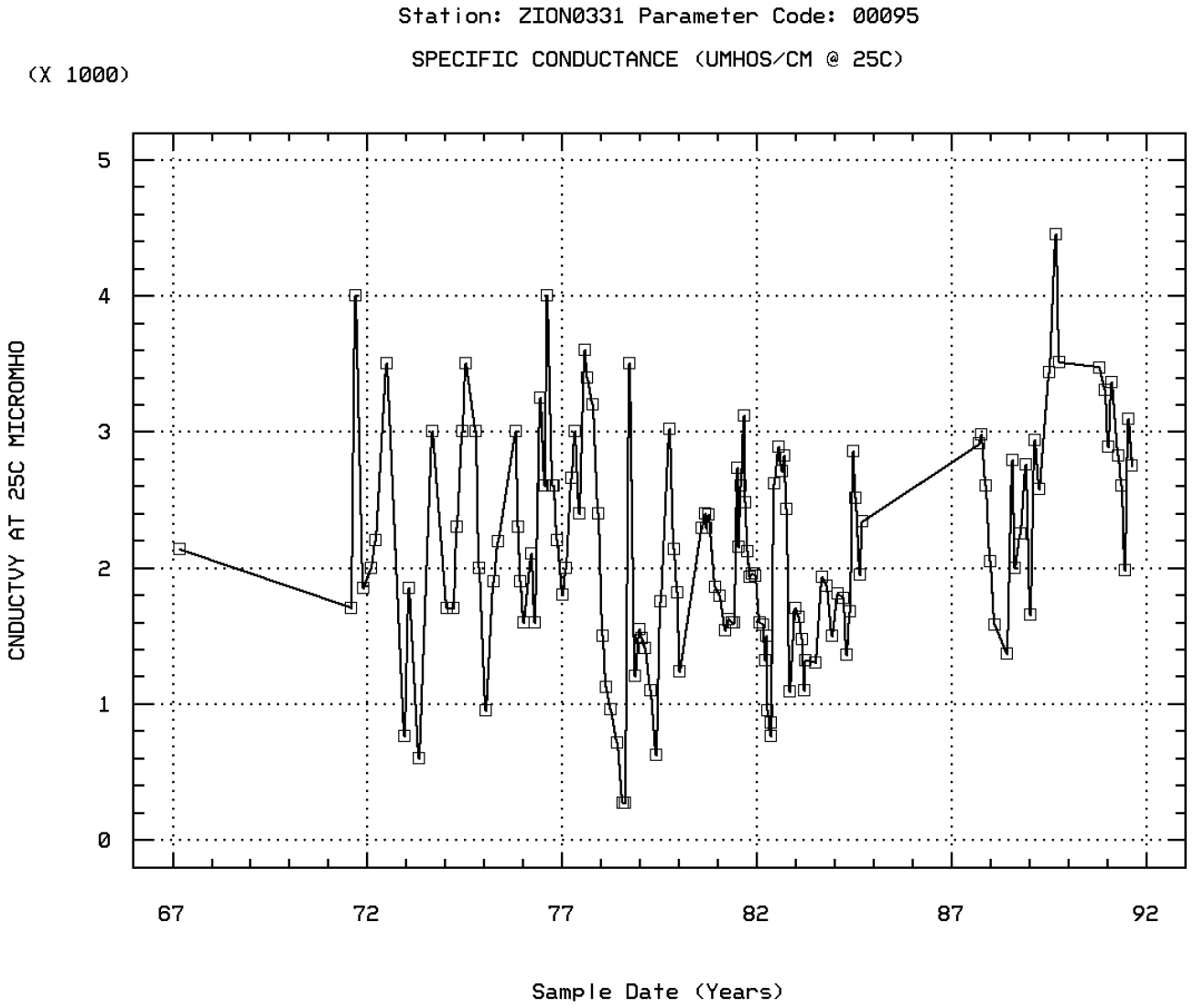
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	114	66.	63.219	100.	15.	525.199	22.917	29.	48.	80.	93.5
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	112	85.	81.205	99.	37.	236.975	15.394	58.3	73.25	94.	97.
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	112	98.5	96.688	100.	71.	20.271	4.502	91.3	95.	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	81	100.	98.938	100.	22.	75.159	8.669	100.	100.	100.	100.
70346	SUS SED FALL DIA(DISTLD WATER)%FINER THAN 1.00MM	02/26/69-01/14/74	5	100.	100.	100.	100.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/07/67-03/07/67	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	115	10100.	39064.609	300000.	97.	4299957518.924	65574.061	491.6	1390.	42400.	122800.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	115	8920.	195793.417	5070000.	21.457574705962.526		676442.685	205.8	618.	63100.	384800.
80158	BED MATERIAL FALL DIAMETER, % FINER THAN .062MM	11/20/67-09/05/73	20	1.	1.9	9.	0.	5.779	2.404	0.	1.	2.	7.5
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	03/07/67-03/19/74	31	8.	14.516	92.	0.	356.858	18.891	1.2	4.	18.	41.2
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	03/07/67-03/19/74	31	55.	52.387	97.	3.	408.978	20.223	20.8	40.	65.	76.6
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	03/07/67-03/19/74	31	84.	79.194	99.	11.	357.695	18.913	54.6	76.	92.	97.2
80162	BED MATERIAL FALL DIAMETER, % FINER THAN 1.00MM	03/07/67-09/02/70	14	85.5	80.071	100.	15.	450.687	21.229	41.	72.25	92.75	98.5
80163	BED MATERIAL FALL DIAMETER, % FINER THAN 2.00MM	03/07/67-09/02/70	13	84.	80.846	98.	25.	359.474	18.96	43.4	74.	93.	97.2
80164	BED MATERIAL SIEVE DIAMETER,% FINER THAN .062MM	05/09/67-03/19/74	4	8.	7.75	15.	0.	70.25	8.382	**	**	**	**
80165	BED MATERIAL SIEVE DIAMETER,% FINER THAN .125MM	05/09/67-09/07/67	2	4.	4.	5.	3.	2.	1.414	**	**	**	**
80166	BED MATERIAL SIEVE DIAMETER,% FINER THAN .250MM	05/09/67-09/07/67	2	29.5	29.5	41.	18.	264.5	16.263	**	**	**	**
80167	BED MATERIAL SIEVE DIAMETER,% FINER THAN .500MM	05/09/67-09/07/67	2	65.5	65.5	91.	40.	1300.5	36.062	**	**	**	**
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	05/09/67-03/19/74	19	94.	86.474	99.	45.	250.374	15.823	46.	82.	97.	99.
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	05/09/67-03/19/74	19	95.	88.368	100.	49.	201.023	14.178	56.	82.	98.	99.
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	03/07/67-12/04/73	31	92.	87.194	100.	35.	204.228	14.291	71.6	82.	96.	99.
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	03/07/67-12/04/73	29	92.	89.724	100.	54.	116.064	10.773	80.	85.	98.	100.
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	03/07/67-12/04/73	25	95.	94.36	100.	80.	20.573	4.536	89.2	92.5	98.	100.
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	03/07/67-12/04/73	21	100.	99.81	100.	96.	0.762	0.873	100.	100.	100.	100.
80174	BED MATERIAL SIEVE DIAMETER,% FINER THAN 64.0MM	02/28/73-02/28/73	1	100.	100.	100.	100.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0331

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	3	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	3	0.60	4	3	0.75	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	4	0.80	4	4	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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



VIRGIN RIVER NR HURRICANE UTAH

Annual Analysis for 1967 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	18	18.3	19.894	29.4	12.2	23.257	4.823	13.73	16.55	24.025	28.41
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	20	270.5	475.2	2890.	105.	370163.958	608.411	123.9	196.25	531.5	850.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	1	2140.	2140.	2140.	2140.	0.	0.	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	19	28.	29.316	51.	5.	165.006	12.845	11.	18.	40.	44.
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	19	37.	36.	67.	9.	273.444	16.536	12.	19.	49.	56.
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	19	52.	54.632	89.	17.	496.468	22.282	18.	32.	74.	87.
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	19	73.	70.737	95.	22.	490.094	22.138	29.	57.	92.	93.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	19	87.	82.158	99.	37.	285.918	16.909	54.	75.	96.	98.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	19	98.	96.316	100.	85.	17.228	4.151	89.	96.	99.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	16	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	19	12200.	26923.579	88500.	467.	904145843.702	30069.018	931.	4590.	39000.	79400.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	19	11100.	54515.263	563000.	194.16	325750998.316	127772.262	354.	2830.	47400.	128000.

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

Annual Analysis for 1968 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	13	20.	17.692	25.	7.	39.731	6.303	7.	12.	22.5	24.6
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	13	263.	597.308	3790.	82.	959156.397	979.365	84.	172.5	600.5	2524.8
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	13	19.	15.923	30.	4.	90.91	9.535	4.4	5.5	24.5	28.4
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	13	23.	21.538	38.	5.	134.269	11.587	6.2	10.	32.5	36.8
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	12	38.	35.583	58.	10.	279.356	16.714	11.2	20.75	51.5	56.2
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	13	53.	53.385	78.	20.	395.59	19.889	23.2	36.	73.5	78.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	13	84.	78.923	94.	58.	170.077	13.041	58.8	66.	91.	94.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	13	98.	97.077	100.	93.	5.077	2.253	93.4	95.5	99.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	12	100.	93.5	100.	22.	507.	22.517	45.4	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	13	9140.	71504.308	297000.	316.11	311802984.564	106356.96	617.6	1215.	139700.	278200.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	13	15500.	293932.462	3040000.	74.69	2898428151.936	832405.207	150.8	579.	128500.	1982000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	17	12.	15.147	26.	5.5	70.493	8.396	5.9	7.	24.	26.
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	17	495.	1311.235	8350.	109.	3881859.191	1970.243	119.4	208.	1665.	3526.
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	17	14.	18.706	47.	3.	152.471	12.348	3.8	12.	25.	39.8
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	17	19.	23.941	58.	5.	227.809	15.093	7.4	13.	34.	50.8
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	16	32.5	38.75	81.	8.	448.067	21.168	11.5	25.	56.5	73.3
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	17	54.	58.471	93.	19.	372.265	19.294	29.4	48.	70.	92.2
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	17	80.	80.353	96.	55.	119.243	10.92	60.6	74.5	88.5	95.2
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	17	97.	96.294	100.	83.	15.971	3.996	91.8	94.	99.	99.2
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	16	100.	99.875	100.	99.	0.117	0.342	99.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	17	11800.	14680.882	52600.	97.	228956607.485	15131.312	753.8	1855.	18600.	43960.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	17	22700.	109621.471	1190000.	54.81	584676566.265	285630.315	226.8	953.	63550.	406800.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	15	19.5	18.7	29.	4.	50.814	7.128	7.6	12.	24.	28.1
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	15	157.	385.	3070.	68.	570147.714	755.081	69.2	87.	345.	1513.6
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	13	14.	17.308	54.	3.	203.564	14.268	3.4	7.	25.	45.2
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	13	20.	24.	72.	6.	331.833	18.216	6.	11.	34.	59.2
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	2	24.5	24.5	33.	16.	144.5	12.021	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	13	55.	59.462	97.	31.	493.936	22.225	31.	39.5	75.5	95.4
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	13	78.	81.692	99.	51.	196.731	14.026	56.6	74.5	93.5	98.6
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	13	100.	98.154	100.	81.	26.974	5.194	87.8	99.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	3	100.	99.667	100.	99.	0.333	0.577	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	14	2730.	50946.571	300000.	169.	8710587656.418	93330.529	204.5	679.	71200.	246000.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	14	820.	129282.	1180000.	34.	102855378364.308	320710.739	45.5	264.	90650.	779000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	20	17.	15.55	25.	7.	45.813	6.769	7.	8.25	20.75	24.5
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	22	166.	603.182	3870.	74.	1043559.013	1021.547	78.5	127.5	436.25	2575.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	3	1850.	2516.667	4000.	1700.	1655833.333	1286.792	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	18	20.	23.944	68.	3.	326.879	18.08	3.9	6.5	38.75	49.1
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	19	22.	28.368	80.	4.	405.801	20.145	5.	10.	45.	53.
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	18	37.5	42.722	95.	8.	662.095	25.731	8.9	25.5	66.5	81.5
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	19	61.	56.474	97.	15.	742.374	27.247	18.	29.	80.	96.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	19	86.	78.737	99.	50.	323.205	17.978	51.	63.	95.	98.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	19	99.	97.526	100.	93.	7.374	2.716	93.	95.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	11	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	19	14800.	25974.895	101000.	630.	979746265.655	31300.899	909.	1440.	42400.	75500.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	19	8920.	65493.579	528000.	228.	17678946676.924	132962.2	331.	553.	45300.	261000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	27	15.	14.463	22.	3.	26.652	5.163	6.5	11.5	18.	21.
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	29	236.	1040.483	8950.	48.	4594826.401	2143.555	52.	86.	873.	5180.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	4	2100.	2115.	3500.	760.	1258233.333	1121.71	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	19	24.	25.947	50.	3.	202.608	14.234	6.	17.	40.	46.
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	19	27.	30.737	57.	7.	231.427	15.213	12.	20.	43.	56.
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	17	45.	49.	88.	20.	308.875	17.575	28.8	36.5	61.5	77.6
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	19	72.	68.789	96.	24.	401.509	20.038	32.	58.	83.	95.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	19	92.	85.368	98.	41.	251.357	15.854	57.	84.	95.	98.
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	19	99.	97.211	100.	88.	13.509	3.675	89.	97.	100.	100.
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	14	100.	100.	100.	100.	0.	0.	100.	100.	100.	100.
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	19	42200.	77552.263	248000.	379.	7124070685.538	84404.21	764.	4640.	130000.	210000.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	19	60700.	663039.105	5070000.	88.	**********	1393337.389	195.	1730.	456000.	3730000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	12	18.75	15.792	25.	5.	50.93	7.137	5.15	8.375	21.	24.7
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	12	297.5	418.75	1190.	78.	154886.386	393.556	83.7	145.5	606.5	1187.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	3	1850.	1815.	3000.	595.	1446925.	1202.882	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	10	23.	27.3	59.	7.	264.233	16.255	7.3	14.5	39.25	57.4
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	10	29.	33.5	71.	8.	401.611	20.04	8.4	15.75	49.5	69.3
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	8	68.	60.625	97.	14.	1046.839	32.355	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	10	87.5	74.2	100.	23.	807.511	28.417	24.2	49.25	97.75	100.
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	8	86.	78.25	99.	38.	492.786	22.199	**	**	**	**
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	8	97.	93.	100.	71.	97.714	9.885	**	**	**	**
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	6	100.	99.333	100.	96.	2.667	1.633	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	10	3830.	9838.4	49000.	98.	249146675.378	15784.381	114.6	315.	12717.5	46700.
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	10	3455.	10127.6	59800.	21.	329113401.822	18141.483	27.6	110.25	11725.	55300.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	11	13.5	14.727	25.5	6.	47.518	6.893	6.	8.	21.	25.4
00060p	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	9	147.	217.444	774.	54.	49444.278	222.361	54.	83.5	245.5	774.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	2	106.	106.	146.	66.	3200.	56.569	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	7	2300.	2457.143	3500.	1700.	509523.81	713.809	**	**	**	**
70337p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	4	20.	22.25	37.	12.	113.583	10.658	**	**	**	**
70338p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	4	28.5	29.	44.	15.	140.667	11.86	**	**	**	**
70340p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	3	50.	42.667	53.	25.	236.333	15.373	**	**	**	**
70342p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	4	71.	70.	80.	58.	98.667	9.933	**	**	**	**
70343p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	4	83.5	84.	96.	73.	136.667	11.69	**	**	**	**
70344p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	4	94.5	95.	100.	91.	22.	4.69	**	**	**	**
70345p	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	3	100.	99.667	100.	99.	0.333	0.577	**	**	**	**
80154p	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	4	2118.	5774.75	18600.	263.	75667464.917	8698.705	**	**	**	**
80155p	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	4	1708.5	10605.25	38900.	104.	357854378.25	18917.039	**	**	**	**

** - 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

Annual Analysis for 1975 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	6	11.5	10.833	14.5	5.5	12.267	3.502	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	6	138.	126.667	152.	79.	836.667	28.925	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	6	2045.	2040.	3000.	950.	447800.	669.179	**	**	**	**

** - 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 box-and-whisker plot

Annual Analysis for 1976 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	9	17.	15.444	24.	7.	24.028	4.902	7.	12.	18.	24.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	9	126.	120.556	202.	40.	2992.278	54.702	40.	71.5	172.	202.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	9	2600.	2505.556	4000.	1600.	589027.778	767.481	1600.	1850.	2925.	4000.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	9	18.	18.444	30.	7.	62.965	7.935	7.	12.5	26.75	30.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	9	73.	99.222	189.	53.	2347.444	48.45	53.	59.5	143.	189.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	9	2660.	2717.778	3600.	1800.	389844.444	624.375	1800.	2200.	3300.	3600.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	9	15.	14.611	22.5	5.	28.174	5.308	5.	11.25	18.5	22.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	9	189.	273.444	609.	59.	50217.278	224.092	59.	75.5	529.5	609.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	9	1120.	1231.111	3500.	270.	940961.111	970.032	270.	490.	1525.	3500.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	8	13.	14.563	27.	7.	55.317	7.438	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	8	169.	306.375	905.	79.	81679.982	285.797	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	8	1615.	1668.125	3020.	625.	513270.982	716.429	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	6	21.5	18.5	25.	9.5	46.	6.782	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	6	151.5	176.333	351.	101.	8578.267	92.619	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	6	2290.	2078.333	2400.	1240.	208136.667	456.22	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	12	16.75	17.	26.5	9.	28.545	5.343	9.6	12.875	20.75	25.9
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	14	151.	153.429	236.	83.	2883.956	53.702	83.5	97.5	199.25	233.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	14	1950.	2084.286	3120.	1540.	234257.143	484.001	1570.	1615.	2510.	2925.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	14	15.75	16.036	28.	7.5	38.71	6.222	8.25	11.	21.625	26.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	14	193.	257.143	550.	82.	25958.132	161.115	84.	128.5	367.25	539.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	14	1590.	1773.571	2890.	760.	594363.187	770.95	810.	1055.	2642.5	2855.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	8	11.	14.	25.5	5.	49.	7.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	8	247.	302.	641.	168.	27650.857	166.285	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	8	1485.	1516.25	1930.	1100.	81798.214	286.004	**	**	**	**

** - 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 1984 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	8	20.75	18.188	26.5	6.5	45.067	6.713	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	8	169.5	184.25	410.	78.	11071.071	105.219	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	8	1880.	2036.25	2860.	1360.	243398.214	493.354	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	4	14.5	13.75	22.	4.	74.917	8.655	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	4	75.5	85.5	132.	59.	1029.667	32.088	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	4	2755.	2635.	2980.	2050.	179366.667	423.517	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	10	18.	17.35	28.	7.	44.781	6.692	7.2	11.25	21.5	27.8
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	10	153.5	166.9	430.	63.	13403.433	115.773	63.2	71.	224.5	414.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	6	2125.	2125.	2790.	1370.	348750.	590.551	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	7	14.	13.786	23.	6.	36.988	6.082	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	9	54.	92.111	250.	40.	5911.861	76.889	40.	50.5	137.	250.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	6	3190.	3095.	4450.	1650.	900910.	949.163	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0331

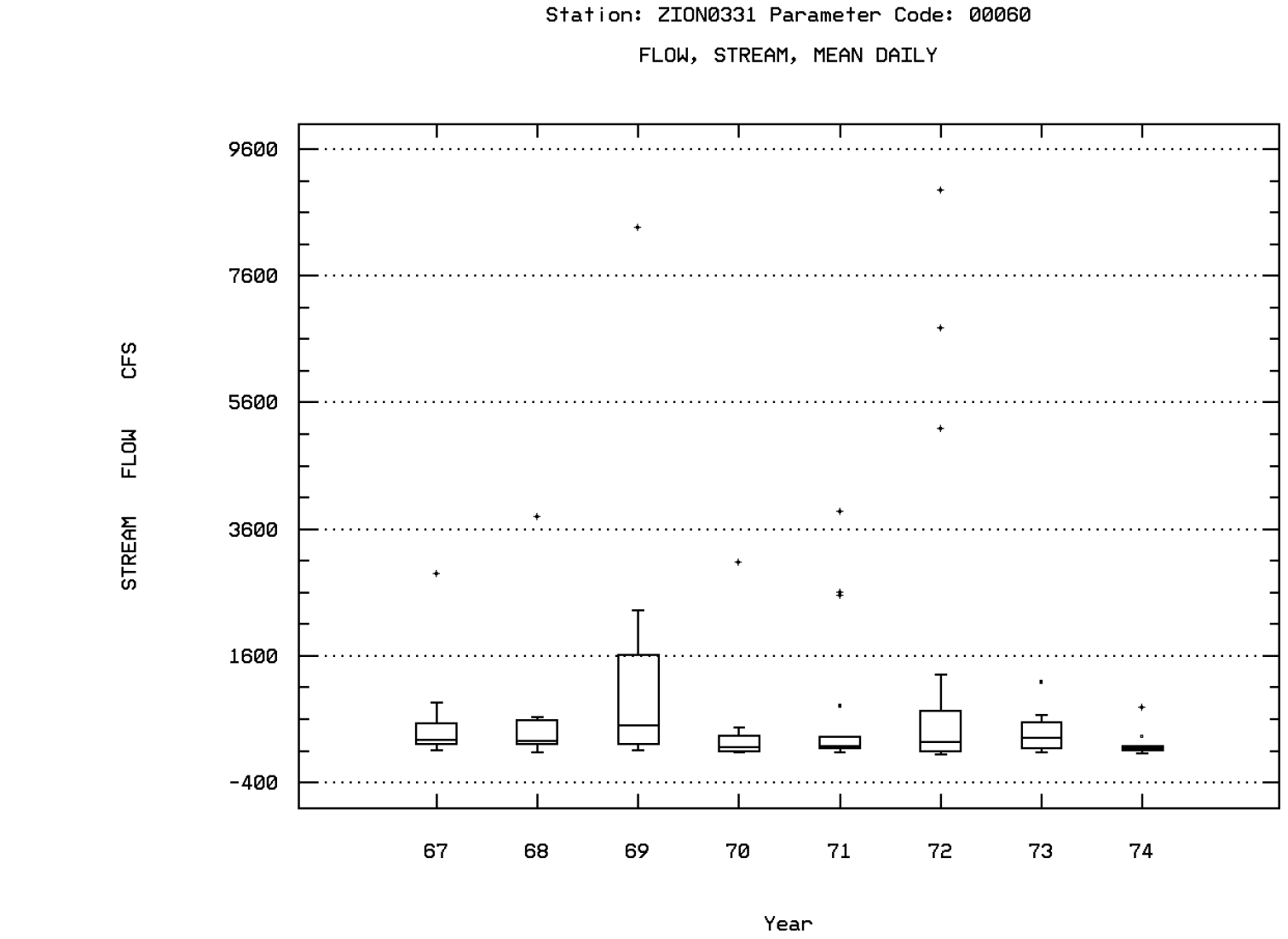
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	2	14.75	14.75	16.5	13.	6.125	2.475	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	2	47.5	47.5	50.	45.	12.5	3.536	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	2	3390.	3390.	3470.	3310.	12800.	113.137	**	**	**	**

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

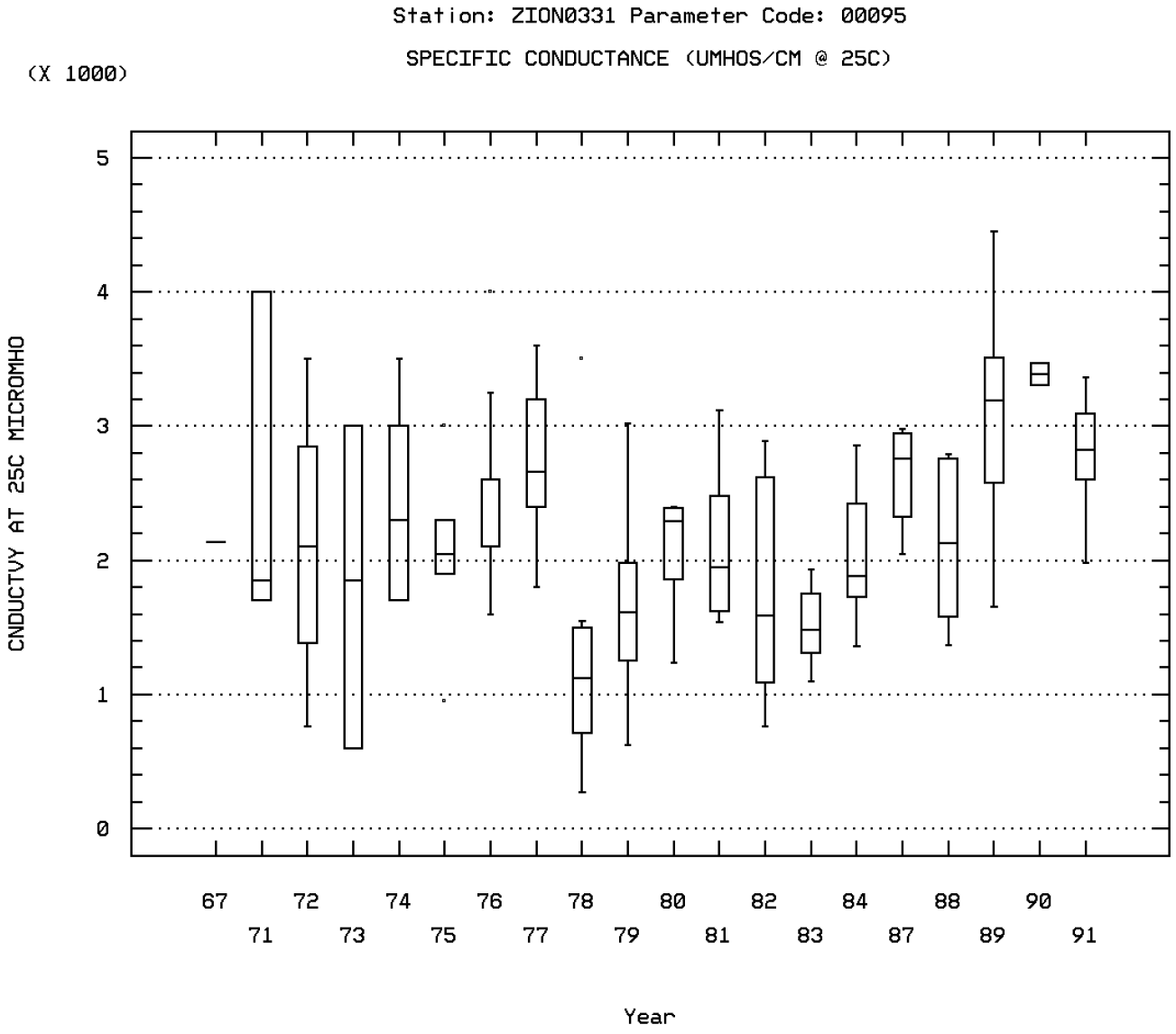
Annual Analysis for 1991 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	7	16.	17.357	27.	8.	52.893	7.273	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	7	66.	67.143	78.	56.	77.476	8.802	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	7	2820.	2784.286	3360.	1980.	186561.905	431.928	**	**	**	**

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



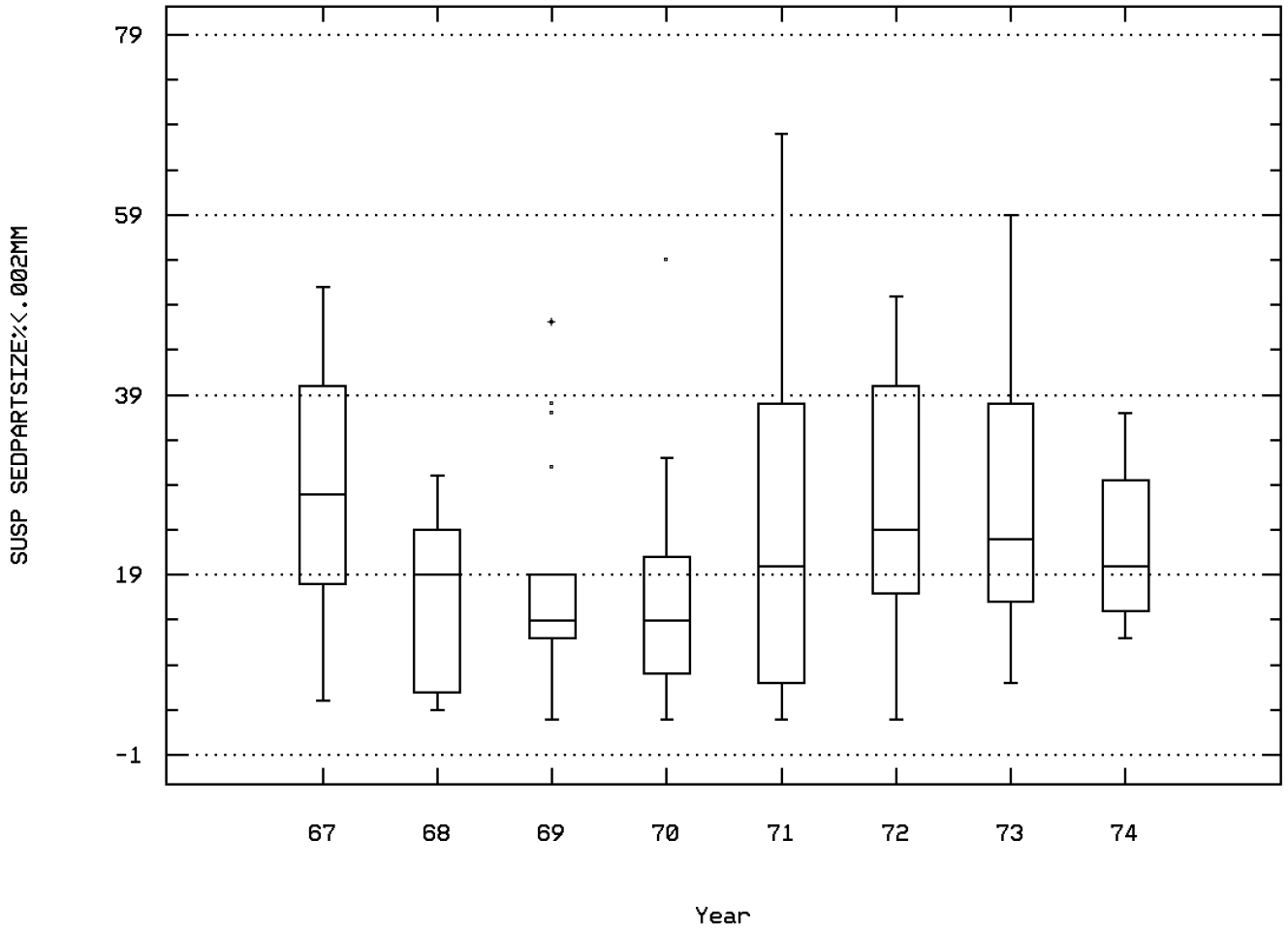
VIRGIN RIVER NR HURRICANE UTAH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70337

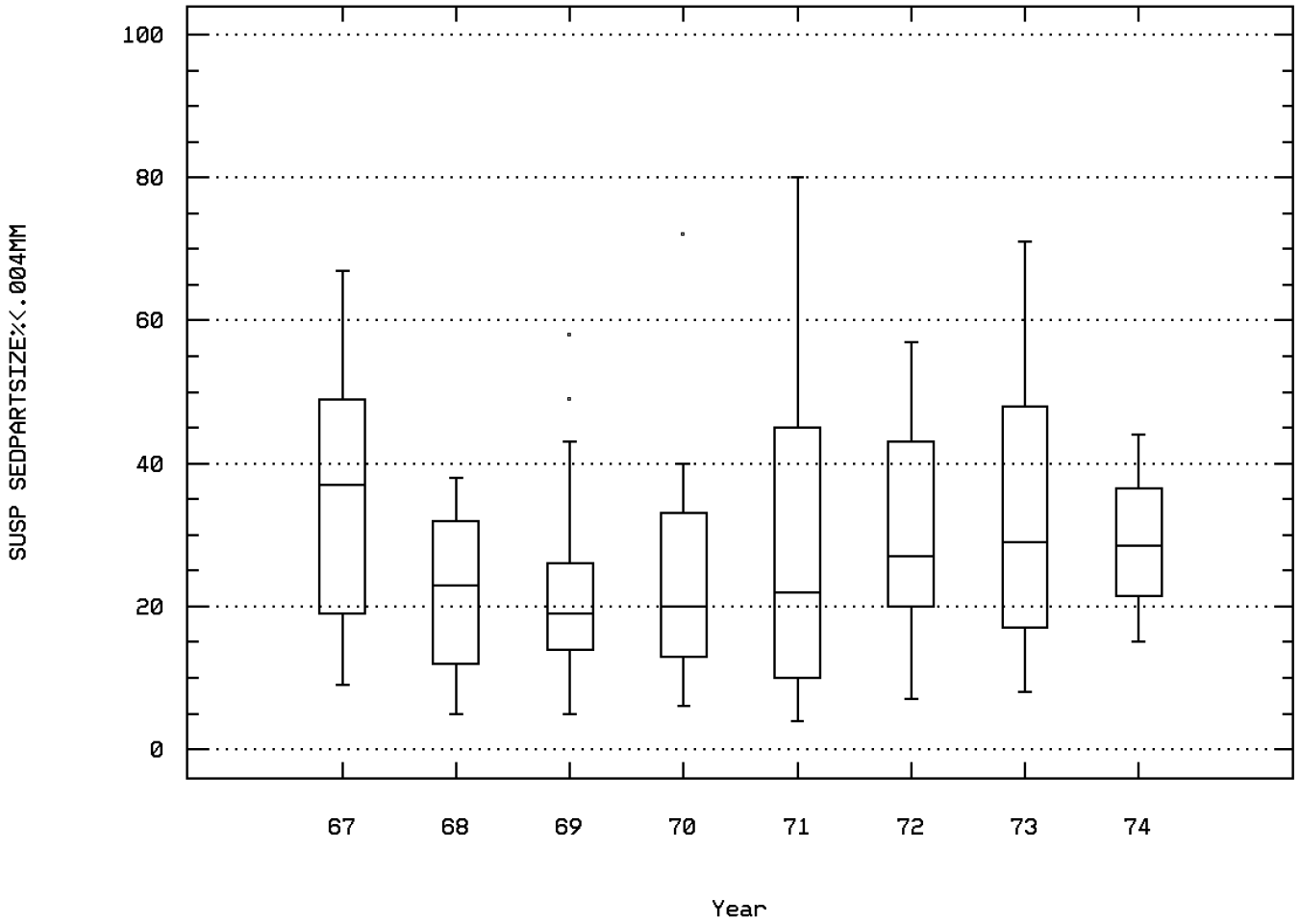
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70338

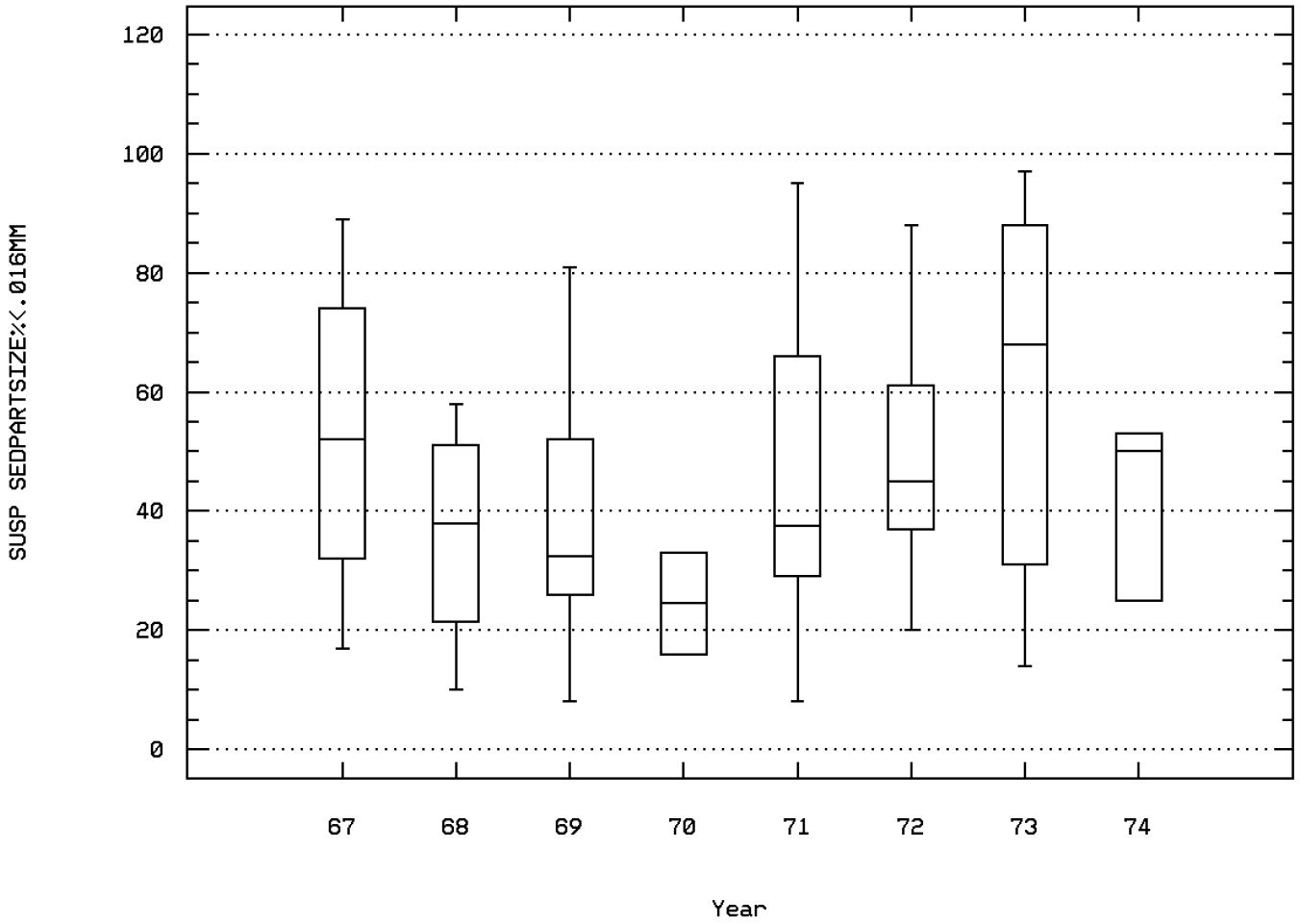
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70340

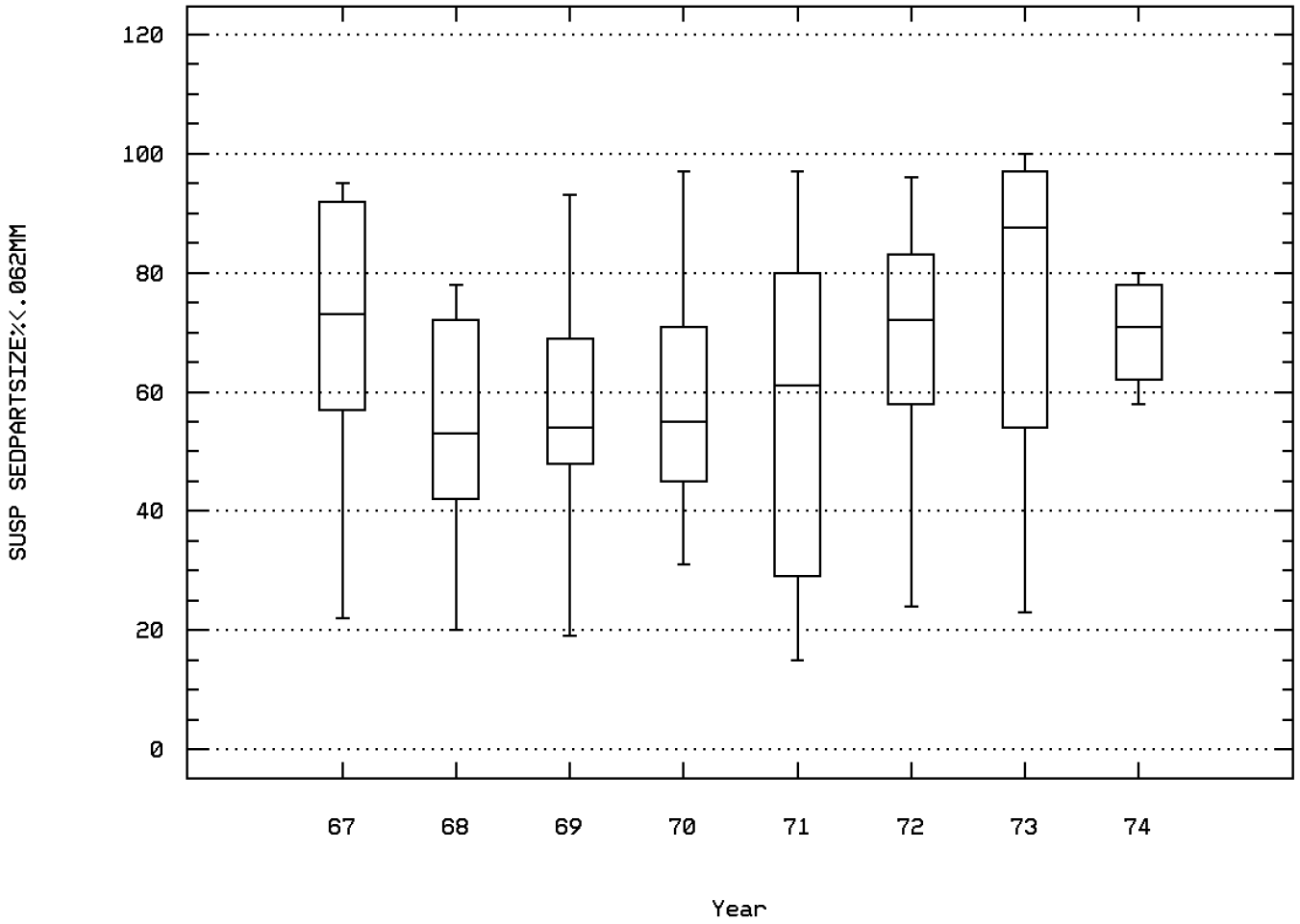
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70342

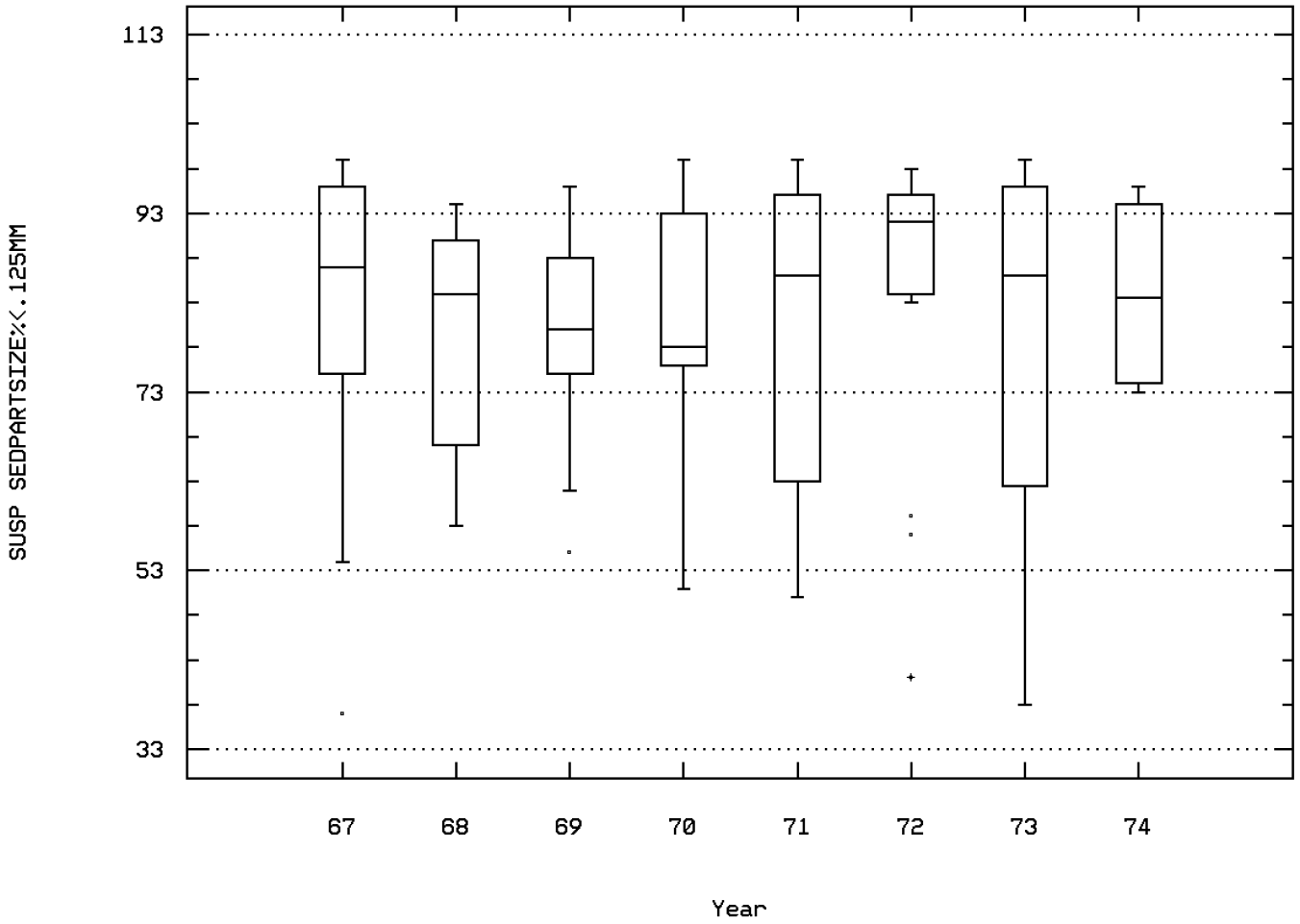
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70343

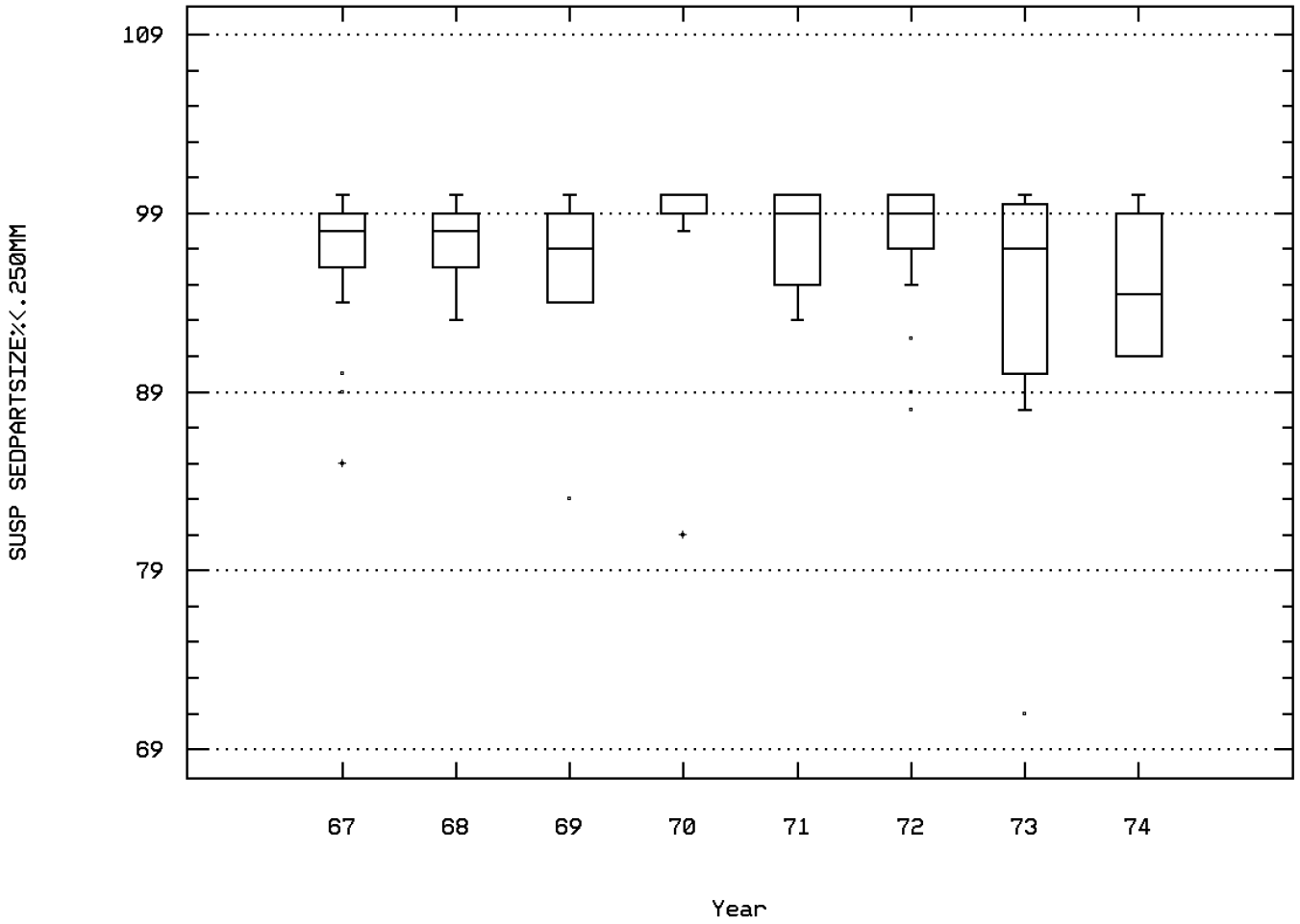
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70344

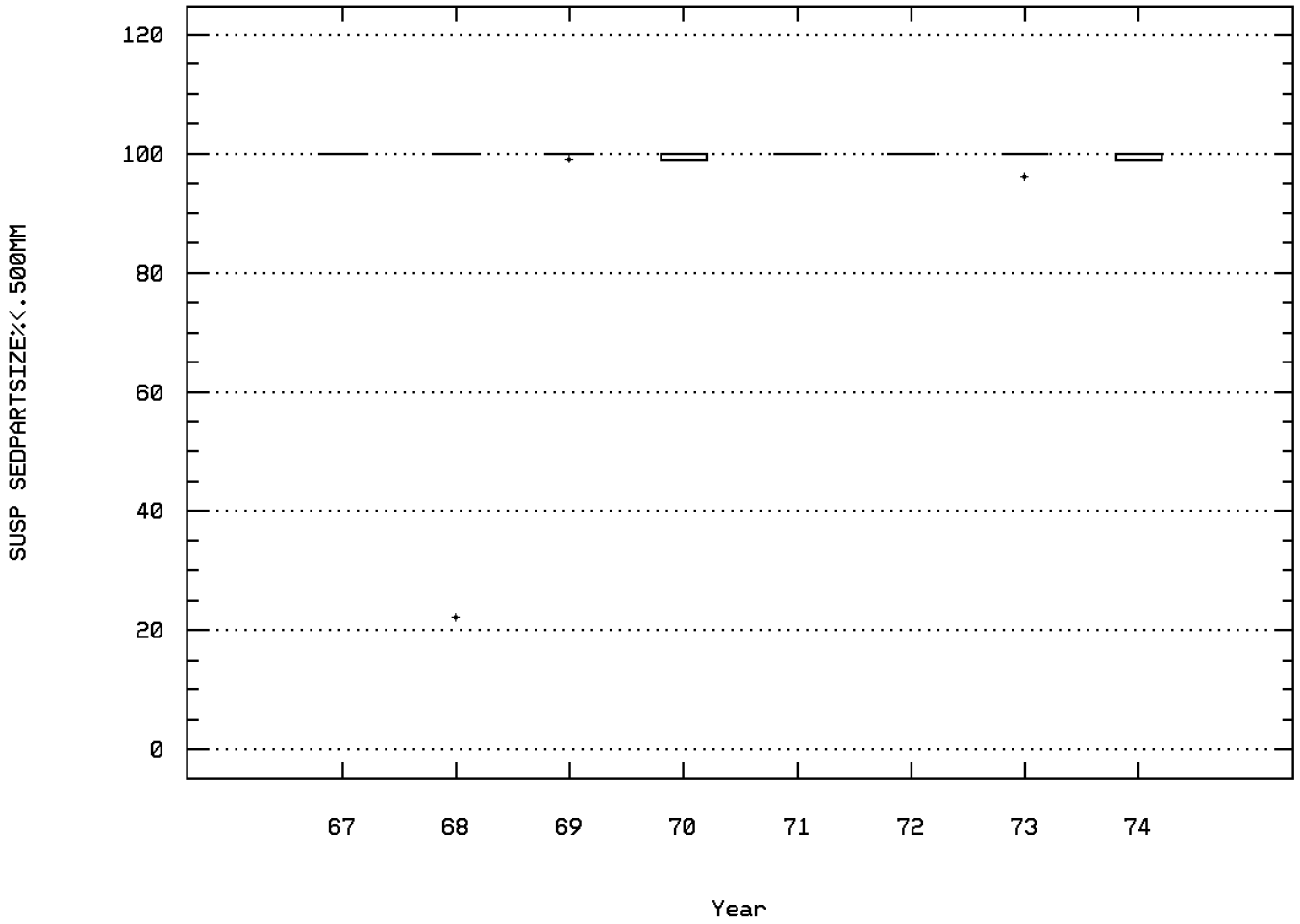
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 70345

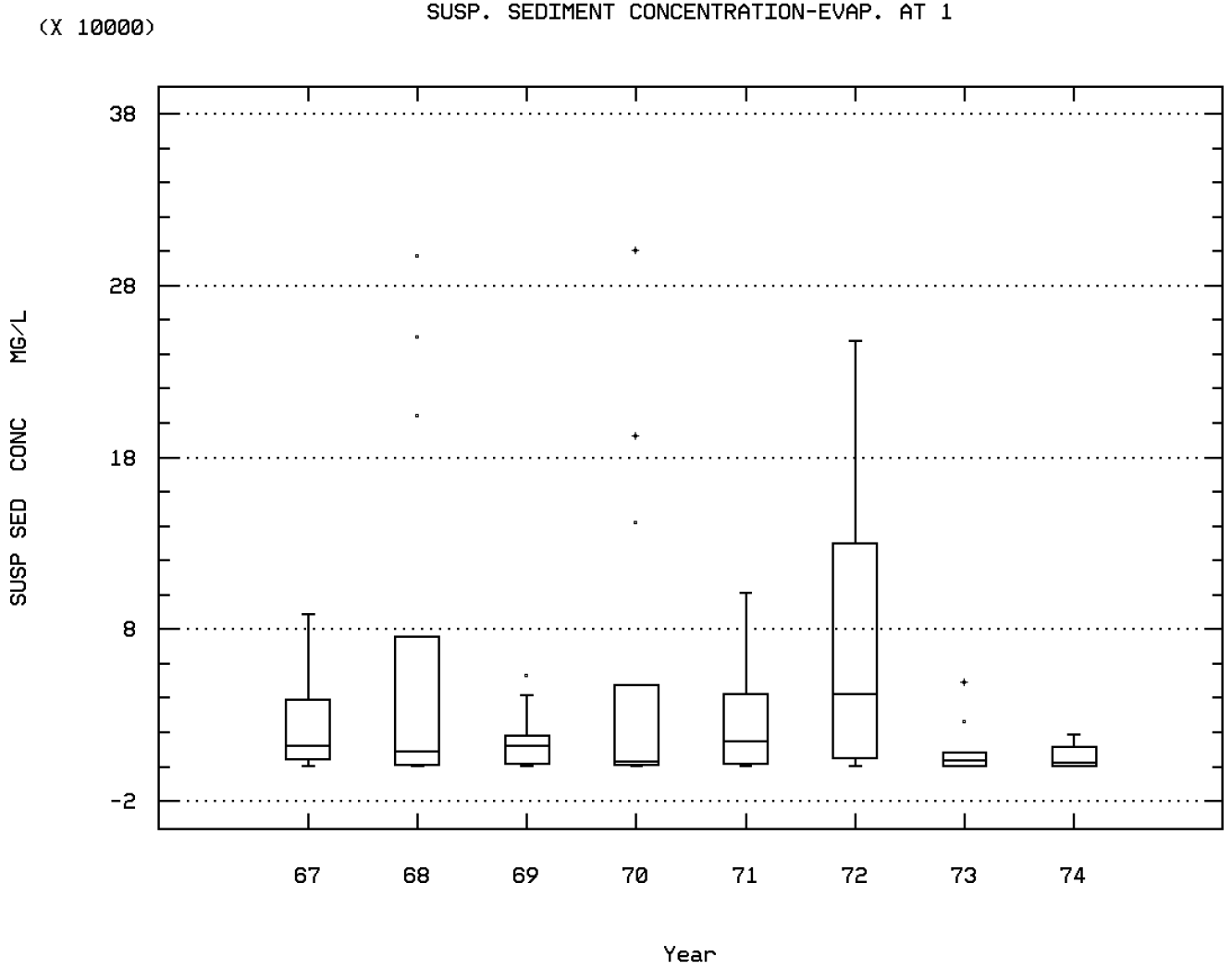
SUS SED FALL DIA(DISTLD WATER)%FINER TH



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 80154

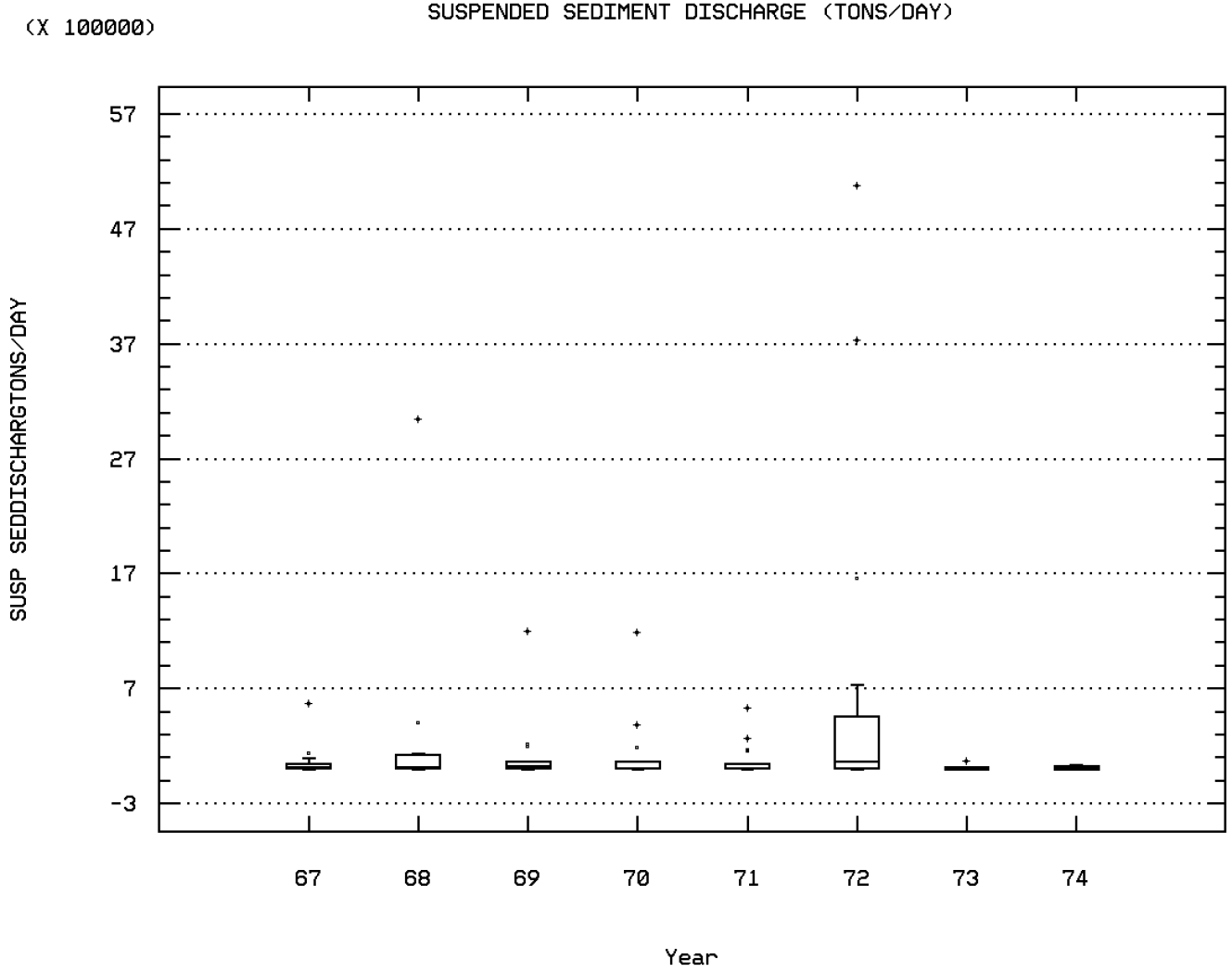
SUSP. SEDIMENT CONCENTRATION-EVAP. AT 1



VIRGIN RIVER NR HURRICANE UTAH

Station: ZION0331 Parameter Code: 80155

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)



VIRGIN RIVER NR HURRICANE UTAH

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	189	17.	16.021	30.	3.	48.627	6.973	7.	9.5	22.	25.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/13/91	20	17.5	16.975	39.	0.	123.065	11.093	2.2	6.	25.75	31.7
00060	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	107	224.	685.43	8950.	48.	1985734.587	1409.161	77.2	141.	495.	1840.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	91	132.	143.495	467.	40.	7198.453	84.844	58.2	79.	186.	247.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	102	2130.	2232.255	4450.	270.	630312.687	793.922	1306.	1700.	2797.5	3388.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	88	21.	24.5	68.	3.	220.437	14.847	4.9	13.25	37.	44.1
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	89	27.	30.27	80.	4.	307.404	17.533	8.	17.	43.	55.
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	77	44.	47.364	97.	8.	558.629	23.635	14.8	32.	67.	80.2
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	89	68.	64.921	100.	15.	574.46	23.968	29.	49.	85.	95.
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	87	88.	83.023	99.	37.	225.302	15.01	59.4	74.	95.	97.2
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	87	99.	97.368	100.	85.	10.514	3.243	92.8	96.	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	61	100.	99.967	100.	99.	0.032	0.18	100.	100.	100.	100.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	90	15200.	41487.589	300000.	98.	4083576039.211	63902.864	795.6	1667.5	52300.	116300.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	90	11850.	195031.622	5070000.	21.	433975445230.552	658768.127	266.4	756.	90650.	393300.
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	03/07/67-03/19/74	24	12.	17.333	92.	0.	426.58	20.654	2.	4.	18.75	48.
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	03/07/67-03/19/74	24	56.5	53.417	97.	3.	448.167	21.17	22.	40.25	65.	82.
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	03/07/67-03/19/74	24	80.	77.708	99.	11.	397.955	19.949	48.	76.	90.75	96.5
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	05/09/67-03/19/74	15	94.	88.2	99.	46.	179.171	13.385	66.4	82.	97.	98.4
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	05/09/67-03/19/74	15	95.	90.133	100.	56.	128.124	11.319	71.	84.	98.	99.4
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	03/07/67-12/04/73	23	91.	87.261	100.	35.	196.838	14.03	72.2	83.	96.	99.6
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	03/07/67-12/04/73	21	91.	89.714	100.	54.	103.514	10.174	80.6	85.5	97.5	98.
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	03/07/67-12/04/73	20	95.	95.2	100.	88.	13.011	3.607	90.	93.	98.	100.
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	03/07/67-12/04/73	16	100.	99.75	100.	96.	1.	1.	98.8	100.	100.	100.

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

Seasonal Analysis for Season #2: 3/20 to 5/09 - Station ZION0331

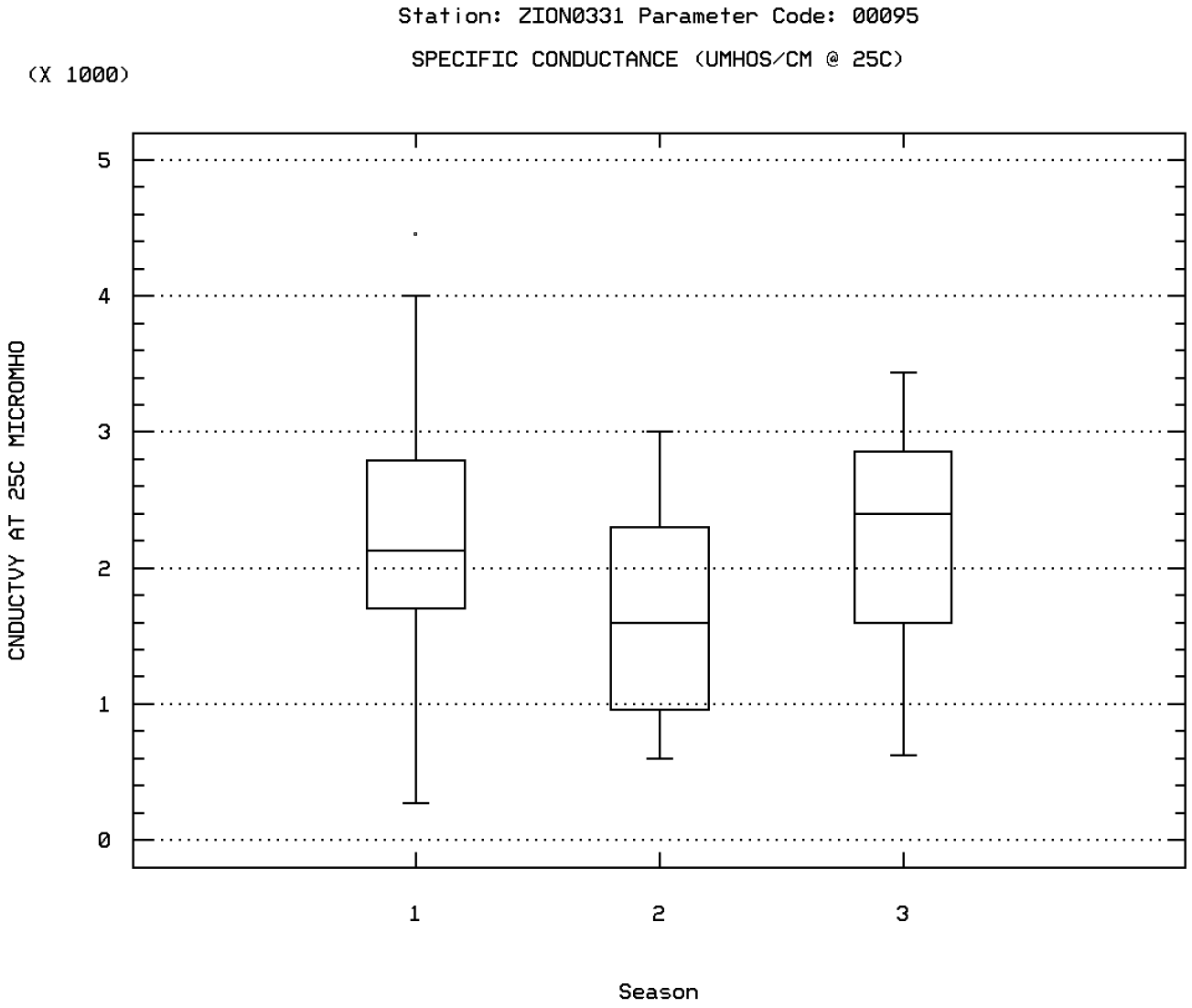
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	34	14.	14.315	24.5	7.	15.837	3.98	9.	12.	16.	20.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/13/91	5	27.	24.4	28.	16.	24.3	4.93	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	14	442.	683.786	1980.	86.	410656.951	640.825	86.	98.25	1207.5	1765.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	20	202.5	294.35	641.	53.	42929.924	207.195	72.	90.	514.25	603.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	19	1600.	1667.105	3000.	595.	548148.099	740.37	760.	960.	2300.	2820.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	11	14.	13.727	27.	5.	46.618	6.828	5.2	8.	18.	26.2
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	11	19.	18.909	37.	8.	71.291	8.443	8.8	12.	21.	35.6
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	9	30.	32.111	52.	18.	122.861	11.084	18.	24.5	40.5	52.
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	11	53.	55.727	80.	35.	192.818	13.886	36.2	45.	70.	78.
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	11	77.	77.182	96.	59.	169.764	13.029	59.	63.	89.	95.6
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	11	98.	96.182	100.	88.	15.364	3.92	88.8	93.	100.	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	9	100.	91.333	100.	22.	676.	26.	22.	100.	100.	100.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	11	4650.	5668.455	18600.	240.	33097997.073	5753.086	267.8	974.	8410.	17240.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	11	11100.	17329.455	63100.	57.	434617445.073	20847.481	63.2	455.	31500.	58260.
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	03/07/67-03/19/74	4	5.	4.5	7.	1.	7.	2.646	**	**	**	**
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	03/07/67-03/19/74	4	58.	54.	69.	31.	268.	16.371	**	**	**	**
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	03/07/67-03/19/74	4	92.5	93.	98.	89.	14.	3.742	**	**	**	**
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	05/09/67-03/19/74	3	94.	79.333	99.	45.	890.333	29.838	**	**	**	**
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	05/09/67-03/19/74	3	97.	81.667	99.	49.	801.333	28.308	**	**	**	**
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	03/07/67-12/04/73	5	99.	89.4	99.	54.	393.3	19.832	**	**	**	**
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	03/07/67-12/04/73	5	100.	91.8	100.	63.	262.2	16.193	**	**	**	**
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	03/07/67-12/04/73	2	88.	88.	96.	80.	128.	11.314	**	**	**	**
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	03/07/67-12/04/73	2	100.	100.	100.	100.	0.	0.	**	**	**	**

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Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0331

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/07/67-08/13/91	29	18.5	19.152	27.	8.	17.395	4.171	14.	16.5	22.1	25.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/31/81-08/13/91	4	30.	29.5	38.	20.	71.	8.426	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	03/07/67-07/11/74	16	213.	802.938	6770.	60.	2725484.863	1650.904	63.5	87.5	764.5	3158.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/10/74-08/13/91	14	125.5	215.571	905.	49.	60659.341	246.291	50.5	74.5	214.	757.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/07/67-08/13/91	13	2400.	2164.231	3440.	625.	845324.359	919.415	659.	1485.	2930.	3364.
70337	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .002MM	03/07/67-04/02/74	14	16.	20.429	46.	5.	192.11	13.86	5.	9.25	32.5	43.5
70338	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .004MM	03/07/67-04/02/74	14	22.	25.357	57.	8.	241.17	15.53	8.5	13.	36.75	52.5
70340	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .016MM	03/07/67-04/02/74	9	45.	45.889	88.	14.	516.111	22.718	14.	28.	63.	88.
70342	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .062MM	03/07/67-04/02/74	14	60.5	58.286	96.	23.	434.681	20.849	25.	44.75	70.75	90.5
70343	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .125MM	03/07/67-04/02/74	14	77.5	73.071	98.	38.	295.302	17.184	44.5	58.75	85.5	96.5
70344	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .250MM	03/07/67-04/02/74	14	95.5	92.857	100.	71.	72.593	8.52	76.	91.25	98.5	100.
70345	SUS SED FALL DIA(DISTLD WATER)%FINER THAN .500MM	03/07/67-03/19/74	11	100.	99.455	100.	96.	1.473	1.214	96.6	99.	100.	100.
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	03/07/67-04/02/74	14	4665.	49728.143	248000.	97.	8618249772.44	92834.529	133.	455.5	60600.	228000.
80155	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	03/07/67-04/02/74	14	2955.	340912.357	3730000.	34.991	548239235.632	995765.153	44.	178.25	83525.	2230000.
80159	BED MATERIAL FALL DIAMETER, % FINER THAN .125MM	03/07/67-03/19/74	3	7.	5.333	8.	1.	14.333	3.786	**	**	**	**
80160	BED MATERIAL FALL DIAMETER, % FINER THAN .250MM	03/07/67-03/19/74	3	52.	42.	55.	19.	399.	19.975	**	**	**	**
80161	BED MATERIAL FALL DIAMETER, % FINER THAN .500MM	03/07/67-03/19/74	3	80.	72.667	85.	53.	296.333	17.214	**	**	**	**
80168	BED MATERIAL SIEVE DIAMETER,% FINER THAN 1.00MM	05/09/67-03/19/74	1	82.	82.	82.	82.	0.	0.	**	**	**	**
80169	BED MATERIAL SIEVE DIAMETER,% FINER THAN 2.00MM	05/09/67-03/19/74	1	82.	82.	82.	82.	0.	0.	**	**	**	**
80170	BED MATERIAL SIEVE DIAMETER,% FINER THAN 4.00MM	03/07/67-12/04/73	3	82.	83.	92.	75.	73.	8.544	**	**	**	**
80171	BED MATERIAL SIEVE DIAMETER,% FINER THAN 8.00MM	03/07/67-12/04/73	3	85.	86.333	93.	81.	37.333	6.11	**	**	**	**
80172	BED MATERIAL SIEVE DIAMETER,% FINER THAN 16.0MM	03/07/67-12/04/73	3	93.	93.	96.	90.	9.	3.	**	**	**	**
80173	BED MATERIAL SIEVE DIAMETER,% FINER THAN 32.0MM	03/07/67-12/04/73	3	100.	100.	100.	100.	0.	0.	**	**	**	**

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VIRGIN RIVER NR HURRICANE UTAH

Station Inventory for Station: ZION0332

NPS Station ID: ZION0332
LAT/LON: 37.162503/-113.395004
Agency: 21USU
Date Created: / /
Location: VIRGIN RIVER AT U-15 BRDG USGS
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 000210 /09408150
RMI-Indexes: 1101001 005770
Within Park Boundary: No
RMI-Miles: 0038.65 0012.17
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 14.030
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008000500.00
RF3 Mile Point: 0.88
Distance from RF3: 0.02
On/Off RF3:
Description:
VIRGIN RIVER 2 MILES EAST OF HARRISBURG JUNCTION AT USGS STA. 09408150.

Parameter Inventory for Station: ZION0332

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/73-07/16/74	5	16.	16.9	24.5	8.	47.55	6.896	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/73-07/16/74	5	108.	101.8	155.	65.	1329.7	36.465	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	10/31/73-05/28/74	4	13.1	13.725	23.	5.7	82.143	9.063	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/73-07/16/74	5	2290.	2620.2	3510.	1790.	524510.2	724.231	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	10/31/73-07/16/74	5	8.3	8.92	11.4	7.4	2.437	1.561	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/31/73-07/16/74	5	1.3	1.22	1.8	0.6	0.227	0.476	**	**	**	**
00400	PH (STANDARD UNITS)	10/31/73-07/16/74	5	8.15	8.11	8.3	7.9	0.026	0.16	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/31/73-07/16/74	5	8.15	8.086	8.3	7.9	0.026	0.162	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/73-07/16/74	5	0.007	0.008	0.013	0.005	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/31/73-05/28/74	4	48.7	42.6	65.	8.	698.64	26.432	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	220.	218.4	235.	200.	169.3	13.012	**	**	**	**
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	10/31/73-05/28/74	4	130.	130.25	141.	120.	76.25	8.732	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/31/73-05/28/74	4	264.	264.5	286.	244.	305.	17.464	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/31/73-07/16/74	5	16.	27.4	76.	11.	748.8	27.364	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.107	0.108	0.153	0.067	0.002	0.041	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.005	0.008	0.014	0.003	0.	0.005	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/31/73-07/16/74	5	0.42	109.716	547.	0.3	59755.414	244.449	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/31/73-07/16/74	5	0.005	0.006	0.01	0.004	0.	0.003	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/73-07/16/74	5	0.042	0.059	0.134	0.032	0.002	0.042	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/73-07/16/74	4	5.	4.25	6.5	0.5	7.417	2.723	**	**	**	**
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	10/31/73-07/16/74	5	57.	55.8	60.	46.	31.7	5.63	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	10/31/73-07/16/74	4	60.	59.125	66.5	50.	52.396	7.238	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/31/73-07/16/74	5	560.	593.2	740.	460.	11551.2	107.477	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/31/73-07/16/74	5	148.	159.6	208.	116.	1280.8	35.788	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/31/73-07/16/74	5	46.	47.2	54.	41.	22.7	4.764	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/31/73-07/16/74	5	280.	329.	480.	160.	17830.	133.529	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/31/73-07/16/74	5	26.	22.6	37.	7.	131.3	11.459	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/73-07/16/74	5	400.	463.4	680.	253.	31054.3	176.222	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/73-07/16/74	5	410.	459.	600.	320.	15930.	126.214	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/31/73-05/28/74	4	0.4	0.373	0.45	0.24	0.01	0.1	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/31/73-05/28/74	4	18.5	18.75	22.	16.	6.25	2.5	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	10/31/73-07/16/74	5	10.	20.	50.	0.	400.	20.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/31/73-07/16/74	5	400.	432.	850.	220.	64470.	253.909	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	10/31/73-07/16/74	5	0.	4.6	22.	0.	94.8	9.737	**	**	**	**

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Parameter Inventory for Station: ZION0332

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	10/31/73-07/16/74	5	0.	0.4	2.	0.	0.8	0.894	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	10/31/73-05/28/74	4	180.	151.	230.	14.	9164.	95.729	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/73-07/16/74	5	0.	6.	20.	0.	80.	8.944	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/73-07/16/74	5	0.	8.	30.	0.	170.	13.038	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/31/73-07/16/74	5	16.	18.8	48.	4.	299.2	17.297	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	10/31/73-07/16/74	5	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	10/31/73-07/16/74	5	0.	4.	10.	0.	30.	5.477	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10/31/73-07/16/74	5	0.	1.6	8.	0.	12.8	3.578	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/31/73-07/16/74	5	930.	2702.	9300.	230.	14189070.	3766.838	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/31/73-07/16/74	5	2.968	3.107	3.968	2.362	0.359	0.599	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1279.666								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	75.	110.4	230.	4.	9862.3	99.309	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	10/31/73-07/16/74	5	1.875	1.755	2.362	0.602	0.506	0.711	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			56.842								
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	10/31/73-07/16/74	5 ##	3.655	4.401	10.7	0.	15.082	3.884	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/31/73-07/16/74	5	1440.	1655.6	2300.	1144.	220088.8	469.136	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	10/31/73-05/28/74	4	0.	0.	0.	0.	0.	0.	**	**	**	**
75009	CADDIS	07/16/74-07/16/74	1 ##	7.	7.	7.	7.	0.	0.	**	**	**	**
75012	SNAILS	07/16/74-07/16/74	1	14.	14.	14.	14.	0.	0.	**	**	**	**
75021	CHIRONOMIDAE	07/16/74-07/16/74	1	789.	789.	789.	789.	0.	0.	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0332

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 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	1	0	0.00	1	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Other-Hi Lim.	9.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	250.	5	5	1.00	3	3	1.00	1	1	1.00	1	1	1.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	5	1.00	3	3	1.00	1	1	1.00	1	1	1.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	1	0.20	3	1	0.33	1	0	0.00	1	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	5	1	0.20	3	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	5.	5	1	0.20	3	0	0.00	1	0	0.00	1	1	1.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1300.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	15.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	100.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	5000.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	50.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	2	0.40	3	1	0.33	1	0	0.00	1	1	1.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0332

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	2	0.40	3	2	0.67	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

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

Station Inventory for Station: ZION0333

NPS Station ID: ZION0333
LAT/LON: 37.207226/-113.396115
Agency: 21UTAH
Date Created: 05/17/86
Location: QUAIL CK AB RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495038
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: UPPER COLORADO RIVER
ECO Region:
RF1 Index: 15010008023
RF1 Mile Point: 2.000
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008002300.00
RF3 Mile Point: 0.35
Distance from RF3: 0.01
On/Off RF3:
Description:
UTAH STATE CLASSIFICATION-1C,2B,3B,4
USGS 7.5 QUADRANGLE-HURRICANE 29400

Parameter Inventory for Station: ZION0333

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/86-08/09/95	8	21.35	21.038	28.8	11.2	37.426	6.118	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/86-08/09/95	7	0.5	3.443	11.	0.2	18.733	4.328	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/19/86-08/03/90	3	225.	234.	445.	32.	42703.	206.647	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/19/86-08/09/95	8	334.	539.625	1287.	222.	198241.696	445.243	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/19/86-08/03/90	3	1320.	1320.333	1551.	1090.	53130.333	230.5	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/19/86-08/09/95	8	8.	8.05	9.1	6.8	0.554	0.745	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	08/19/86-10/05/88	2	23.5	23.5	35.	12.	264.5	16.263	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/86-08/09/95	8	8.25	8.2	8.5	7.5	0.109	0.33	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/86-08/09/95	8	8.247	8.061	8.5	7.5	0.131	0.362	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/86-08/09/95	8	0.006	0.009	0.032	0.003	0.	0.01	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	10/05/88-08/03/90	2	8.05	8.05	8.1	8.	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/05/88-08/03/90	2	8.047	8.047	8.1	8.	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/05/88-08/03/90	2	0.009	0.009	0.01	0.008	0.	0.001	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	08/19/86-08/03/90	3	3.	3.667	5.	3.	1.333	1.155	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	263.	284.	345.	244.	2881.	53.675	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	08/19/86-08/03/90	3	321.	346.333	421.	297.	4325.333	65.767	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	08/19/86-08/03/90	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/19/86-08/09/95	7	24.	166.143	924.	8.	113770.476	337.299	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/19/86-08/09/95	8 ##	0.025	0.045	0.12	0.025	0.001	0.034	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3 ##	0.005	0.01	0.02	0.005	0.	0.009	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	08/19/86-08/03/90	3	0.02	0.302	0.88	0.005	0.251	0.501	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/05/88-10/05/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/19/86-05/22/91	4 ##	0.075	0.225	0.7	0.05	0.101	0.318	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	05/22/91-08/09/95	5	0.01	0.02	0.05	0.01	0.	0.017	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/19/86-08/09/95	8	0.05	0.085	0.329	0.024	0.01	0.101	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	08/03/90-08/09/95	6	0.03	0.022	0.034	0.003	0.	0.014	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/19/86-10/05/88	2 ##	0.021	0.021	0.04	0.003	0.001	0.027	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/19/86-10/05/88	2	5.9	5.9	6.4	5.4	0.5	0.707	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/86-08/03/90	3	635.	631.667	741.	519.	12329.333	111.038	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/86-08/03/90	3	150.	133.667	160.	91.	1390.333	37.287	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/86-08/03/90	3	71.	72.333	83.	63.	101.333	10.066	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/86-08/03/90	3	60.	65.333	81.	55.	190.333	13.796	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/86-08/03/90	3	6.	5.667	6.	5.	0.333	0.577	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/19/86-10/05/88	2	38.5	38.5	43.	34.	40.5	6.364	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/03/90-08/03/90	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/19/86-08/03/90	3	480.	446.667	600.	260.	29733.333	172.434	**	**	**	**

** - Less than 9 observations ## - 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: ZION0333

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01002	ARSENIC, TOTAL (UG/L AS AS)	08/19/86-08/03/90	3	3.	3.5	5.	2.5	1.75	1.323	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	08/19/86-08/03/90	3	120.	123.333	130.	120.	33.333	5.774	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/19/86-08/03/90	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/19/86-08/03/90	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/19/86-08/03/90	3 ##	10.	13.667	21.	10.	40.333	6.351	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/19/86-08/03/90	3 ##	2.5	3.333	5.	2.5	2.083	1.443	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	08/19/86-08/03/90	3	54.	93.	180.	45.	5697.	75.478	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	08/19/86-08/03/90	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	08/19/86-08/03/90	3 ##	10.	8.333	10.	5.	8.333	2.887	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	08/19/86-08/03/90	3 ##	0.25	1.	2.5	0.25	1.688	1.299	**	**	**	**
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/22/91-05/22/91	1	12.	12.	12.	12.	0.	0.	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/22/91-05/22/91	1	1.079	1.079	1.079	1.079	0.	0.	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			12.								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	05/22/91-05/22/91	1	92.	92.	92.	92.	0.	0.	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	05/22/91-05/22/91	1	1.964	1.964	1.964	1.964	0.	0.	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			92.								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/19/86-08/09/95	8	465.	523.875	1228.	6.	274702.411	524.121	**	**	**	**
70324	SOLIDS, VOLATILE SUSPENDED IN MIXED LIQUOR (MG/L)	05/22/91-08/09/95	5	5.	6.	10.	2.	11.5	3.391	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	08/19/86-08/03/90	3	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/19/86-08/03/90	3 ##	0.1	0.083	0.1	0.05	0.001	0.029	**	**	**	**
72015	DEPTH TO TOP OF SAMPLE INTERVAL (FT BELOW LSD)	06/28/95-06/28/95	1	18.	18.	18.	18.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	08/19/86-08/03/90	3	0.13	1.12	3.1	0.13	2.94	1.715	**	**	**	**

** - Less than 9 observations ## - 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: ZION0333

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	2	0.67	3	2	0.67									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8	0	0.00	5	0	0.00				3	0	0.00			
00400	PH	Other-Hi Lim.	9.	8	0	0.00	5	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	5	0	0.00				3	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	3	0	0.00	3	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	3	0	0.00	3	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	5	0	0.00	2	0	0.00				3	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									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	3	1.00	3	3	1.00									
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									
01007	BARIUM, TOTAL	Drinking Water	2000.	3	0	0.00	3	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	3	0	0.00	3	0	0.00									
		Drinking Water	5.	3	0	0.00	3	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	3	0	0.00	3	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	3	1	0.33	3	1	0.33									
		Drinking Water	1300.	3	0	0.00	3	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	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.	3	0	0.00	3	0	0.00									
		Drinking Water	5000.	3	0	0.00	3	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0333

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	0	0.00	3	0	0.00									
		Drinking Water	2.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0334

NPS Station ID: ZION0334
LAT/LON: 37.210004/-113.397781
Agency: 21UTAH
Date Created: 10/26/96
Location: LEEDS CK AB QUAIL CK
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495031
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0334

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/09/96-10/30/96	4	17.95	18.75	22.3	16.8	6.177	2.485	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	07/09/96-10/30/96	4	0.3	0.375	0.8	0.1	0.116	0.34	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/09/96-10/30/96	4	3.85	6.4	15.9	2.	40.953	6.399	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/09/96-10/30/96	4	859.	939.5	1198.	842.	29763.	172.52	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/09/96-10/30/96	4	898.	963.5	1200.	858.	25257.	158.925	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/09/96-10/30/96	4	8.05	7.9	9.4	6.1	2.22	1.49	**	**	**	**
00400	PH (STANDARD UNITS)	07/09/96-10/30/96	4	7.95	7.925	8.2	7.6	0.062	0.25	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/09/96-10/30/96	4	7.947	7.87	8.2	7.6	0.067	0.258	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/09/96-10/30/96	4	0.011	0.014	0.025	0.006	0.	0.008	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/09/96-10/30/96	4	8.	8.025	8.2	7.9	0.022	0.15	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/09/96-10/30/96	4	7.989	8.006	8.2	7.9	0.023	0.152	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/09/96-10/30/96	4	0.01	0.01	0.013	0.006	0.	0.003	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/09/96-10/30/96	4	5.	5.25	7.	4.	2.25	1.5	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/09/96-10/30/96	4	247.	260.25	317.	230.	1496.25	38.681	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/09/96-10/30/96	4	301.	317.	386.	280.	2214.667	47.06	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/09/96-10/30/96	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/09/96-10/30/96	4	29.5	71.	216.	9.	9666.	98.316	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/09/96-10/30/96	4 ##	0.025	0.053	0.135	0.025	0.003	0.055	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/09/96-10/30/96	4 ##	0.015	0.033	0.09	0.01	0.001	0.039	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/09/96-10/30/96	4	0.025	0.036	0.073	0.02	0.001	0.025	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	07/09/96-10/30/96	4	0.015	0.016	0.03	0.005	0.	0.011	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/09/96-10/30/96	4	424.	441.75	516.	403.	2564.917	50.645	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/09/96-10/30/96	4	108.5	108.5	112.	105.	8.333	2.887	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/09/96-10/30/96	4	36.05	41.575	60.	34.2	151.683	12.316	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/09/96-10/30/96	4	32.3	34.75	43.7	30.7	36.977	6.081	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/09/96-10/30/96	4	1.75	3.07	7.68	1.1	9.674	3.11	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/09/96-10/30/96	4	30.5	28.75	31.	23.	14.917	3.862	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/09/96-10/30/96	4	189.55	219.825	318.6	181.6	4354.949	65.992	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/09/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	07/09/96-10/30/96	3	88.	82.667	120.	40.	1621.333	40.266	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/09/96-10/30/96	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/09/96-10/30/96	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/09/96-10/30/96	3 ##	6.	6.	6.	6.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/09/96-10/30/96	3	41.	103.667	239.	31.	13761.333	117.309	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/09/96-10/30/96	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/09/96-10/30/96	3	66.	76.	130.	32.	2476.	49.759	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	07/09/96-10/30/96	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/09/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0334

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/09/96-10/30/96	3 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/09/96-10/30/96	3 ##	0.5	2.	5.	0.5	6.75	2.598	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/09/96-10/30/96	4	622.	672.5	866.	580.	17417.	131.973	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	07/09/96-10/30/96	4	0.	0.	0.	0.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	07/09/96-10/30/96	3 ##	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: ZION0334

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00									
00400	PH	Other-Hi Lim.	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	4	0	0.00	4	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	4	0	0.00									
		Drinking Water	250.	4	0	0.00	4	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	1	0.25	4	1	0.25									
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	3	0	0.00	3	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	3	0	0.00	3	0	0.00									
		Drinking Water	5.	3	0	0.00	3	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00	3	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	3	0	0.00	3	0	0.00									
		Drinking Water	1300.	3	0	0.00	3	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	3	0	0.00	3	0	0.00									
		Drinking Water	15.	3	0	0.00	3	0	0.00									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	3	0	0.00	3	0	0.00									
		Drinking Water	5000.	3	0	0.00	3	0	0.00									
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	3	0	0.00	3	0	0.00									
		Drinking Water	50.	3	0	0.00	3	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	3	0	0.00	3	0	0.00									
		Drinking Water	2.	3	0	0.00	3	0	0.00									

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

Station Inventory for Station: ZION0335

NPS Station ID: ZION0335
LAT/LON: 37.156948/-113.400005
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-14) 2CCA-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370925113240001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008086700.37
RF3 Mile Point: 4.16
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0335

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/10/68-10/10/68	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/10/68-10/10/68	1	1520.	1520.	1520.	1520.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/10/68-10/10/68	1	67.	67.	67.	67.	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: ZION0335

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0336

NPS Station ID: ZION0336 LAT/LON: 37.308337/-113.427782 Agency: 113FORS4 Date Created: 04/02/83
Location: LEEDS CREEK - AT BRIDGE NEAR LEEDS SPRING BOX FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 070105A /15010008105A/016070105A /DD62
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: LOWER COLORADO RIVER - VIRGIN RIVER ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008002513.74 RF3 Mile Point: 16.25 Distance from RF3: 0.02 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0336

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/20/77-09/23/77	4	12.2	12.55	15.9	9.9	9.39	3.064	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/20/77-09/23/77	4	5.65	5.975	10.5	2.1	16.943	4.116	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/20/77-09/23/77	4	54.	83.75	182.	45.	4310.917	65.658	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/20/77-09/23/77	4	12.2	12.225	13.9	10.6	2.056	1.434	**	**	**	**
00400	PH (STANDARD UNITS)	05/20/77-09/23/77	4	7.8	7.625	8.1	6.8	0.329	0.574	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/20/77-09/23/77	4	7.789	7.303	8.1	6.8	0.467	0.684	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/77-09/23/77	4	0.016	0.05	0.158	0.008	0.005	0.073	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	06/14/77-06/14/77	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/14/77-06/14/77	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	06/14/77-06/14/77	1	84.	84.	84.	84.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	06/14/77-06/14/77	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/20/77-09/23/77	4	0.042	0.041	0.05	0.03	0.	0.011	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/20/77-09/23/77	4	0.07	0.073	0.08	0.07	0.	0.005	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	06/14/77-06/14/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/14/77-06/14/77	1	64.	64.	64.	64.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	06/14/77-06/14/77	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	06/14/77-06/14/77	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/14/77-06/14/77	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/14/77-06/14/77	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/14/77-06/14/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/14/77-06/14/77	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/14/77-06/14/77	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/14/77-06/14/77	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/14/77-06/14/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/14/77-06/14/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/14/77-06/14/77	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/20/77-09/23/77	4	8.	7.625	14.	0.5	33.229	5.764	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/20/77-09/23/77	4	0.889	0.656	1.146	-0.301	0.43	0.656	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			4.527								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/14/77-06/14/77	1	84.	84.	84.	84.	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/14/77-06/14/77	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0336

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00				2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	2	0	0.00				2	0	0.00			
00400	PH	Other-Hi Lim.	9.	4	0	0.00	2	0	0.00				2	0	0.00			
		Other-Lo Lim.	6.5	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			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
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			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	4	0	0.00	2	0	0.00				2	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
		Drinking Water	2.	1	0	0.00							1	0	0.00			

& - 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: ZION0337

NPS Station ID: ZION0337 LAT/LON: 37.307226/-113.428615 Agency: 21UTDHDW Date Created: 05/26/90
Location: SILVER REEF SPEC SER DIST - OAK GROVE SPR. FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702601 /UT4902369001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008004302.33 RF3 Mile Point: 3.77 Distance from RF3: 0.15 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1121

Parameter Inventory for Station: ZION0337

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	07/05/83-07/05/83	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/05/83-07/05/83	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/05/83-07/05/83	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/05/83-07/05/83	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/05/83-07/05/83	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/05/83-07/05/83	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/05/83-07/05/83	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/05/83-07/05/83	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/05/83-07/05/83	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/05/83-07/05/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/05/83-07/05/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/05/83-07/05/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/05/83-07/05/83	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/05/83-07/05/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/05/83-07/05/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/05/83-07/05/83	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/05/83-07/05/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	05/18/89-05/18/89	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	07/05/83-07/05/83	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/05/83-07/05/83	1	150.	150.	150.	150.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/05/83-07/05/83	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/05/83-07/05/83	1	0.12	0.12	0.12	0.12	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: ZION0337

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
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.	0 &	0	0.00												
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0338

NPS Station ID: ZION0338 LAT/LON: 37.308615/-113.428892 Agency: 21UTDHDW Date Created: 05/26/90
Location: LEEDS DOMESTIC WAT USERS - OAK GROVE SPR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701001 /UT4900256001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.70 On/Off RF1:
RF3 Index: 15010008002200.04 RF3 Mile Point: 6.69 Distance from RF3: 0.02 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-PRIVATELY OWNED SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-1134

Parameter Inventory for Station: ZION0338

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-01/09/89	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-10/06/86	3	200.	214.333	245.	198.	706.333	26.577	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/06/77-01/09/89	4	7.4	7.475	8.1	7.	0.236	0.486	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/06/77-01/09/89	4	7.355	7.309	8.1	7.	0.272	0.522	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/77-01/09/89	4	0.044	0.049	0.1	0.008	0.002	0.041	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	04/28/80-10/06/86	2	9.5	9.5	17.	2.	112.5	10.607	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-10/06/86	3	112.	113.	118.	109.	21.	4.583	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-10/06/86	3	136.	138.	144.	134.	28.	5.292	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/06/86-10/06/86	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/28/80-10/06/86	2 ##	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/28/80-04/28/80	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-10/06/86	3	118.	118.667	130.	108.	121.333	11.015	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-10/06/86	3	35.	35.	38.	32.	9.	3.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-10/06/86	3	7.	7.333	9.	6.	2.333	1.528	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-01/09/89	4	5.	5.75	8.	5.	2.25	1.5	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/28/80-10/06/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-01/09/89	4	1.5	2.5	6.	1.	5.667	2.38	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-01/09/89	4	6.5	8.625	19.	2.5	52.896	7.273	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-01/09/89	4	0.13	0.31	0.9	0.08	0.156	0.395	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-10/06/86	3	29.	23.	29.	11.	108.	10.392	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/28/80-01/09/89	3	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	04/28/80-01/09/89	3 ##	0.05	0.042	0.05	0.025	0.	0.014	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-04/28/80	2	47.5	47.5	65.	30.	612.5	24.749	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/28/80-01/09/89	3 ##	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	04/28/80-10/06/86	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/28/80-01/09/89	3 ##	5.	4.167	5.	2.5	2.083	1.443	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/28/80-01/09/89	3 ##	5.	10.	20.	5.	75.	8.66	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/06/77	1	90.	90.	90.	90.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/28/80-01/09/89	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/28/80-01/09/89	3 ##	5.	5.833	10.	2.5	14.583	3.819	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/06/77	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

Parameter Inventory for Station: ZION0338

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01067	NICKEL, TOTAL (UG/L AS NI)	04/28/80-04/28/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	04/28/80-01/09/89	3 ##	2.	1.833	2.5	1.	0.583	0.764	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/06/77	1	93.	93.	93.	93.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/28/80-01/09/89	3	10.	179.	520.	7.	87213.	295.318	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	04/28/80-01/09/89	3 ##	0.5	1.167	2.5	0.5	1.333	1.155	**	**	**	**
01501	ALPHA, TOTAL	06/18/81-08/05/85	3	1.	1.667	3.	1.	1.333	1.155	**	**	**	**
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	01/09/89-01/09/89	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-01/09/89	4	153.	152.75	176.	129.	368.917	19.207	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	04/28/80-01/09/89	3	0.5	0.7	1.5	0.1	0.52	0.721	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/06/77-01/09/89	4	0.045	0.061	0.13	0.025	0.002	0.048	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: ZION0338

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	3	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	3	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	4	0	0.00	3	0	0.00	1	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	50.	3	0	0.00	2	0	0.00	1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	3	0	0.00	2	0	0.00	1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	5.	3	0	0.00	2	0	0.00	1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	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						
01034	CHROMIUM, TOTAL	Drinking Water	100.	3	0	0.00	2	0	0.00	1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	3	1	0.33	2	1	0.50	1	0	0.00						
		Drinking Water	1300.	3	0	0.00	2	0	0.00	1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	15.	3	0	0.00	2	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	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	100.	3	0	0.00	2	0	0.00	1	0	0.00						
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									
01092	ZINC, TOTAL	Fresh Acute	120.	3	1	0.33	2	1	0.50	1	0	0.00						
		Drinking Water	5000.	3	0	0.00	2	0	0.00	1	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	50.	3	0	0.00	2	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	3	0	0.00	2	0	0.00	1	0	0.00						
		Drinking Water	2.	3	0	0.00	2	0	0.00	1	0	0.00						

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

Station Inventory for Station: ZION0339

NPS Station ID: ZION0339
LAT/LON: 37.383337/-113.433337
Agency: 112WRD
Date Created: 02/28/78
Location: (C-39-14)20ACD-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372300113260001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.10
On/Off RF1:
RF3 Index: 15010008002505.17
RF3 Mile Point: 5.93
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0339

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/24/68-10/24/68	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/24/68-10/24/68	1	159.	159.	159.	159.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/24/68-10/24/68	1	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

EPA Water Quality Criteria Analysis for Station: ZION0339

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0340

NPS Station ID: ZION0340
LAT/LON: 37.308337/-113.433337
Agency: 112WRD
Date Created: 02/28/78
Location: (C-40-14)16DBC-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 371830113260001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.40
On/Off RF1:
RF3 Index: 15010008002206.77
RF3 Mile Point: 7.06
Distance from RF3: 0.27
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0340

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/68-10/30/68	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/20/64-10/30/68	2	224.	224.	225.	223.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	02/20/64-02/20/64	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/20/64-02/20/64	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/20/64-02/20/64	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/20/64-02/20/64	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/20/64-02/20/64	1	146.	146.	146.	146.	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/20/64-02/20/64	1	0.26	0.26	0.26	0.26	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/20/64-02/20/64	1	108.	108.	108.	108.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/20/64-02/20/64	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/20/64-02/20/64	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/20/64-02/20/64	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	02/20/64-02/20/64	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/20/64-02/20/64	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/20/64-10/30/68	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	02/20/64-02/20/64	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/20/64-02/20/64	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	02/20/64-02/20/64	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	02/20/64-02/20/64	1	400.	400.	400.	400.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/20/64-02/20/64	1	169.	169.	169.	169.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	02/20/64-02/20/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	02/20/64-02/20/64	1	340.	340.	340.	340.	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: ZION0340

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0340

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	1	1.00	1	1	1.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	1	1.00	1	1	1.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0341

NPS Station ID: ZION0341 LAT/LON: 37.115559/-113.435005 Agency: 112WRD Date Created: 12/19/81
Location: ST. GEORGE WASHINGTON CANAL AT INLET, UT FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 370656113260601
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008029 RF1 Mile Point: 9.800 Distance from RF1: 1.40 On/Off RF1: OFF
RF3 Index: 15010008001800.00 RF3 Mile Point: 5.08 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0341

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/81-05/06/82	2	19.	19.	23.	15.	32.	5.657	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/24/81-05/06/82	2	26.5	26.5	28.	25.	4.5	2.121	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	05/06/81-08/24/81	2	669.	669.	683.	655.	392.	19.799	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/24/81-05/06/82	2	131.	131.	175.	87.	3872.	62.225	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/24/81-05/06/82	2	2135.	2135.	3450.	820.	3458450.	1859.691	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/24/81-05/06/82	2	8.55	8.55	11.	6.1	12.005	3.465	**	**	**	**
00400	PH (STANDARD UNITS)	08/24/81-05/06/82	2	7.9	7.9	8.2	7.6	0.18	0.424	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/24/81-05/06/82	2	7.804	7.804	8.2	7.6	0.199	0.446	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-05/06/82	2	0.016	0.016	0.025	0.006	0.	0.013	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/24/81-05/06/82	2	8.05	8.05	8.1	8.	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/24/81-05/06/82	2	8.047	8.047	8.1	8.	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/81-05/06/82	2	0.009	0.009	0.01	0.008	0.	0.001	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/24/81-08/24/81	1	0.77	0.77	0.77	0.77	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/24/81-05/06/82	2	0.5	0.5	0.7	0.3	0.08	0.283	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/06/82-05/06/82	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/24/81-05/06/82	2 ##	0.013	0.013	0.02	0.005	0.	0.011	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/24/81-05/06/82	2	995.	995.	1700.	290.	994050.	997.021	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/24/81-05/06/82	2	321.	321.	560.	82.	114242.	337.997	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/24/81-05/06/82	2	42.	42.	64.	20.	968.	31.113	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/24/81-05/06/82	2	152.5	152.5	250.	55.	19012.5	137.886	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/24/81-05/06/82	2	2.1	2.1	2.7	1.5	0.72	0.849	**	**	**	**
00932	SODIUM, PERCENT	08/24/81-05/06/82	2	26.5	26.5	29.	24.	12.5	3.536	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/24/81-05/06/82	2	13.2	13.2	21.	5.4	121.68	11.031	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/24/81-05/06/82	2	209.5	209.5	340.	79.	34060.5	184.555	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/24/81-05/06/82	2	820.	820.	1500.	140.	924800.	961.665	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/24/81-05/06/82	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/24/81-05/06/82	2	12.75	12.75	16.	9.5	21.125	4.596	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/24/81-05/06/82	2	395.	395.	660.	130.	140450.	374.767	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/24/81-08/24/81	1	2990.	2990.	2990.	2990.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/24/81-05/06/82	2	1675.5	1675.5	2850.	501.	2758900.5	1660.994	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/24/81-05/06/82	2	468.	468.	699.	237.	106722.	326.683	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/24/81-05/06/82	2	2.375	2.375	4.07	0.68	5.746	2.397	**	**	**	**

** - Less than 9 observations ## - 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: ZION0341

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	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	1	0.50	1	1	1.00	1	0	0.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	1	0.50	1	1	1.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	1	0	0.00	1	0	0.00						

& - 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: ZION0342

NPS Station ID: ZION0342 LAT/LON: 37.115003/-113.438337 Agency: 112WRD Date Created: 02/04/89
Location: ST. GEORGE-WASHINGTON CANAL NR WASHINGTON, UT FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 09408175
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.70 On/Off RF1:
RF3 Index: 15010008001902.85 RF3 Mile Point: 3.11 Distance from RF3: 0.00 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0342

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/87-04/18/89	13	16.	15.054	28.	7.	35.696	5.975	7.4	10.	18.25	25.6
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	10/16/87-04/18/89	12	23.5	21.583	36.	10.	68.811	8.295	10.	12.25	27.25	34.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/16/87-04/18/89	13	72.	67.692	118.	21.	797.397	28.238	28.6	44.5	86.	113.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/07/88-10/06/88	5	1790.	2049.	2850.	1545.	298655.	546.493	**	**	**	**
00400	PH (STANDARD UNITS)	01/07/88-01/07/88	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/07/88-01/07/88	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/07/88-01/07/88	1	0.006	0.006	0.006	0.006	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: ZION0342

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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

Station Inventory for Station: ZION0343

NPS Station ID: ZION0343
LAT/LON: 37.095837/-113.446393
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-14)32ABB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370545113264701
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 3.60
On/Off RF1:
RF3 Index: 15010008039000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.01
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0343

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/04/65-11/04/65	1	21.1	21.1	21.1	21.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/04/65-11/04/65	1	3610.	3610.	3610.	3610.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/04/65-11/04/65	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/04/65-11/04/65	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/04/65-11/04/65	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/04/65-11/04/65	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	11/04/65-11/04/65	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/04/65-11/04/65	1	1780.	1780.	1780.	1780.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/04/65-11/04/65	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/04/65-11/04/65	1	424.	424.	424.	424.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/04/65-11/04/65	1	175.	175.	175.	175.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/04/65-11/04/65	1	363.	363.	363.	363.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	11/04/65-11/04/65	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/04/65-11/04/65	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/04/65-11/04/65	1	71.	71.	71.	71.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/04/65-11/04/65	1	2310.	2310.	2310.	2310.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/04/65-11/04/65	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/04/65-11/04/65	1	980.	980.	980.	980.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/04/65-11/04/65	1	3400.	3400.	3400.	3400.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/04/65-11/04/65	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0343

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0344

NPS Station ID: ZION0344
LAT/LON: 37.376392/-113.448892
Agency: 112WRD
Date Created: 12/19/81
Location: SANTA CLARA R. ABOVE CAMPGROUND, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372235113265601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008025
RF1 Mile Point: 17.900
Distance from RF1: 0.50
On/Off RF1: ON
RF3 Index: 15010008002800.00
RF3 Mile Point: 0.00
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0344

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-05/04/82	2	7.	7.	11.5	2.5	40.5	6.364	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-05/04/82	2	15.75	15.75	18.5	13.	15.125	3.889	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-05/04/82	2	582.	582.	584.	580.	8.	2.828	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-05/04/82	2	18.45	18.45	36.	0.9	616.005	24.819	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-05/04/82	2	78.5	78.5	120.	37.	3444.5	58.69	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/81-05/04/82	2	9.55	9.55	10.7	8.4	2.645	1.626	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-05/04/82	2	7.	7.	7.1	6.9	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-05/04/82	2	6.989	6.989	7.1	6.9	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-05/04/82	2	0.103	0.103	0.126	0.079	0.001	0.033	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-05/04/82	2	7.85	7.85	7.9	7.8	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-05/04/82	2	7.847	7.847	7.9	7.8	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-05/04/82	2	0.014	0.014	0.016	0.013	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-05/04/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/04/82	2	0.12	0.12	0.18	0.06	0.007	0.085	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-05/04/82	2	0.04	0.04	0.06	0.02	0.001	0.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-05/04/82	2	33.5	33.5	51.	16.	612.5	24.749	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-05/04/82	2	8.	8.	12.	4.	32.	5.657	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-05/04/82	2	3.25	3.25	5.1	1.4	6.845	2.616	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-05/04/82	2	3.35	3.35	5.	1.7	5.445	2.333	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-05/04/82	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-05/04/82	2	18.	18.	19.	17.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-05/04/82	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-05/04/82	2	1.9	1.9	3.	0.8	2.42	1.556	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-05/04/82	2	4.	4.	6.	2.	8.	2.828	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-05/04/82	2 ##	0.025	0.025	0.05	0.	0.001	0.035	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-05/04/82	2	18.	18.	25.	11.	98.	9.899	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-05/04/82	2 ##	12.5	12.5	20.	5.	112.5	10.607	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-05/04/82	2	63.	63.	90.	36.	1458.	38.184	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-05/04/82	2	1.855	1.855	3.5	0.21	5.412	2.326	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-05/04/82	2	0.085	0.085	0.12	0.05	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - 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: ZION0344

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0345

NPS Station ID: ZION0345 LAT/LON: 37.366670/-113.450005 Agency: 21UTDHDW Date Created: 05/26/90
Location: JUNIPER PARK CAMPGROUND - SPRING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702801 /UT4905011001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 17.40 On/Off RF1:
RF3 Index: 15010008026700.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0345

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/09/85-08/09/85	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/09/85-08/09/85	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/22/84-08/09/85	2 ##	2.25	2.25	2.5	2.	0.125	0.354	**	**	**	**

** - Less than 9 observations ## - 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: ZION0345

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	--------------n/a-------------- Obs	Exceed	Prop.
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			

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

Station Inventory for Station: ZION0346

NPS Station ID: ZION0346 LAT/LON: 37.316670/-113.450005 Agency: 21UTDHDW Date Created: 05/26/90
Location: OAK GROVE CAMPGROUND - OAK GROVE SPR. FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702901 /UT4901050001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008092600.00 RF3 Mile Point: 0.47 Distance from RF3: 0.06 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: USFS CAMPGROUND SERVICE AREA TYPE: RECREATION AREA

Parameter Inventory for Station: ZION0346

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/19/78-09/19/78	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/19/78-09/19/78	1	370.	370.	370.	370.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/19/78-09/19/78	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/78-09/19/78	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/78-09/19/78	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	09/19/78-09/19/78	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/19/78-09/19/78	1	198.	198.	198.	198.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/19/78-09/19/78	1	242.	242.	242.	242.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/78-09/19/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/19/78-09/19/78	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/19/78-09/19/78	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/19/78-09/19/78	1	196.	196.	196.	196.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/19/78-09/19/78	1	66.	66.	66.	66.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/19/78-09/19/78	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/19/78-09/19/78	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/19/78-09/19/78	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/19/78-09/19/78	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/19/78-05/03/84	2	3.5	3.5	5.	2.	4.5	2.121	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/19/78-09/19/78	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/19/78-09/19/78	1	28.	28.	28.	28.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	09/19/78-09/19/78	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	09/19/78-09/19/78	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	09/19/78-09/19/78	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/78-09/19/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	09/19/78-09/19/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/19/78-09/19/78	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/78-09/19/78	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/19/78-09/19/78	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

Parameter Inventory for Station: ZION0346

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	09/19/78-09/19/78	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/19/78-09/19/78	1	224.	224.	224.	224.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/78-09/19/78	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/19/78-09/19/78	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	09/19/78-09/19/78	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: ZION0346

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0347

NPS Station ID: ZION0347 LAT/LON: 37.369448/-113.454170 Agency: 113FORS4 Date Created: 04/02/83
Location: SANTA CLARA RIVER - NEAR HEAD OF WHIPPLE TRAIL FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 070101A /15010008101A/017070101A /A1
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: LOWER COLORADO RIVER - VIRGIN RIVER ECO Region:
RF1 Index: 15010008025 RF1 Mile Point: 17.900 Distance from RF1: 1.70 On/Off RF1: ON
RF3 Index: 15010008003900.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0347

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/77-09/23/77	3	11.7	12.433	15.	10.6	5.243	2.29	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	05/16/75-10/14/76	12	46.5	48.917	58.	42.	38.992	6.244	42.	44.25	56.	58.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/75-10/30/75	6	1.	2.7	11.	0.3	16.88	4.109	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/12/76-09/23/77	9	10.5	16.822	56.7	2.1	347.659	18.646	2.1	2.2	29.4	56.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/12/76-09/23/77	9	22.	26.	58.	12.	185.5	13.62	12.	19.	30.5	58.
00300	OXYGEN, DISSOLVED MG/L	05/16/75-09/23/77	15	10.1	10.147	11.9	8.	1.371	1.171	8.6	9.	11.2	11.84
00400	PH (STANDARD UNITS)	05/16/75-09/23/77	15	8.1	8.053	8.6	7.4	0.11	0.331	7.52	7.8	8.3	8.48
00400	CONVERTED PH (STANDARD UNITS)	05/16/75-09/23/77	15	8.1	7.931	8.6	7.4	0.126	0.355	7.52	7.8	8.3	8.48
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/16/75-09/23/77	15	0.008	0.012	0.04	0.003	0.	0.01	0.003	0.005	0.016	0.031
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/07/74-09/23/77	16	0.058	0.082	0.5	0.002	0.013	0.115	0.015	0.041	0.076	0.234
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	08/07/74-09/23/77	16	0.105	0.108	0.3	0.03	0.005	0.072	0.037	0.045	0.14	0.23
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	09/23/77-09/23/77	1	150.	150.	150.	150.	0.	0.	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	09/23/77-09/23/77	1	2.176	2.176	2.176	2.176	0.	0.	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			150.								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/12/76-09/23/77	9	4.	8.833	23.	0.5	89.063	9.437	0.5	0.5	19.	23.
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/12/76-09/23/77	9	0.602	0.522	1.362	-0.301	0.559	0.748	-0.301	-0.301	1.278	1.362
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			3.325								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	5 ##	0.5	42.4	210.	0.5	8778.05	93.691	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	5 ##	-0.301	0.224	2.322	-0.301	1.376	1.173	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1.673								

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

EPA Water Quality Criteria Analysis for Station: ZION0347

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	6	0	0.00	4	0	0.00				2	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	9	1	0.11	6	0	0.00				3	1	0.33			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	15	0	0.00	10	0	0.00				5	0	0.00			
00400	PH	Other-Hi Lim.	9.	15	0	0.00	10	0	0.00				5	0	0.00			
		Other-Lo Lim.	6.5	15	0	0.00	10	0	0.00				5	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	16	0	0.00	11	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

EPA Water Quality Criteria Analysis for Station: ZION0347

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	1	0	0.00	1	0	0.00									
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	9	0	0.00	6	0	0.00				3	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	1	0.20	4	1	0.25				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: ZION0348

NPS Station ID: ZION0348
LAT/LON: 37.376392/-113.464171
Agency: 112WRD
Date Created: 12/02/81
Location: SANTA CLARA R. BELOW RIGHT FK., UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 372235113275101
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008025
RF1 Mile Point: 17.900
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008090500.67
RF3 Mile Point: 1.27
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0348

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-05/04/82	2	7.25	7.25	11.	3.5	28.125	5.303	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/18/81-05/04/82	2	18.75	18.75	22.5	15.	28.125	5.303	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/18/81-05/04/82	2	586.	586.	588.	584.	8.	2.828	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-05/04/82	2	30.5	30.5	58.	3.	1512.5	38.891	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/81-05/04/82	2	69.5	69.5	95.	44.	1300.5	36.062	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/81-05/04/82	2	9.3	9.3	10.2	8.4	1.62	1.273	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-05/04/82	2	6.95	6.95	7.1	6.8	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-05/04/82	2	6.925	6.925	7.1	6.8	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-05/04/82	2	0.119	0.119	0.158	0.079	0.003	0.056	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-05/04/82	2	7.45	7.45	7.8	7.1	0.245	0.495	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-05/04/82	2	7.322	7.322	7.8	7.1	0.278	0.527	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-05/04/82	2	0.048	0.048	0.079	0.016	0.002	0.045	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-05/04/82	2 ##	0.025	0.025	0.05	0.	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/18/81-05/04/82	2	0.35	0.35	0.64	0.06	0.168	0.41	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/18/81-05/04/82	2	0.115	0.115	0.21	0.02	0.018	0.134	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-05/04/82	2	30.	30.	40.	20.	200.	14.142	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-05/04/82	2	7.25	7.25	9.1	5.4	6.845	2.616	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-05/04/82	2	2.95	2.95	4.2	1.7	3.125	1.768	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-05/04/82	2	2.95	2.95	4.1	1.8	2.645	1.626	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-05/04/82	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-05/04/82	2	17.	17.	18.	16.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-05/04/82	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/18/81-05/04/82	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-05/04/82	2 ##	4.25	4.25	6.	2.5	6.125	2.475	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/18/81-05/04/82	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-05/04/82	2	17.5	17.5	23.	12.	60.5	7.778	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/18/81-05/04/82	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/18/81-05/04/82	2	57.5	57.5	75.	40.	612.5	24.749	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/18/81-05/04/82	2	3.41	3.41	6.26	0.56	16.245	4.031	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/18/81-05/04/82	2	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - 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: ZION0348

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

& - 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: ZION0349

NPS Station ID: ZION0349 LAT/LON: 37.377781/-113.469449 Agency: 113FORS4 Date Created: 04/02/83
Location: SANTA CLARA RIVER - BELOW RECREATION AREA FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 070101B /15010008101B/017070101B /A2
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: LOWER COLORADO RIVER - VIRGIN RIVER ECO Region:
RF1 Index: 15010008025 RF1 Mile Point: 17.900 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 15010008092600.00 RF3 Mile Point: 0.21 Distance from RF3: 0.03 On/Off RF3:
Description:
FOR MORE INFORMATION, CONTACT; FOREST HYDROLOGIST, DIXIE NATIONAL FOREST, 801-586-2421...

Parameter Inventory for Station: ZION0349

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/77-07/24/79	6	9.1	9.717	15.5	4.	23.374	4.835	**	**	**	**
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	05/16/75-10/14/76	12	49.	50.75	61.	43.	44.75	6.69	43.	45.25	58.	60.7
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/16/75-10/30/75	6	1.3	8.733	46.	0.3	333.855	18.272	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/12/76-07/24/79	12	2.1	8.725	35.7	1.1	127.469	11.29	1.28	1.8	15.825	31.92
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/23/75-07/24/79	14	34.	67.786	230.	10.	3985.72	63.133	15.5	25.	102.5	190.
00300	OXYGEN, DISSOLVED MG/L	05/16/75-07/24/79	18	10.05	10.194	12.	8.	1.259	1.122	8.9	9.	11.125	11.82
00400	PH (STANDARD UNITS)	05/16/75-07/24/79	18	8.05	8.006	8.4	7.2	0.099	0.315	7.47	7.875	8.2	8.4
00400	CONVERTED PH (STANDARD UNITS)	05/16/75-07/24/79	18	8.047	7.871	8.4	7.2	0.119	0.344	7.47	7.875	8.2	8.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/16/75-07/24/79	18	0.009	0.013	0.063	0.004	0.	0.014	0.004	0.006	0.013	0.035
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/02/74-06/19/79	20	0.06	0.155	1.4	0.02	0.099	0.315	0.02	0.041	0.12	0.509
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	07/02/74-06/19/79	20	0.155	0.253	1.8	0.03	0.172	0.414	0.04	0.055	0.2	0.884
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	05/02/79-07/24/79	3	40.	50.	70.	40.	300.	17.321	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	05/02/79-07/24/79	3	1.602	1.683	1.845	1.602	0.02	0.14	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			48.203								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	05/12/76-07/24/79	11	16.	14.818	40.	0.	210.114	14.495	0.1	0.5	32.	38.4
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	05/12/76-07/24/79	11	1.204	0.807	1.602	-0.301	0.531	0.729	-0.06	-0.301	1.505	1.583
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			6.413								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	5	2.	471.7	2350.	0.5	1102504.95	1050.002	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/16/75-10/30/75	5	0.301	0.855	3.371	-0.301	2.086	1.444	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			7.159								
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/19/79-06/19/79	1	64.	64.	64.	64.	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: ZION0349

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	6	0	0.00	4	0	0.00				2	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	12	0	0.00	7	0	0.00	1	0	0.00	4	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	18	0	0.00	11	0	0.00	1	0	0.00	6	0	0.00			
00400	PH	Other-Hi Lim.	9.	18	0	0.00	11	0	0.00	1	0	0.00	6	0	0.00			
		Other-Lo Lim.	6.5	18	0	0.00	11	0	0.00	1	0	0.00	6	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0349

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	20	0	0.00	12	0	0.00	1	0	0.00	7	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	11	0	0.00	6	0	0.00	1	0	0.00	4	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	1	0.20	4	1	0.25				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: ZION0350

NPS Station ID: ZION0350 LAT/LON: 37.413892/-113.472227 Agency: 113FORS4 Date Created: 12/22/84
Location: WATER CANYON - NEAR JEEP ROAD FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 070107A /15010008107A/017070107A
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: COLORADO RIVER Elevation: 0 Water Body Id:
Minor Basin: LOWER COLORADO RIVER - VIRGIN RIVER ECO Region:
RF1 Index: 15010008025 RF1 Mile Point: 18.730 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 15010008000500.00 RF3 Mile Point: 1.98 Distance from RF3: 0.06 On/Off RF3:
Description:

Parameter Inventory for Station: ZION0350

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/12/82-05/12/82	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/12/82-05/12/82	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/12/82-05/12/82	1	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/12/82-05/12/82	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/12/82-05/12/82	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/12/82-05/12/82	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/12/82-05/12/82	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/12/82-05/12/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/12/82-05/12/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/12/82-05/12/82	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/12/82-05/12/82	1	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/12/82-05/12/82	1	72.	72.	72.	72.	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: ZION0350

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			----------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.	1	0	0.00							1	0	0.00			
00400	PH	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			

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

Station Inventory for Station: ZION0351

NPS Station ID: ZION0351
LAT/LON: 37.383337/-113.481670
Agency: 21UTAH
Date Created: 02/20/82
Location: SANTA CLARA RIVER BL PINE VALLEY RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 595067 /5065
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN-SANTA CLARA DR
ECO Region:
RF1 Index: 15010008025
RF1 Mile Point: 17.900
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008002507.67
RF3 Mile Point: 7.67
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0351

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: ZION0352

NPS Station ID: ZION0352
LAT/LON: 37.383337/-113.481670
Agency: 21UTAH
Date Created: 03/08/80
Location: SANTA CLARA R BL PINE VALLEY RES
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495065
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN DRAINAGE
ECO Region:
RF1 Index: 15010008025
RF1 Mile Point: 17.900
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008000700.00
RF3 Mile Point: 0.16
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0352

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/79-06/25/93	2	8.	8.	10.	6.	8.	2.828	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/04/90-06/25/93	2	25.95	25.95	33.	18.9	99.405	9.97	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	05/23/79-06/25/93	2	107.5	107.5	120.	95.	312.5	17.678	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/24/79-06/25/93	3	1.5	2.5	5.	1.	4.75	2.179	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/23/79-09/04/90	2	71.5	71.5	93.	50.	924.5	30.406	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/24/79-06/25/93	3	64.	69.	93.	50.	481.	21.932	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/79-05/23/79	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	05/23/79-09/04/90	2 ##	13.	13.	19.	7.	72.	8.485	**	**	**	**
00400	PH (STANDARD UNITS)	05/23/79-06/25/93	2	8.	8.	8.5	7.5	0.5	0.707	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/79-06/25/93	2	7.76	7.76	8.5	7.5	0.616	0.785	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/79-06/25/93	2	0.017	0.017	0.032	0.003	0.	0.02	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	05/24/79-06/25/93	3	7.5	7.3	7.6	6.8	0.19	0.436	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	05/24/79-06/25/93	3	7.5	7.144	7.6	6.8	0.226	0.476	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/79-06/25/93	3	0.032	0.072	0.158	0.025	0.006	0.075	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	05/24/79-06/25/93	3	1.	3.333	8.	1.	16.333	4.041	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/79-06/25/93	3	29.	30.	45.	16.	211.	14.526	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/24/79-06/25/93	3	36.	37.	55.	20.	307.	17.521	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/24/79-06/25/93	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/04/90-06/25/93	2 ##	2.25	2.25	3.	1.5	1.125	1.061	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/79-09/04/90	2 ##	0.038	0.038	0.05	0.025	0.	0.018	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	05/24/79-05/24/79	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/24/79-09/04/90	2 ##	0.015	0.015	0.025	0.005	0.	0.014	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/24/79-05/24/79	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/24/79-09/04/90	2	0.23	0.23	0.4	0.06	0.058	0.24	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/79-09/04/90	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/79-06/25/93	2 ##	0.018	0.018	0.025	0.01	0.	0.011	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/23/79-06/25/93	3	0.05	0.042	0.05	0.026	0.	0.014	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/24/79-05/24/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/04/90-09/04/90	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/24/79-06/25/93	3	22.	26.	36.	20.	76.	8.718	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/24/79-06/25/93	3	6.	6.233	8.	4.7	2.763	1.662	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/24/79-06/25/93	3	2.5	2.5	4.	1.	2.25	1.5	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	05/24/79-06/25/93	3	2.9	2.967	4.	2.	1.003	1.002	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/24/79-06/25/93	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/24/79-05/24/79	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/24/79-06/25/93	3 ##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/24/79-06/25/93	3	6.	5.333	8.	2.	9.333	3.055	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/24/79-05/24/79	1	0.03	0.03	0.03	0.03	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: ZION0352

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955	SILICA, DISSOLVED (MG/L AS SI02)	05/24/79-05/24/79	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/25/93-06/25/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	05/24/79-05/24/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	06/25/93-06/25/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	05/24/79-05/24/79	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/24/79-05/24/79	1	75.	75.	75.	75.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/25/93-06/25/93	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/79-05/24/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/25/93-06/25/93	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	05/24/79-05/24/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/24/79-05/24/79	1 ##	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/25/93-06/25/93	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/24/79-05/24/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/25/93-06/25/93	1	47.	47.	47.	47.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/25/93-06/25/93	1 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/24/79-05/24/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/79-05/24/79	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/25/93-06/25/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/24/79-05/24/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/25/93-06/25/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/24/79-05/24/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/25/93-06/25/93	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/24/79-05/24/79	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/25/93-06/25/93	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/24/79-05/24/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/23/79-05/23/79	1	240.	240.	240.	240.	0.	0.	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	05/23/79-05/23/79	1	2.38	2.38	2.38	2.38	0.	0.	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			240.								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/23/79-05/23/79	1	15.	15.	15.	15.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	05/23/79-05/23/79	1	1.176	1.176	1.176	1.176	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			15.								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	05/24/79-05/24/79	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	05/24/79-06/25/93	3	50.	52.	58.	48.	28.	5.292	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	05/24/79-06/25/93	3	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/79-09/04/90	2	0.035	0.035	0.05	0.02	0.	0.021	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/25/93-06/25/93	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/24/79-05/24/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	05/24/79-05/24/79	1	0.49	0.49	0.49	0.49	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: ZION0352

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	0	0.00	1	0	0.00				2	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400	PH	Other-Hi Lim.	9.	2	0	0.00							2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00							2	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	3	0	0.00	1	0	0.00				2	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00	1	0	0.00				2	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00615	NITRITE NITROGEN, TOTAL 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.	1	0	0.00							1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	1	0	0.00				1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00							2	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			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			

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

EPA Water Quality Criteria Analysis for Station: ZION0352

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
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.	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	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00							1	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
		Drinking Water	1300.	1	0	0.00							1	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	0	0.00							1	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
		Drinking Water	15.	1	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			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00							1	0	0.00			
		Drinking Water	100.	1	0	0.00							1	0	0.00			
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			
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			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	1	0	0.00							1	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	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			
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: ZION0353

NPS Station ID: ZION0353
LAT/LON: 37.383337/-113.482504
Agency: 112WRD
Date Created: / /
Location: SANTA CLARA RIVER NR PINE VALLEY UTAH
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 09408400
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008025
RF1 Mile Point: 17.900
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008082904.44
RF3 Mile Point: 4.74
Distance from RF3: 0.03
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0353

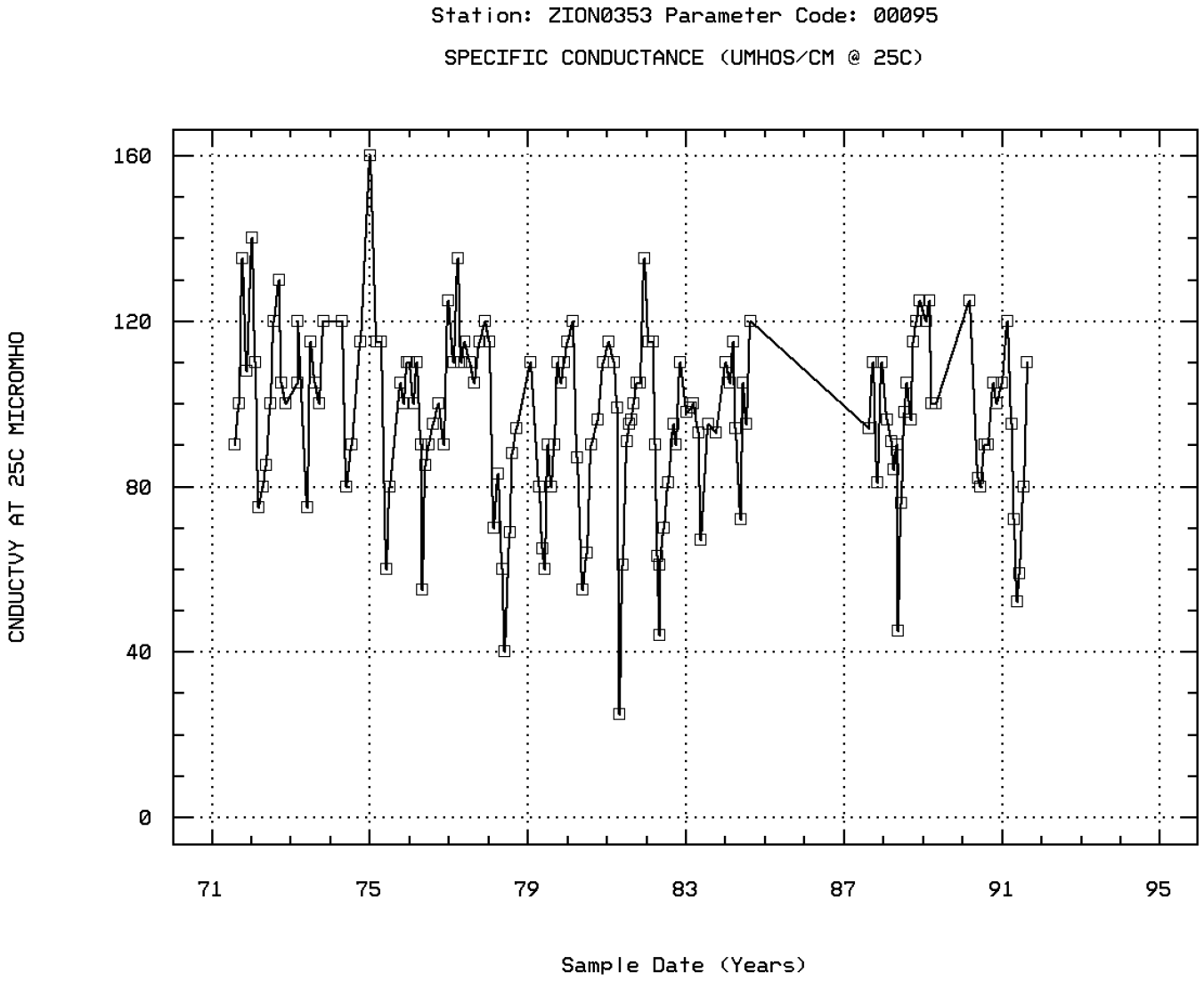
Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	143	7.5	8.416	24.	0.	36.394	6.033	1.	3.	13.	17.1
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/17/81-06/17/91	28	15.	15.821	36.	-5.	119.745	10.943	4.9	6.5	22.375	34.1
00025	BAROMETRIC PRESSURE (MM OF HG)	08/17/81-05/04/82	2	589.	589.	591.	587.	8.	2.828	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	08/03/71-07/17/74	24	5.	16.917	137.	2.	1273.036	35.68	2.	2.25	8.75	80.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	128	5.	14.499	149.	0.5	613.812	24.775	2.	3.	13.	44.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	151	100.	96.503	160.	25.	459.238	21.43	64.2	85.	110.	120.
00300	OXYGEN, DISSOLVED MG/L	08/17/81-05/04/82	2	9.2	9.2	10.4	8.	2.88	1.697	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-05/04/82	2	7.85	7.85	8.1	7.6	0.125	0.354	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-05/04/82	2	7.782	7.782	8.1	7.6	0.134	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/04/82	2	0.017	0.017	0.025	0.008	0.	0.012	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-05/04/82	2	7.5	7.5	7.6	7.4	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-05/04/82	2	7.489	7.489	7.6	7.4	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-05/04/82	2	0.032	0.032	0.04	0.025	0.	0.01	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-08/17/81	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-05/04/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/17/81-05/04/82	2	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/17/81-05/04/82	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/17/81-05/04/82	2	30.	30.	41.	19.	242.	15.556	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-05/04/82	2	7.	7.	9.3	4.7	10.58	3.253	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-05/04/82	2	3.	3.	4.2	1.8	2.88	1.697	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-05/04/82	2	3.1	3.1	4.3	1.9	2.88	1.697	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-05/04/82	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-05/04/82	2	18.	18.	19.	17.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-05/04/82	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/17/81-05/04/82	2	1.45	1.45	2.	0.9	0.605	0.778	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-05/04/82	2	4.	4.	6.	2.	8.	2.828	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/17/81-05/04/82	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-05/04/82	2	16.5	16.5	20.	13.	24.5	4.95	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/17/81-05/04/82	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/17/81-05/04/82	2	54.	54.	67.	41.	338.	18.385	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/17/81-05/04/82	2	3.335	3.335	6.09	0.58	15.18	3.896	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/17/81-05/04/82	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/17/81-08/17/81	1	0.21	0.21	0.21	0.21	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: ZION0353

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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						

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



SANTA CLARA RIVER NR PINE VALLEY UTAH

Annual Analysis for 1971 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	3	12.	11.333	19.	3.	64.333	8.021	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	4	104.	108.25	135.	90.	372.25	19.294	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	10	8.5	9.4	20.	0.	60.6	7.785	0.1	1.	18.125	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	10	102.5	104.5	140.	75.	452.5	21.272	75.5	83.75	122.5	139.

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

Annual Analysis for 1973 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	6	9.75	9.	14.	2.	21.9	4.68	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	7	105.	105.714	120.	75.	245.238	15.66	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	4	14.	15.25	23.	10.	34.417	5.867	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	4	102.5	101.25	120.	80.	372.917	19.311	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	5.	5.625	16.	0.	27.696	5.263	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	3.	10.5	53.	2.	302.286	17.386	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	107.5	105.625	160.	60.	845.982	29.086	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	11	8.	7.727	18.	0.	35.968	5.997	0.	2.5	12.	17.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	11	4.	6.273	25.	1.	48.418	6.958	1.2	2.	8.	22.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	11	95.	95.455	125.	55.	317.273	17.812	61.	90.	110.	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 1977 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	10.25	10.75	21.	0.	64.786	8.049	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	1.	2.15	10.	0.5	10.246	3.201	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	112.5	115.	135.	105.	85.714	9.258	**	**	**	**

** - 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 1978 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	6.25	7.063	13.5	1.	22.674	4.762	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	14.5	25.	87.	1.	837.143	28.933	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	76.5	77.375	115.	40.	522.839	22.866	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	9	8.5	8.667	14.5	0.5	24.438	4.943	0.5	4.25	13.25	14.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	10	11.	30.3	103.	4.	1460.011	38.21	4.1	5.	56.75	102.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	10	90.	90.	110.	60.	350.	18.708	60.5	76.25	110.	110.

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	8.5	7.688	13.	2.5	15.924	3.991	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	9.5	22.125	76.	3.	750.696	27.399	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	93.	92.125	120.	55.	547.839	23.406	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	12	7.	8.333	15.5	0.	29.424	5.424	0.75	4.25	14.5	15.5
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	12	3.	6.833	30.	2.	69.424	8.332	2.	3.	8.	25.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	12	99.5	94.75	135.	25.	776.205	27.86	35.8	92.	108.75	129.

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

Annual Analysis for 1982 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	11	4.	6.318	14.	0.	22.864	4.782	0.4	3.5	11.	14.
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	11	6.	13.636	55.	2.	263.655	16.237	2.	4.	25.	49.4
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	11	90.	84.909	115.	44.	555.691	23.573	47.4	63.	110.	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

Annual Analysis for 1983 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	7	4.	5.429	12.	2.	14.036	3.746	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	24.	35.125	136.	4.	1881.268	43.374	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	7	95.	92.143	100.	67.	130.81	11.437	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	9.	9.313	20.	2.	49.353	7.025	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	4.5	5.625	11.	3.	9.696	3.114	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	105.	102.	120.	72.	226.857	15.062	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	3	3.	5.333	13.	0.	46.333	6.807	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	4	4.5	8.75	24.	2.	104.917	10.243	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	4	102.	98.75	110.	81.	196.917	14.033	**	**	**	**

** - 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

Annual Analysis for 1988 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	8.75	8.188	15.	0.	34.281	5.855	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	12	8.5	14.417	62.	3.	276.265	16.621	3.	4.25	19.5	50.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	12	96.	95.083	125.	45.	459.902	21.445	54.3	85.5	112.5	123.5

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

Annual Analysis for 1989 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	4	4.5	5.375	12.	0.5	24.563	4.956	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	4	4.	4.25	7.	2.	4.917	2.217	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	4	110.	111.25	125.	100.	172.917	13.15	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or 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 ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	7	14.	12.214	19.5	2.	51.655	7.187	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	7	2.	2.714	5.	1.	2.571	1.604	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	7	90.	96.	125.	80.	243.667	15.61	**	**	**	**

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

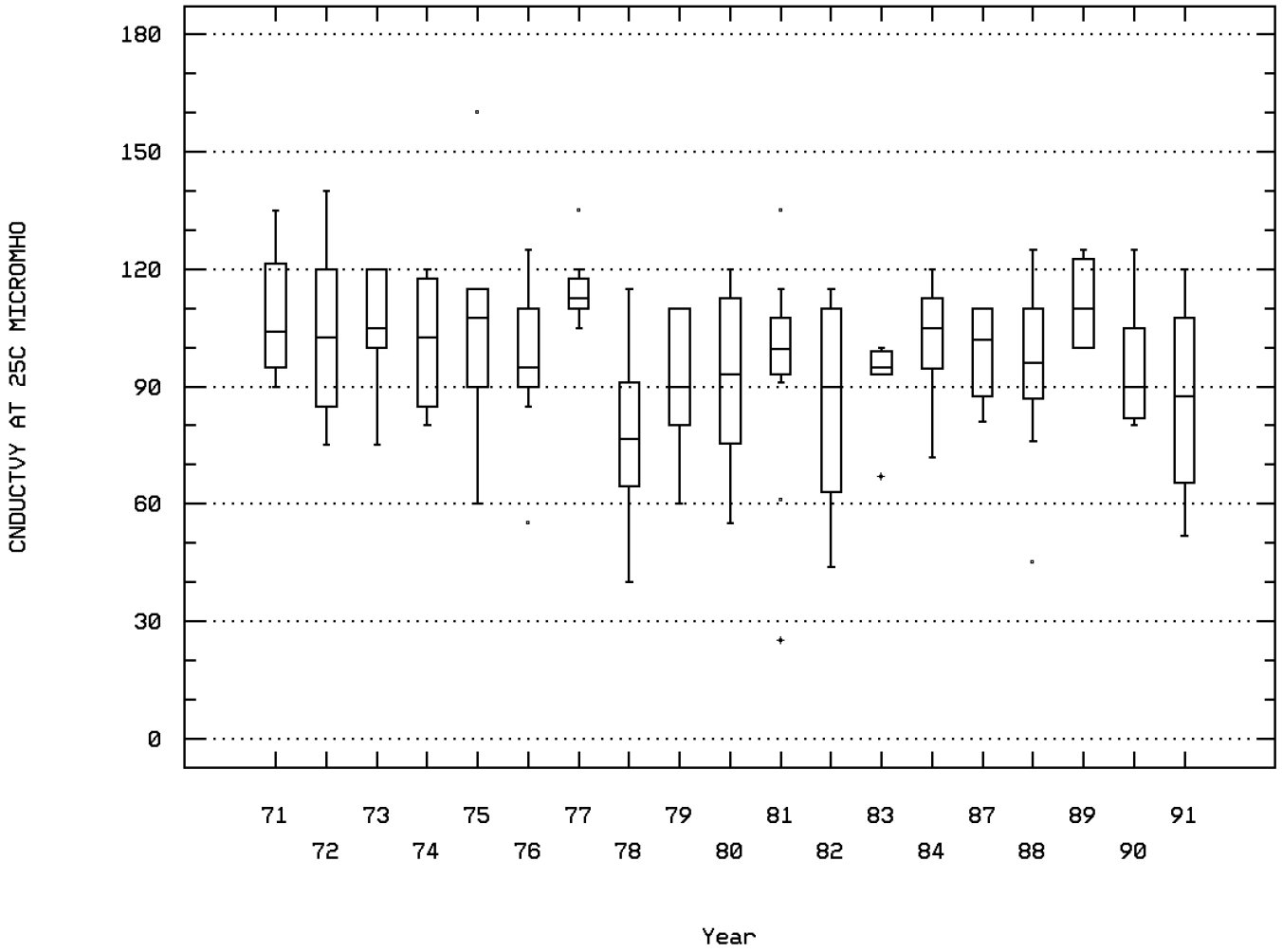
Annual Analysis for 1991 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	8	6.5	9.75	24.	0.5	65.286	8.08	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	8	7.5	25.213	149.	0.7	2532.018	50.319	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	8	87.5	86.625	120.	52.	612.554	24.75	**	**	**	**

** - Less than 9 observations ## - Computed 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: ZION0353 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



SANTA CLARA RIVER NR PINE VALLEY UTAH

Seasonal Analysis for Season #1: 7/01 to 3/19 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	97	8.	8.433	24.	0.	47.613	6.9	0.	2.	14.	18.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	84	3.5	6.874	149.	0.7	274.145	16.557	1.5	2.	5.	13.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	103	105.	104.883	160.	69.	221.418	14.88	90.	95.	115.	120.

** - Less than 9 observations ## - Computed 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: 3/20 to 5/09 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	22	6.	6.864	16.5	3.5	8.6	2.933	3.65	5.	7.625	11.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	21	10.	16.5	55.	0.5	221.15	14.871	1.8	6.5	27.	42.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	23	90.	87.174	135.	25.	591.423	24.319	48.4	80.	100.	118.

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

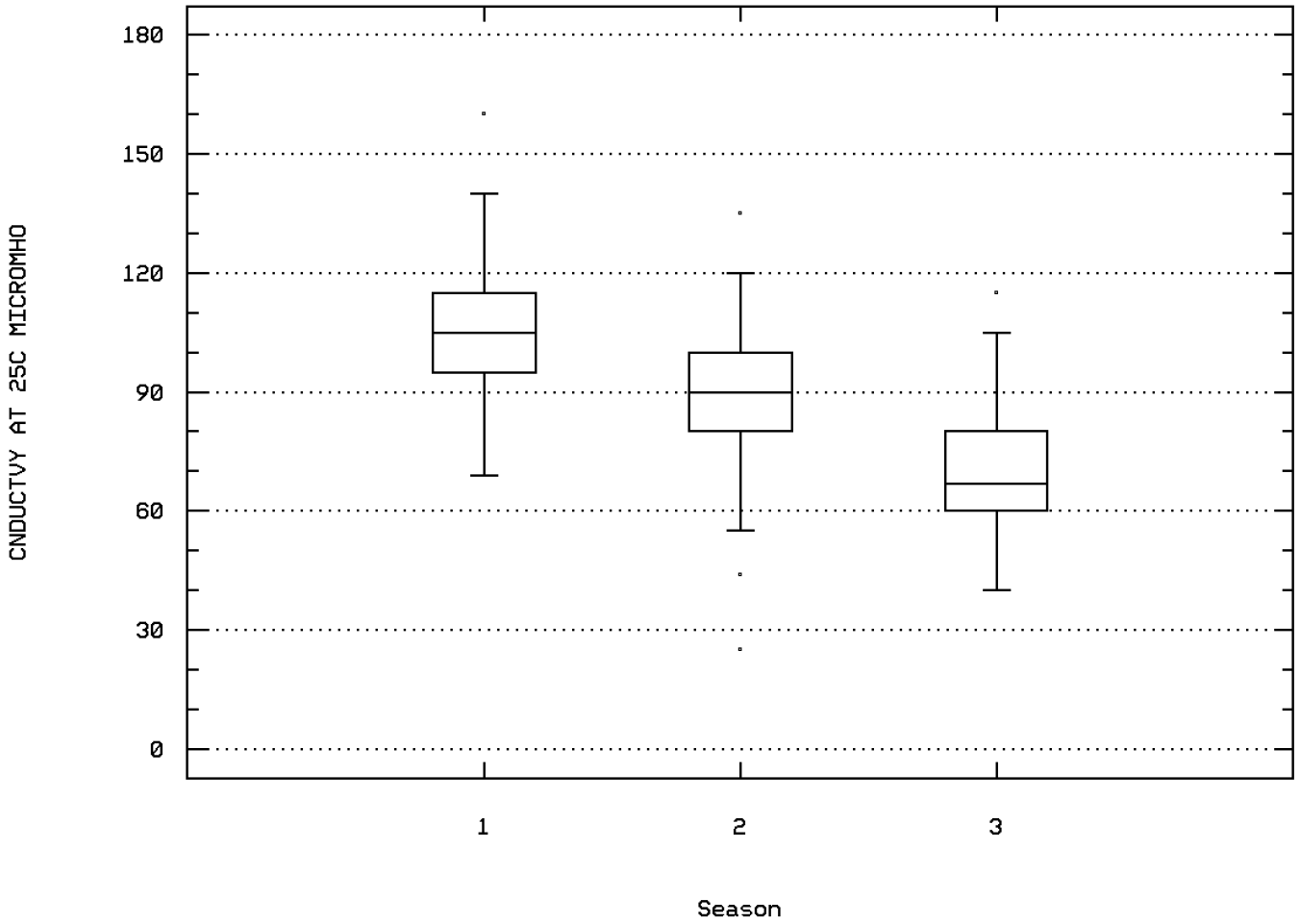
Seasonal Analysis for Season #3: 5/10 to 6/30 - Station ZION0353

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/71-08/20/91	24	9.	9.771	19.	4.	13.891	3.727	5.	7.125	12.75	15.25
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/09/74-08/20/91	23	25.	40.522	136.	4.	1374.261	37.071	5.	12.	62.	99.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/03/71-08/20/91	25	67.	70.56	115.	40.	301.173	17.354	49.2	60.	81.	96.

** - Less than 9 observations ## - Computed 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: ZION0353 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



SANTA CLARA RIVER NR PINE VALLEY UTAH

Station Inventory for Station: ZION0354

NPS Station ID: ZION0354
LAT/LON: 37.116115/-113.500005
Agency: 21UTAH
Date Created: 01/21/84
Location: VIRGIN R AB WASHINGTON LAGOONS
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495026
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO RIVER
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 5.470
Distance from RF1: 0.00
On/Off RF1: ON
RF3 Index: 15010008004700.50
RF3 Mile Point: 2.32
Distance from RF3: 0.01
On/Off RF3:
Description:
USGS HYDROLOGIC UNIT=15010008

Parameter Inventory for Station: ZION0354

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/20/82-04/27/83	6	11.8	16.283	33.8	5.5	118.478	10.885	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/15/82-03/02/83	3	23.	148.	416.	5.	53949.	232.269	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/20/82-04/27/83	6	486.	486.45	1000.	3.7	192453.415	438.695	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/20/82-04/27/83	6	1372.	1385.667	2300.	280.	686400.667	828.493	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/20/82-04/27/83	6	1375.	1499.167	2280.	775.	436594.167	660.753	**	**	**	**
00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	09/15/82-04/27/83	5	4.	4.6	8.	3.	4.3	2.074	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/15/82-04/27/83	4	9.35	8.675	9.5	6.5	2.109	1.452	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	07/20/82-04/27/83	6	2.	2.083	4.	0.5	1.642	1.281	**	**	**	**
00335	COD, .025N K2CR2O7 MG/L	07/20/82-04/27/83	6 ##	5.	17.833	75.	4.	795.367	28.202	**	**	**	**
00400	PH (STANDARD UNITS)	09/15/82-04/27/83	5	8.2	8.18	8.6	7.6	0.132	0.363	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/15/82-04/27/83	5	8.2	8.043	8.6	7.6	0.155	0.394	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/15/82-04/27/83	5	0.006	0.009	0.025	0.003	0.	0.009	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/15/82-04/27/83	5	8.2	8.14	8.3	7.8	0.043	0.207	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/15/82-04/27/83	5	8.2	8.096	8.3	7.8	0.045	0.213	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/15/82-04/27/83	5	0.006	0.008	0.016	0.005	0.	0.005	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/20/82-04/27/83	6	4.5	4.167	5.	2.	1.367	1.169	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/20/82-04/27/83	6	213.	203.167	257.	149.	1775.367	42.135	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/20/82-04/27/83	6	260.	248.	314.	182.	2632.	51.303	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/20/82-04/27/83	6	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/20/82-04/27/83	6	365.	600.	1566.	4.	433559.6	658.452	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/20/82-04/27/83	6	365.	600.	1566.	4.	433559.6	658.452	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/20/82-04/27/83	6	0.1	0.117	0.3	0.05	0.009	0.093	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/20/82-04/27/83	6	0.35	0.383	0.5	0.3	0.01	0.098	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/20/82-04/27/83	6	0.36	0.403	0.65	0.2	0.028	0.168	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/20/82-04/27/83	6	0.33	0.475	1.	0.15	0.122	0.349	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/20/82-04/27/83	6	13.75	14.25	20.1	7.3	25.883	5.088	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/20/82-04/27/83	6	425.	466.333	715.	295.	31542.667	177.603	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/20/82-04/27/83	6	113.	120.167	186.	66.	2312.967	48.093	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/20/82-04/27/83	6	37.5	40.667	61.	27.	209.067	14.459	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/20/82-04/27/83	6	138.	158.167	290.	44.	10684.567	103.366	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/20/82-04/27/83	6	11.5	13.833	25.	5.	71.367	8.448	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/20/82-04/27/83	6	176.	193.	385.	48.	17459.6	132.135	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/20/82-04/27/83	6	176.	193.	385.	48.	17459.6	132.135	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/20/82-04/27/83	6	290.	370.833	790.	144.	57700.567	240.209	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/20/82-04/27/83	6	10.	8.833	13.	3.	13.367	3.656	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/20/82-04/27/83	6 ##	0.043	0.056	0.1	0.025	0.001	0.037	**	**	**	**

** - Less than 9 observations ## - 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: ZION0354

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01027	CADMIUM, TOTAL (UG/L AS CD)	07/20/82-04/27/83	6 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/20/82-04/27/83	6 ##	2.5	7.833	30.	2.5	121.167	11.008	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/20/82-04/27/83	6 ##	10.	15.833	40.	5.	204.167	14.289	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/20/82-04/27/83	6	6.5	6.75	11.	2.5	9.775	3.126	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/20/82-04/27/83	6	360.	363.333	660.	90.	70466.667	265.456	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/20/82-04/27/83	6 ##	9.	26.333	115.	5.	1906.667	43.665	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/20/82-04/27/83	6 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/20/82-04/27/83	6	25.	32.083	70.	2.5	646.042	25.417	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/20/82-04/27/83	6 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/20/82-04/27/83	5	2400.	13740.	50000.	300.	448398000.	21175.41	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	07/20/82-04/27/83	5	3.38	3.528	4.699	2.477	0.829	0.91	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			3374.794								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/20/82-04/27/83	5	800.	7380.	30000.	0.	166082000.	12887.281	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	07/20/82-04/27/83	5	2.903	2.632	4.477	0.	3.03	1.741	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			428.225								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	07/20/82-11/09/82	3	8300.	13433.333	30000.	2000.	215763333.333	14688.885	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	07/20/82-11/09/82	3	3.919	3.899	4.477	3.301	0.346	0.588	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			7926.408								
50051	FLOW, RATE, INSTANTANEOUS MGD	11/09/82-11/09/82	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/20/82-04/27/83	6	907.	1015.667	1610.	488.	243874.267	493.836	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	07/20/82-04/27/83	5	0.	0.	0.	0.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/20/82-04/27/83	6 ##	0.05	0.083	0.2	0.05	0.004	0.061	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/20/82-04/27/83	6	1.765	2.118	4.38	0.2	2.978	1.726	**	**	**	**

** - Less than 9 observations ## - 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: ZION0354

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	6	5	0.83	5	4	0.80	1	1	1.00						
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	5	0	0.00	1	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	250.	6	2	0.33	5	2	0.40	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	250.	6	2	0.33	5	2	0.40	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	3	0.50	5	3	0.60	1	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	50.	6	0	0.00	5	0	0.00	1	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	6	0	0.00	5	0	0.00	1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	5.	6	0	0.00	5	0	0.00	1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	6	0	0.00	5	0	0.00	1	0	0.00						
01042	COPPER, TOTAL	Fresh Acute	18.	6	2	0.33	5	2	0.40	1	0	0.00						
		Drinking Water	1300.	6	0	0.00	5	0	0.00	1	0	0.00						
01051	LEAD, TOTAL	Fresh Acute	82.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	15.	6	0	0.00	5	0	0.00	1	0	0.00						
01067	NICKEL, TOTAL	Fresh Acute	1400.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	100.	6	1	0.17	5	1	0.20	1	0	0.00						
01077	SILVER, TOTAL	Fresh Acute	4.1	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	100.	6	0	0.00	5	0	0.00	1	0	0.00						
01092	ZINC, TOTAL	Fresh Acute	120.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	5000.	6	0	0.00	5	0	0.00	1	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	50.	6	0	0.00	5	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: ZION0354

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	----------7/01-3/19---------- Obs	Exceed	Prop.	----------3/20-5/09---------- Obs	Exceed	Prop.	----------5/10-6/30---------- Obs	Exceed	Prop.	----------n/a---------- Obs	Exceed	Prop.
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	5	3	0.60	4	3	0.75	1	0	0.00						
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	5	3	0.60	4	3	0.75	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	6	0	0.00	5	0	0.00	1	0	0.00						
		Drinking Water	2.	6	0	0.00	5	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: ZION0355

NPS Station ID: ZION0355
LAT/LON: 37.125005/-113.500005
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-15)11D -S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370730113300001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 2.10
On/Off RF1:
RF3 Index: 15010008084700.00
RF3 Mile Point: 10.31
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0355

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/10/64-03/10/64	1	515.	515.	515.	515.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/10/64-03/10/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/10/64-03/10/64	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/10/64-03/10/64	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/10/64-03/10/64	1	165.	165.	165.	165.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/10/64-03/10/64	1	199.	199.	199.	199.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/10/64-03/10/64	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/10/64-03/10/64	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/10/64-03/10/64	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/10/64-03/10/64	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/10/64-03/10/64	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/10/64-03/10/64	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/10/64-03/10/64	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/10/64-03/10/64	1	61.	61.	61.	61.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/10/64-03/10/64	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/10/64-03/10/64	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/10/64-03/10/64	1	160.	160.	160.	160.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	03/10/64-03/10/64	1	200.	200.	200.	200.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/10/64-03/10/64	1	327.	327.	327.	327.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/10/64-03/10/64	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	03/10/64-03/10/64	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	03/10/64-03/10/64	1	60.	60.	60.	60.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0355

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	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: ZION0355

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	1	1.00	1	1	1.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0356

NPS Station ID: ZION0356 LAT/LON: 37.312226/-113.505003 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - COTTONWOOD SPR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701501 /UT4900382001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 7.40 On/Off RF1:
RF3 Index: 15010008048500.00 RF3 Mile Point: 0.63 Distance from RF3: 0.00 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0356

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/28/77-08/23/89	5	0.8	0.92	2.2	0.2	0.612	0.782	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/28/77-04/02/85	3	180.	238.667	390.	146.	17465.333	132.156	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/28/77-08/23/89	5	7.8	7.86	8.8	7.	0.418	0.647	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/28/77-08/23/89	5	7.8	7.531	8.8	7.	0.554	0.744	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/28/77-08/23/89	5	0.016	0.029	0.1	0.002	0.002	0.04	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/28/77-08/23/89	5	74.	86.	149.	56.	1314.5	36.256	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/28/77-08/23/89	5	90.	102.4	170.	68.	1538.8	39.228	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-08/23/89	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-08/23/89	4 ##	0.018	0.026	0.06	0.01	0.001	0.024	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/28/77-08/23/89	5	0.3	0.4	0.9	0.1	0.12	0.346	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/28/77-08/23/89	5	76.	93.	168.	66.	1809.	42.532	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/28/77-08/23/89	5	24.	26.6	48.	17.	154.3	12.422	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/28/77-08/23/89	5	5.	5.8	12.	2.	14.2	3.768	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/28/77-08/23/89	5	8.	8.6	16.	4.	19.8	4.45	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/28/77-08/23/89	5 ##	0.5	0.9	2.	0.5	0.425	0.652	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/28/77-08/23/89	5	6.	8.	16.	2.	38.5	6.205	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/28/77-08/23/89	5	4.	12.6	34.	2.	206.8	14.381	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/28/77-08/23/89	5	0.07	0.262	0.9	0.04	0.135	0.367	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/28/77-08/23/89	5	22.	21.6	23.	20.	1.3	1.14	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-08/23/89	4 ##	0.5	11.875	46.	0.5	517.563	22.75	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	11/28/77-11/28/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-08/23/89	4	0.015	0.034	0.1	0.005	0.002	0.045	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	11/28/77-08/23/89	4	40.	37.5	60.	10.	491.667	22.174	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-08/23/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-08/23/89	3 ##	2.	2.167	2.5	2.	0.083	0.289	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-08/23/89	4 ##	0.5	1.	2.5	0.5	1.	1.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	11/28/77-11/28/77	1	54.	54.	54.	54.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-08/23/89	4 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	11/28/77-08/23/89	3 ##	15.	58.333	145.	15.	5633.333	75.056	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-08/23/89	4 ##	0.5	1.625	5.	0.5	5.063	2.25	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-08/23/89	4 ##	5.	8.	17.	5.	36.	6.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-08/23/89	3 ##	5.	8.333	15.	5.	33.333	5.774	**	**	**	**

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

Parameter Inventory for Station: ZION0356

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-08/23/89	4 ##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	11/28/77-11/28/77	1	164.	164.	164.	164.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-08/23/89	4 ##	25.	218.125	820.	2.5	161380.729	401.722	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-08/23/89	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01501	ALPHA, TOTAL	06/15/81-08/23/89	4	4.	3.375	5.	0.5	4.563	2.136	**	**	**	**
03501	BETA, TOTAL	04/02/85-08/23/89	2	5.	5.	7.	3.	8.	2.828	**	**	**	**
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	05/11/83-12/18/87	5	1.7	1.26	2.2	0.1	0.823	0.907	**	**	**	**
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
32104	BROMOFORM,WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	05/11/83-05/11/83	3	0.9	0.867	0.9	0.8	0.003	0.058	**	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L	05/11/83-12/18/87	5	2.7	2.02	3.7	0.3	2.332	1.527	**	**	**	**
34301	CHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34306	CHLORODIBROMOMETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34311	CHLOROETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34391	HEXACHLOROBUTADIENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34413	METHYL BROMIDE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34418	METHYL CHLORIDE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34536	1,2-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34561	1,3-DICHLOROPROPENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34566	1,3-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34571	1,4-DICHLOROBENZENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688	HEXACHLOROBENZENE WET WGTTISMG/KG	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34696	NAPHTHALENE TOTWUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38760	DBCP WATER, TOTUG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/28/77-08/23/89	5	115.	131.8	238.	88.	3727.7	61.055	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	08/23/89-08/23/89	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-08/23/89	4 ##	0.1	0.087	0.1	0.05	0.001	0.025	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	11/28/77-08/23/89	5	0.03	0.066	0.18	0.015	0.005	0.071	**	**	**	**
77093	CIS-1,2-DICHLOROETHYLENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77128	STYRENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77135	O-XYLENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77168	1,1-DICHLOROPROPENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77170	2,2-DICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77173	1,3-DICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77222	1,2,4-TRIMETHYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77223	ISOPROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77224	N-PROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77226	1,3,5-TRIMETHYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77275	1-METHYL-2-CHLOROBENZENE (O-CHLOR*WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77277	1-METHYL-4-CHLOROBENZENE (P-CHLOR*WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77297	CHLOROBROMOMETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77342	N-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77350	SEC-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77353	TERT-BUTYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77356	1-METHYL-4-ISOPROPYLBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77443	1,2,3-TRICHLOROPROPANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77562	1,1,1,2-TETRACHLOROETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77613	1,2,3-TRICHLOROBENZENE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
77651	1,2-DIBROMOETHANE WHOLE WATER,UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0356

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
78113	ETHYL BENZENE WHOLE WATER SAMPLE UG/L	12/18/87-12/18/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
78124	BENZENE IN WATER (VOLATILE ANALYSIS) UG/L	12/18/87-12/18/87	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
78132	P-XYLENE IN WHOLE WATER UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81522	DIBROMOETHANE WHL WATER SMPL UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81555	BROMOBENZENE WHL WATER SMPL UG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81710	M-XYLENE IN THE WHOLE WATER SAMPLE MG/L	12/18/87-12/18/87	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82080	TRIHALOMETHANE TOTAL IN WATER, BY SUMMATION UG/L	05/11/83-05/11/83	4	5.4	4.5	6.8	0.4	7.933	2.817	**	**	**	**

** - 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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0356

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	5	0	0.00	4	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	5	0	0.00	4	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00	1	0	0.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	3	0	0.00	1	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	5	0	0.00	4	0	0.00	1	0	0.00						
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	4	0	0.00	1	0	0.00						
		Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	4	0	0.00	1	0	0.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	5	0	0.00	4	0	0.00	1	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	4	0	0.00	3	0	0.00	1	0	0.00						
01027	CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	5.	4	0	0.00	3	0	0.00	1	0	0.00						
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	3	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									
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.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	15.	4	0	0.00	3	0	0.00	1	0	0.00						
01067	NICKEL, TOTAL	Fresh Acute	1400.	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	100.	4	0	0.00	3	0	0.00	1	0	0.00						
01090	ZINC, DISSOLVED	Fresh Acute	120.	1	1	1.00	1	1	1.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	4	1	0.25	3	1	0.33	1	0	0.00						
		Drinking Water	5000.	4	0	0.00	3	0	0.00	1	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	3	0	0.00	1	0	0.00						
		Drinking Water	50.	4	0	0.00	3	0	0.00	1	0	0.00						
32101	BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	5	0	0.00	1	0	0.00				4	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.	3	0	0.00							3	0	0.00			
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	5	0	0.00	1	0	0.00				4	0	0.00			
		Drinking Water	100.	5	0	0.00	1	0	0.00				4	0	0.00			
34301	CHLOROBENZENE, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
34306	CHLORODIBROMOMETHANE, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0356

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
34391	HEXACHLOROBUTADIENE, TOTAL	Fresh Acute	90.	1	0	0.00	1	0	0.00									
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	0	0.00	1	0	0.00									
34475	TETRACHLOROETHYLENE, TOTAL	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, TOTAL	Drinking Water	7.	1	0	0.00	1	0	0.00									
34506	1,1,1-TRICHLOROETHANE, TOTAL	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, TOTAL	Drinking Water	600.	1	0	0.00	1	0	0.00									
34541	1,2-DICHLOROPROPANE, TOTAL	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, TOTAL	Drinking Water	600.	1	0	0.00	1	0	0.00									
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	1	0	0.00	1	0	0.00									
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	1	0	0.00	1	0	0.00									
38760	DBCP, WATER, TOTAL	Drinking Water	0.2	0 &	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									
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						
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									
77651	1,2-DIBROMOETHANE, WHOLE WATER	Drinking Water	0.05	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: ZION0357

NPS Station ID: ZION0357
LAT/LON: 37.139170/-113.505838
Agency: 21UTDHDW
Date Created: 05/26/90
Location: WASHINGTON - #6 SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 2702104 /UT4900454004
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 11.90
On/Off RF1:
RF3 Index: 15010008004301.26
RF3 Mile Point: 1.64
Distance from RF3: 0.64
On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * *
NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV
SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-222

Parameter Inventory for Station: ZION0357

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: ZION0358

NPS Station ID: ZION0358 LAT/LON: 37.139170/-113.505838 Agency: 21UTDHDW Date Created: 05/26/90
Location: WASHINGTON - WESTOVER SPG #2 FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702102 /UT4900454002
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 11.90 On/Off RF1:
RF3 Index: 15010008004301.26 RF3 Mile Point: 1.64 Distance from RF3: 0.64 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0358

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-07/13/83	3	1.1	1.233	1.7	0.9	0.173	0.416	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-06/28/84	3	495.	489.	532.	440.	2143.	46.293	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/06/77-06/28/84	4	7.4	7.425	7.9	7.	0.196	0.443	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/06/77-06/28/84	4	7.304	7.276	7.9	7.	0.226	0.475	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/77-06/28/84	4	0.05	0.053	0.1	0.013	0.002	0.043	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-06/28/84	3	160.	161.	164.	159.	7.	2.646	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-12/13/77	2	197.5	197.5	200.	195.	12.5	3.536	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/06/77-12/13/77	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-12/13/77	2	254.	254.	272.	236.	648.	25.456	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-06/28/84	3	58.	61.667	69.	58.	40.333	6.351	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-12/13/77	2	23.	23.	24.	22.	2.	1.414	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-12/13/77	2	13.5	13.5	15.	12.	4.5	2.121	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/77-12/13/77	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-07/13/83	3	14.	13.333	16.	10.	9.333	3.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-07/13/83	3	126.	152.667	250.	82.	7589.333	87.117	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-07/13/83	3	0.25	0.247	0.25	0.24	0.	0.006	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-12/13/77	2	16.5	16.5	17.	16.	0.5	0.707	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/13/83-07/13/83	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/77-12/13/77	2	65.	65.	70.	60.	50.	7.071	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/13/83-07/13/83	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-12/13/77	2	85.	85.	90.	80.	50.	7.071	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/13/83-07/13/83	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/13/83-07/13/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/77-12/13/77	2	9.5	9.5	14.	5.	40.5	6.364	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/13/83-07/13/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/13/77	2	130.	130.	144.	116.	392.	19.799	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/13/83-07/13/83	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/13/83-07/13/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/13/77	2	9.5	9.5	13.	6.	24.5	4.95	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/13/83-07/13/83	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/13/77	2	91.	91.	112.	70.	882.	29.698	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/13/83-07/13/83	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/13/83-07/13/83	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: ZION0358

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01501	ALPHA, TOTAL	10/09/84-10/09/84	1	3.	3.	3.	3.	0.	0.	**	**	**	**
03501	BETA, TOTAL	10/09/84-10/09/84	1	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-06/28/84	4	325.5	323.75	358.	286.	1121.583	33.49	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/13/83-07/13/83	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/06/77-07/13/83	3	0.25	0.327	0.67	0.06	0.097	0.312	**	**	**	**

** - Less than 9 observations ## - 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: ZION0358

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	1	0.33	3	1	0.33									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	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	2	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	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									
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									
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									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
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									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0359

NPS Station ID: ZION0359 LAT/LON: 37.139170/-113.505838 Agency: 21UTDHDW Date Created: 05/26/90
Location: WASHINGTON - SPROUL SPRINGS FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702101 /UT4900454001
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 24.60 On/Off RF1:
RF3 Index: 15010008047100.00 RF3 Mile Point: 1.12 Distance from RF3: 0.29 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0359

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/05/77-12/06/77	2	0.85	0.85	1.2	0.5	0.245	0.495	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/05/77-12/06/77	2	475.	475.	476.	474.	2.	1.414	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/05/77-12/06/77	2	6.95	6.95	7.	6.9	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/77-12/06/77	2	6.947	6.947	7.	6.9	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/77-12/06/77	2	0.113	0.113	0.126	0.1	0.	0.018	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/77-12/06/77	2	165.	165.	166.	164.	2.	1.414	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/05/77-12/06/77	2	201.	201.	202.	200.	2.	1.414	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/05/77-12/06/77	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/05/77-12/06/77	2	247.	247.	248.	246.	2.	1.414	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/05/77-12/06/77	2	62.	62.	62.	62.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/05/77-12/06/77	2	21.5	21.5	22.	21.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/05/77-12/06/77	2	14.5	14.5	15.	14.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/05/77-12/06/77	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/05/77-12/06/77	2	11.	11.	12.	10.	2.	1.414	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/05/77-12/06/77	2	98.	98.	98.	98.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/05/77-12/06/77	2	0.26	0.26	0.26	0.26	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/05/77-12/06/77	2	15.5	15.5	16.	15.	0.5	0.707	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/05/77-12/06/77	2	50.	50.	60.	40.	200.	14.142	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/05/77-12/06/77	2	75.	75.	90.	60.	450.	21.213	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/05/77-12/06/77	2	10.5	10.5	16.	5.	60.5	7.778	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/05/77-12/06/77	2	145.	145.	152.	138.	98.	9.899	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/05/77-12/06/77	2	7.5	7.5	8.	7.	0.5	0.707	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/05/77-12/06/77	2	43.5	43.5	49.	38.	60.5	7.778	**	**	**	**
01501	ALPHA, TOTAL	08/06/81-08/06/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/05/77-12/06/77	2	308.	308.	308.	308.	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/05/77-12/06/77	2	0.57	0.57	0.75	0.39	0.065	0.255	**	**	**	**

** - Less than 9 observations ## - 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: ZION0359

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	2	0	0.00									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	2	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	2	0	0.00									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	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									
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									

& - 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: ZION0360

NPS Station ID: ZION0360 LAT/LON: 37.139170/-113.505838 Agency: 21UTDHDW Date Created: 05/26/90
Location: WASHINGTON - PRISBREY SPG #1 FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702103 /UT4900454003
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 11.90 On/Off RF1:
RF3 Index: 15010008004301.26 RF3 Mile Point: 1.64 Distance from RF3: 0.64 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0360

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/06/77-07/12/83	3	0.3	0.567	1.2	0.2	0.303	0.551	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/06/77-06/28/84	3	430.	442.	475.	421.	837.	28.931	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/06/77-06/28/84	4	7.75	7.625	8.	7.	0.189	0.435	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/06/77-06/28/84	4	7.747	7.438	8.	7.	0.236	0.485	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/06/77-06/28/84	4	0.018	0.036	0.1	0.01	0.002	0.043	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	11/11/80-11/11/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/06/77-06/28/84	3	157.	150.	160.	133.	219.	14.799	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	12/06/77-11/11/80	2	178.5	178.5	195.	162.	544.5	23.335	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/11/80-11/11/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/11/80-11/11/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/06/77-11/11/80	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/06/77-11/11/80	2	216.	216.	228.	204.	288.	16.971	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	12/06/77-06/28/84	3	56.	53.333	57.	47.	30.333	5.508	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	12/06/77-11/11/80	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	12/06/77-11/11/80	2	13.	13.	14.	12.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	12/06/77-11/11/80	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	12/06/77-07/12/83	3	11.	10.333	12.	8.	4.333	2.082	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	12/06/77-07/12/83	3	84.	84.	92.	76.	64.	8.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	12/06/77-07/12/83	3	0.23	0.237	0.25	0.23	0.	0.012	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/06/77-11/11/80	2	17.5	17.5	18.	17.	0.5	0.707	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	11/11/80-07/12/83	2	4.	4.	5.	3.	2.	1.414	**	**	**	**
01005	BARIUM, DISSOLVED (UG/L AS BA)	12/06/77-12/06/77	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	11/11/80-07/12/83	2 ##	0.087	0.087	0.15	0.025	0.008	0.088	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	12/06/77-11/11/80	2	82.5	82.5	115.	50.	2112.5	45.962	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	11/11/80-07/12/83	2 ##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	11/11/80-11/11/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	11/11/80-07/12/83	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	12/06/77-12/06/77	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	11/11/80-07/12/83	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	12/06/77-12/06/77	1	108.	108.	108.	108.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/11/80-07/12/83	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	11/11/80-07/12/83	2 ##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	12/06/77-12/06/77	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: ZION0360

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01067	NICKEL, TOTAL (UG/L AS NI)	11/11/80-11/11/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	11/11/80-07/12/83	2 ##	1.75	1.75	2.5	1.	1.125	1.061	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	12/06/77-12/06/77	1	73.	73.	73.	73.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	11/11/80-07/12/83	2 ##	13.75	13.75	25.	2.5	253.125	15.91	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	11/11/80-07/12/83	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01501	ALPHA, TOTAL	10/09/84-10/09/84	1	3.	3.	3.	3.	0.	0.	**	**	**	**
03501	BETA, TOTAL	10/09/84-10/09/84	1	4.	4.	4.	4.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	12/06/77-06/28/84	4	317.	317.75	362.	275.	2382.917	48.815	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	11/11/80-07/12/83	2 ##	0.275	0.275	0.5	0.05	0.101	0.318	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	12/06/77-07/12/83	3	0.05	0.127	0.3	0.03	0.023	0.15	**	**	**	**

** - Less than 9 observations ## - 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: ZION0360

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	3	0	0.00	3	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	4	0	0.00	3	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00				1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	3	0	0.00									
		Drinking Water	250.	3	0	0.00	3	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	3	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	3	0	0.00									
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									
01005	BARIUM, DISSOLVED	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	2	0	0.00	2	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									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	2	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	2	0	0.00	2	0	0.00									
		Drinking Water	1300.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	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	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.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	2	0	0.00	2	0	0.00									
		Drinking Water	5000.	2	0	0.00	2	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									

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

Station Inventory for Station: ZION0361

NPS Station ID: ZION0361 LAT/LON: 37.139170/-113.505838 Agency: 21UTDHDW Date Created: 05/26/90
Location: WASHINGTON - #7 SPRING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2702105 /UT4900454005
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 11.90 On/Off RF1:
RF3 Index: 15010008004301.26 RF3 Mile Point: 1.64 Distance from RF3: 0.64 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA
ATE ENGINEER'S WATER USER CLAIM NUMBER IS: 81-222

Parameter Inventory for Station: ZION0361

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/28/84-06/28/84	1	520.	520.	520.	520.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/28/84-06/28/84	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/28/84-06/28/84	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/84-06/28/84	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/28/84-06/28/84	1	172.	172.	172.	172.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/28/84-06/28/84	1	61.	61.	61.	61.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/28/84-06/28/84	1	366.	366.	366.	366.	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: ZION0361

			Total	Exceed	Prop.	7/01-3/19			3/20-5/09			5/10-6/30			n/a		
Parameter	Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00403 PH, LAB	Other-Hi Lim.	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	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

Station Inventory for Station: ZION0362

NPS Station ID: ZION0362
LAT/LON: 37.119726/-113.507227
Agency: 112WRD
Date Created: 03/27/82
Location: MILL C. BELOW WASHINGTON, UT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 370711113302601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 5.160
Distance from RF1: 0.00
On/Off RF1: OFF
RF3 Index: 15010008002520.45
RF3 Mile Point: 20.85
Distance from RF3: 0.02
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0362

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-05/06/82	2	20.75	20.75	27.5	14.	91.125	9.546	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/20/81-05/06/82	2	33.	33.	39.	27.	72.	8.485	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	08/20/81-05/06/82	2	642.	642.	685.	599.	3698.	60.811	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-05/06/82	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/20/81-05/06/82	2	1440.	1440.	1480.	1400.	3200.	56.569	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/20/81-05/06/82	2	7.3	7.3	9.	5.6	5.78	2.404	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-05/06/82	2	8.	8.	8.1	7.9	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-05/06/82	2	7.989	7.989	8.1	7.9	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-05/06/82	2	0.01	0.01	0.013	0.008	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-05/06/82	2	8.15	8.15	8.2	8.1	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-05/06/82	2	8.147	8.147	8.2	8.1	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-05/06/82	2	0.007	0.007	0.008	0.006	0.	0.001	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-05/06/82	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	08/20/81-05/06/82	2	0.545	0.545	1.	0.09	0.414	0.643	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/20/81-05/06/82	2	0.18	0.18	0.33	0.03	0.045	0.212	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-05/06/82	2	350.	350.	370.	330.	800.	28.284	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-05/06/82	2	94.	94.	97.	91.	18.	4.243	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-05/06/82	2	28.5	28.5	31.	26.	12.5	3.536	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-05/06/82	2	155.	155.	160.	150.	50.	7.071	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-05/06/82	2	3.85	3.85	3.9	3.8	0.005	0.071	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-05/06/82	2	47.5	47.5	48.	47.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-05/06/82	2	16.	16.	16.	16.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	08/20/81-05/06/82	2	170.	170.	180.	160.	200.	14.142	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-05/06/82	2	285.	285.	300.	270.	450.	21.213	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/20/81-05/06/82	2	0.8	0.8	0.9	0.7	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-05/06/82	2	23.5	23.5	24.	23.	0.5	0.707	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	08/20/81-05/06/82	2	345.	345.	360.	330.	450.	21.213	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	08/20/81-05/06/82	2	894.	894.	936.	852.	3528.	59.397	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	08/20/81-05/06/82	2	5.84	5.84	7.33	4.35	4.44	2.107	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	08/20/81-05/06/82	2	1.215	1.215	1.27	1.16	0.006	0.078	**	**	**	**

** - Less than 9 observations ## - 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: ZION0362

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400	PH	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
00403	PH, LAB	Other-Hi Lim.	9.	2	0	0.00	1	0	0.00	1	0	0.00						
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00						
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	2	1.00	1	1	1.00	1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	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: ZION0363

NPS Station ID: ZION0363
LAT/LON: 37.119448/-113.508337
Agency: 21UTAH
Date Created: 03/24/79
Location: WASHINGTON LAGOONS EFFLUENT
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 495025
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin: COLORADO RIVER BASIN
Elevation: 0
Water Body Id:
Minor Basin: LOWER COLORADO-VIRGIN R
ECO Region:
RF1 Index: 15010008029
RF1 Mile Point: 5.160
Distance from RF1: 12.70
On/Off RF1: ON
RF3 Index: 15010008058200.00
RF3 Mile Point: 0.34
Distance from RF3: 0.36
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0363

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/25/77-04/27/83	31	14.1	15.648	29.8	0.	60.697	7.791	5.46	10.5	23.	26.86
00058	FLOW, RATE GALLONS/MIN	04/19/79-04/27/83	5	19.	40.4	100.	8.	1522.3	39.017	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/11/78-06/16/81	4	0.15	0.35	1.	0.1	0.19	0.436	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	02/21/79-02/21/79	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/21/79-04/27/83	22	1425.	1366.091	1900.	415.	116814.944	341.782	772.2	1310.	1579.25	1741.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/25/77-02/21/79	8	1500.	1522.5	2000.	1300.	51564.286	227.078	**	**	**	**
00136	TEMPERATURE OF SAMPLE AT ARRIVAL TIME AT LAB	02/25/82-04/27/83	6	3.5	3.667	5.	3.	0.667	0.816	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/25/77-04/27/83	21	8.9	9.948	16.	4.2	11.483	3.389	5.52	7.35	12.1	15.04
00310	BOD, 5 DAY, 20 DEG C MG/L	03/07/78-04/27/83	27	29.	30.937	105.	6.3	289.807	17.024	16.6	23.	33.	42.6
00335	COD, .025N K2CR2O7 MG/L	04/11/78-09/11/79	5	106.	107.	125.	89.	282.5	16.808	**	**	**	**
00400	PH (STANDARD UNITS)	04/25/77-04/27/83	28	8.65	8.593	9.3	7.6	0.127	0.357	8.18	8.325	8.875	9.
00400	CONVERTED PH (STANDARD UNITS)	04/25/77-04/27/83	28	8.647	8.425	9.3	7.6	0.157	0.396	8.18	8.325	8.875	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/77-04/27/83	28	0.002	0.004	0.025	0.001	0.	0.005	0.001	0.001	0.005	0.007
00403	PH, LAB, STANDARD UNITS SU	03/07/78-04/27/83	17	8.6	8.541	9.2	7.4	0.248	0.498	7.72	8.2	8.9	9.2
00403	CONVERTED PH, LAB, STANDARD UNITS	03/07/78-04/27/83	17	8.6	8.231	9.2	7.4	0.35	0.591	7.72	8.2	8.9	9.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/07/78-04/27/83	17	0.003	0.006	0.04	0.001	0.	0.01	0.001	0.001	0.006	0.021
00405	CARBON DIOXIDE (MG/L AS CO2)	02/21/79-02/21/79	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	1	235.	235.	235.	235.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/21/79-02/21/79	1	286.	286.	286.	286.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	02/21/79-02/21/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/07/78-04/27/83	25	30.	64.144	570.	0.6	13650.335	116.835	2.6	13.	62.5	181.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/21/79-04/27/83	21	33.	70.81	570.	2.	15957.262	126.322	2.6	15.5	62.5	215.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/11/78-04/27/83	21	5.8	5.54	12.4	0.05	14.671	3.83	0.32	2.2	8.75	11.84
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	02/21/79-02/21/79	1	8.25	8.25	8.25	8.25	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/21/79-02/21/79	1	8.25	8.25	8.25	8.25	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/11/78-04/27/83	21	10.8	11.543	21.2	3.3	22.256	4.718	5.68	8.45	15.	19.12
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/11/78-04/27/83	21	0.15	0.414	2.55	0.	0.44	0.663	0.05	0.09	0.425	1.81
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/11/78-04/27/83	21	3.	3.098	4.9	0.75	1.39	1.179	1.582	2.27	4.05	4.84
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/21/79-02/21/79	1	2.75	2.75	2.75	2.75	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/11/78-07/20/82	6	34.5	39.617	67.1	25.	269.386	16.413	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/21/79-02/21/79	1	450.	450.	450.	450.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/21/79-02/21/79	1	104.	104.	104.	104.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/21/79-02/21/79	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/21/79-02/21/79	1	106.	106.	106.	106.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/21/79-02/21/79	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/21/79-02/21/79	1	85.	85.	85.	85.	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: ZION0363

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	02/21/79-02/21/79	1	85.	85.	85.	85.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	02/21/79-02/21/79	1	330.	330.	330.	330.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/21/79-02/21/79	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/21/79-02/21/79	1	29.	29.	29.	29.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	02/21/79-02/21/79	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	02/21/79-02/21/79	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/21/79-02/21/79	1	400.	400.	400.	400.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	02/21/79-02/21/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/21/79-02/21/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	02/21/79-02/21/79	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	02/21/79-02/21/79	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	02/21/79-02/21/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	02/21/79-02/21/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	02/21/79-02/21/79	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	02/21/79-02/21/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31501	COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,35C	07/20/82-04/27/83	5	1200.	17600.	60000.	400.	677200000.	26023.067	**	**	**	**
31501	LOG COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,	07/20/82-04/27/83	5	3.079	3.554	4.778	2.602	0.946	0.973	**	**	**	**
31501	GM COLIFORM,TOT,MEMBRANE FILTER,IMMED.M-ENDO MED,3	GEOMETRIC MEAN =			3582.156								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-05/18/82	26	2350.	21191.154	240000.	40.	2649901954.615	51477.198	206.	430.	12225.	93000.
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	01/25/77-05/18/82	26	3.371	3.391	5.38	1.602	0.884	0.94	2.306	2.633	4.057	4.968
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			2462.076								
31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	07/20/82-04/27/83	5	0.	863.2	4300.	0.	3691171.2	1921.242	**	**	**	**
31613	LOG FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24	07/20/82-04/27/83	5	0.	0.968	3.633	0.	2.493	1.579	**	**	**	**
31613	GM FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24H	GEOMETRIC MEAN =			9.279								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-05/18/82	26	115.	5953.865	93000.	7.	358743922.571	18940.536	11.5	35.75	547.5	24000.
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	01/25/77-05/18/82	26	2.061	2.295	4.968	0.845	1.222	1.105	1.061	1.542	2.714	4.38
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			197.152								
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48	07/20/82-11/09/82	3	9800.	9933.333	20000.	0.	100013333.333	10000.667	**	**	**	**
31672	LOG FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35	07/20/82-11/09/82	3	3.991	2.764	4.301	0.	5.754	2.399	**	**	**	**
31672	GM FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C	GEOMETRIC MEAN =			580.879								
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	02/21/79-02/21/79	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
50051	FLOW, RATE, INSTANTANEOUS MGD	02/21/79-09/15/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	03/07/78-08/18/81	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	04/11/78-04/19/79	4	957.	949.5	1002.	882.	3595.667	59.964	**	**	**	**
71830	HYDROXIDE ION (MG/L AS OH)	02/21/79-02/21/79	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	02/21/79-02/21/79	1	2.75	2.75	2.75	2.75	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	02/21/79-02/21/79	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	02/21/79-02/21/79	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

EPA Water Quality Criteria Analysis for Station: ZION0363

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	21	0	0.00	11	0	0.00	6	0	0.00	4	0	0.00			
00400	PH	Other-Hi Lim.	9.	28	4	0.14	15	1	0.07	7	3	0.43	6	0	0.00			
		Other-Lo Lim.	6.5	28	0	0.00	15	0	0.00	7	0	0.00	6	0	0.00			
00403	PH, LAB	Other-Hi Lim.	9.	17	4	0.24	10	1	0.10	5	1	0.20	2	2	1.00			
		Other-Lo Lim.	6.5	17	0	0.00	10	0	0.00	5	0	0.00	2	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	21	0	0.00	13	0	0.00	5	0	0.00	3	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

EPA Water Quality Criteria Analysis for Station: ZION0363

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	1	1.00	1	1	1.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	5	3	0.60	4	2	0.50	1	1	1.00						
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	26	15	0.58	14	8	0.57	6	5	0.83	6	2	0.33			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	5	1	0.20	4	1	0.25	1	0	0.00						
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	25 &	11	0.44	14	7	0.50	5	4	0.80	6	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	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: ZION0364

NPS Station ID: ZION0364 LAT/LON: 37.297503/-113.510282 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - LOWER SPRING FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701503 /UT4900382003
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008025800.00 RF3 Mile Point: 0.00 Distance from RF3: 0.06 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0364

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	370.	370.	370.	370.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	146.	146.	146.	146.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	170.	170.	170.	170.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	164.	164.	164.	164.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1	55.	55.	55.	55.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	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: ZION0364

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	218.	218.	218.	218.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	1	0.27	0.27	0.27	0.27	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: ZION0364

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0365

NPS Station ID: ZION0365
LAT/LON: 37.298615/-113.511116
Agency: 21UTDHDW
Date Created: 05/26/90
Location: ST. GEORGE CITY - SULLIVAN SPRING
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY
STORET Station ID(s): 2701502 /UT4900382002
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 24.50
On/Off RF1:
RF3 Index: 15010008084400.00
RF3 Mile Point: 3.25
Distance from RF3: 0.02
On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * *
NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV
SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0365

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	625.	625.	625.	625.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	136.	136.	136.	136.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	158.	158.	158.	158.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	296.	296.	296.	296.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	161.	161.	161.	161.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1	120.	120.	120.	120.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	1	47.	47.	47.	47.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0365

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	416.	416.	416.	416.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	1	0.07	0.07	0.07	0.07	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: ZION0365

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0366

NPS Station ID: ZION0366
LAT/LON: 37.136116/-113.511670
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-15)14BCB-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370810113304201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 6.60
On/Off RF1:
RF3 Index: 15010008031000.00
RF3 Mile Point: 0.00
Distance from RF3: 0.15
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0366

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/68-10/16/68	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/68-10/16/68	1	673.	673.	673.	673.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/16/68-10/16/68	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/16/68-10/16/68	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/68-10/16/68	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/16/68-10/16/68	1	180.	180.	180.	180.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/16/68-10/16/68	1	220.	220.	220.	220.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	10/16/68-10/16/68	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/16/68-10/16/68	1	300.	300.	300.	300.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/16/68-10/16/68	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/68-10/16/68	1	63.	63.	63.	63.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/68-10/16/68	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/16/68-10/16/68	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00933	SODIUM,PLUS POTASSIUM (MG/L)	10/16/68-10/16/68	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/16/68-10/16/68	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/16/68-10/16/68	1	101.	101.	101.	101.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/68-10/16/68	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	10/16/68-10/16/68	1	100.	100.	100.	100.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/16/68-10/16/68	1	435.	435.	435.	435.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/16/68-10/16/68	1	380.	380.	380.	380.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/68-10/16/68	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0366

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0367

NPS Station ID: ZION0367
LAT/LON: 37.138892/-113.511670
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-15)15AAA-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370820113304201
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 12.30
On/Off RF1:
RF3 Index: 15010008004301.26
RF3 Mile Point: 1.61
Distance from RF3: 0.28
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0367

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/16/68-10/16/68	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/62-10/16/68	2	501.5	501.5	516.	487.	420.5	20.506	**	**	**	**
00400	PH (STANDARD UNITS)	07/14/62-07/14/62	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/14/62-07/14/62	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/62-07/14/62	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/62-07/14/62	1	152.	152.	152.	152.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/62-07/14/62	1	186.	186.	186.	186.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/62-07/14/62	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	07/14/62-07/14/62	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/62-07/14/62	1	243.	243.	243.	243.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	07/14/62-07/14/62	1	91.	91.	91.	91.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/62-07/14/62	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/62-07/14/62	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/62-07/14/62	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	07/14/62-07/14/62	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/62-07/14/62	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/14/62-10/16/68	2	9.	9.	10.	8.	2.	1.414	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/14/62-07/14/62	1	95.	95.	95.	95.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/62-07/14/62	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/62-07/14/62	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/62-07/14/62	1	60.	60.	60.	60.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/14/62-07/14/62	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/14/62-07/14/62	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/14/62-07/14/62	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/62-07/14/62	1	328.	328.	328.	328.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/14/62-07/14/62	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	07/14/62-07/14/62	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	07/14/62-07/14/62	1	60.	60.	60.	60.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0367

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400	PH	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	2	0	0.00									
		Drinking Water	250.	2	0	0.00	2	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0368

NPS Station ID: ZION0368
LAT/LON: 37.383615/-113.516670
Agency: 112WRD
Date Created: 02/28/78
Location: (C-39-15)15DBC-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372301113310001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 13.60
On/Off RF1:
RF3 Index: 15010008091900.00
RF3 Mile Point: 0.25
Distance from RF3: 0.31
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0368

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/23/68-10/23/68	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/23/68-10/23/68	1	223.	223.	223.	223.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/23/68-10/23/68	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: ZION0368

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0369

NPS Station ID: ZION0369
LAT/LON: 37.383337/-113.516670
Agency: 112WRD
Date Created: 02/28/78
Location: (C-39-15)15DCD-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372300113310001
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 0.00
On/Off RF1:
RF3 Index: 15010008002523.71
RF3 Mile Point: 24.49
Distance from RF3: 0.05
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0369

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/23/68-10/23/68	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/23/68-10/23/68	1	282.	282.	282.	282.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/23/68-10/23/68	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: ZION0369

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0370

NPS Station ID: ZION0370
LAT/LON: 37.366670/-113.520838
Agency: 112WRD
Date Created: 02/28/78
Location: (C-39-15)22CCD-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 372200113311501
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 1.60
On/Off RF1:
RF3 Index: 15010008002209.35
RF3 Mile Point: 9.96
Distance from RF3: 0.14
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0370

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	02/18/67-02/18/67	1	145.	145.	145.	145.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/67-02/18/67	1	68.	68.	68.	68.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	02/18/67-02/18/67	1	81.	81.	81.	81.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	02/18/67-02/18/67	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/18/67-02/18/67	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/18/67-02/18/67	1	72.	72.	72.	72.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	02/18/67-02/18/67	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	02/18/67-02/18/67	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	02/18/67-02/18/67	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	02/18/67-02/18/67	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	02/18/67-02/18/67	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	02/18/67-02/18/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	02/18/67-02/18/67	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	02/18/67-02/18/67	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/18/67-02/18/67	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	02/18/67-02/18/67	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	02/18/67-02/18/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	02/18/67-02/18/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	02/18/67-02/18/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	02/18/67-02/18/67	1	10.	10.	10.	10.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	02/18/67-02/18/67	1	94.	94.	94.	94.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	02/18/67-02/18/67	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
71883	MANGANESE, TOTAL ELEMENTAL (UG/L AS MN)	02/18/67-02/18/67	1	0.	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	02/18/67-02/18/67	1	50.	50.	50.	50.	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0370

				Total	Exceed	Prop.	----------7/01-3/19----------			----------3/20-5/09----------			----------5/10-6/30----------			--------------n/a--------------		
Parameter		Std. Type	Std. Value	Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									

& - 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: ZION0370

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01040	COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
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									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									

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

Station Inventory for Station: ZION0371

NPS Station ID: ZION0371
LAT/LON: 37.138892/-113.521115
Agency: 112WRD
Date Created: 02/28/78
Location: (C-42-15)15BBA-S1
FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/AMBNT/SPRING
STORET Station ID(s): 370820113311601
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 15010008
Depth of Water: 0
Aquifer:
Major Basin:
Elevation: 0
Water Body Id:
Minor Basin:
ECO Region:
RF1 Index: 15010008
RF1 Mile Point: 0.000
Distance from RF1: 13.70
On/Off RF1:
RF3 Index: 15010008004301.26
RF3 Mile Point: 1.65
Distance from RF3: 0.34
On/Off RF3:
Description:

Parameter Inventory for Station: ZION0371

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/30/66-10/16/68	2	22.15	22.15	23.3	21.	2.645	1.626	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/30/66-10/16/68	2	2010.	2010.	2010.	2010.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/30/66-03/30/66	1	206.	206.	206.	206.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/30/66-03/30/66	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/30/66-03/30/66	1	340.	340.	340.	340.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/30/66-03/30/66	1	163.	163.	163.	163.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/30/66-03/30/66	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/30/66-03/30/66	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/30/66-03/30/66	1	283.	283.	283.	283.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/30/66-03/30/66	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/30/66-03/30/66	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/30/66-10/16/68	2	290.	290.	295.	285.	50.	7.071	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/30/66-03/30/66	1	415.	415.	415.	415.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/30/66-03/30/66	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	03/30/66-03/30/66	1	800.	800.	800.	800.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/30/66-03/30/66	1	1240.	1240.	1240.	1240.	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: ZION0371

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	250.	2	2	1.00	1	1	1.00	1	1	1.00						
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	1	1.00				1	1	1.00						
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	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

Station Inventory for Station: ZION0372

NPS Station ID: ZION0372 LAT/LON: 37.322781/-113.524449 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - QUAKING ASP SPR FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701505 /UT4900382005
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008084108.13 RF3 Mile Point: 11.83 Distance from RF3: 0.01 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0372

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	34.	34.	34.	34.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	52.	52.	52.	52.	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: ZION0372

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

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

EPA Water Quality Criteria Analysis for Station: ZION0372

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0373

NPS Station ID: ZION0373 LAT/LON: 37.319726/-113.524726 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - BIG PINE CANYON FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701506 /UT4900382006
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008025500.00 RF3 Mile Point: 0.00 Distance from RF3: 0.03 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0373

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	500.	500.	500.	500.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	07/14/80-07/14/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	251.	251.	251.	251.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	306.	306.	306.	306.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	244.	244.	244.	244.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	1	69.	69.	69.	69.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	35.	35.	35.	35.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1	55.	55.	55.	55.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	286.	286.	286.	286.	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: ZION0373

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	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 time series plot

EPA Water Quality Criteria Analysis for Station: ZION0373

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0374

NPS Station ID: ZION0374 LAT/LON: 37.303892/-113.526115 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - W FORK CTTNWD FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701504 /UT4900382004
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008084400.00 RF3 Mile Point: 0.66 Distance from RF3: 0.01 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0374

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	95.	95.	95.	95.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	112.	112.	112.	112.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0374

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	124.	124.	124.	124.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	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

EPA Water Quality Criteria Analysis for Station: ZION0374

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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: ZION0375

NPS Station ID: ZION0375 LAT/LON: 37.333615/-113.531670 Agency: 21UTDHDW Date Created: 05/26/90
Location: ST. GEORGE CITY - CARTER CANYON FIPS State/County: 49053 UTAH/WASHINGTON
Station Type: /TYPA/MUN/INTAKE/NONAMB/SPRING/SUPPLY STORET Station ID(s): 2701508 /UT4900382008
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 15010008 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 15010008 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 15010008088300.00 RF3 Mile Point: 0.40 Distance from RF3: 0.00 On/Off RF3:
Description:
NOTE: THIS IS A PUBLIC DRINKING WATER SOURCE * * * NOTE: THE SECONDARY STATION CODE IS EPA'S FRDS2 PWS-ID #
SYSTEM TYPE: COMMUNITY-POLITICAL SUBDIV SERVICE AREA TYPE: RESIDENTIAL AREA

Parameter Inventory for Station: ZION0375

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/80-07/14/80	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/80-07/14/80	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/14/80-07/14/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/14/80-07/14/80	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/80-07/14/80	1	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	07/14/80-07/14/80	1	66.	66.	66.	66.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/80-07/14/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/14/80-07/14/80	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/14/80-07/14/80	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/14/80-07/14/80	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/14/80-07/14/80	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/14/80-07/14/80	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/14/80-07/14/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/14/80-07/14/80	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/14/80-07/14/80	1	27.	27.	27.	27.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01007	BARIUM, TOTAL (UG/L AS BA)	07/14/80-07/14/80	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	07/14/80-07/14/80	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/80-07/14/80	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/80-07/14/80	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	07/14/80-07/14/80	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/80-07/14/80	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	07/14/80-07/14/80	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

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

Parameter Inventory for Station: ZION0375

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/14/80-07/14/80	1	82.	82.	82.	82.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/80-07/14/80	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
74010	IRON, TOTAL (MG/L AS FE)	07/14/80-07/14/80	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: ZION0375

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00403	PH, LAB	Other-Hi Lim.	9.	1	0	0.00	1	0	0.00									
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01007	BARIUM, TOTAL	Drinking Water	2000.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
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									

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EPA Water Quality Criteria Analysis for Entire ZION Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	88	2	0.02	51	0	0.00	15	1	0.07	22	1	0.05			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	895 &	245	0.27	612	172	0.28	127	49	0.39	156	24	0.15			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	157	3	0.02	102	1	0.01	27	1	0.04	28	1	0.04			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1317	42	0.03	865	32	0.04	177	2	0.01	275	8	0.03			
00400	PH	Other-Hi Lim.	9.	1636	70	0.04	1076	55	0.05	219	5	0.02	341	10	0.03			
		Other-Lo Lim.	6.5	1636	22	0.01	1076	11	0.01	219	2	0.01	341	9	0.03			
00403	PH, LAB	Other-Hi Lim.	9.	971	22	0.02	658	13	0.02	172	5	0.03	141	4	0.03			
		Other-Lo Lim.	6.5	971	1	0.00	658	1	0.00	172	0	0.00	141	0	0.00			
00406	PH, FIELD	Other-Hi Lim.	9.	91	0	0.00	66	0	0.00	7	0	0.00	18	0	0.00			
		Other-Lo Lim.	6.5	91	0	0.00	66	0	0.00	7	0	0.00	18	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	413	1	0.00	283	1	0.00	47	0	0.00	83	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	200	0	0.00	137	0	0.00	34	0	0.00	29	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	423	12	0.03	290	11	0.04	49	0	0.00	84	1	0.01			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	318	1	0.00	228	1	0.00	36	0	0.00	54	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	321	1	0.00	213	1	0.00	41	0	0.00	67	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	654	0	0.00	409	0	0.00	96	0	0.00	149	0	0.00			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	3 &	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	0.2	3 &	0	0.00	1	0	0.00				2	0	0.00			
00723	CYANIDE, DISSOLVED STD METHOD	Fresh Acute	22.	9	0	0.00	6	0	0.00				3	0	0.00			
		Drinking Water	200.	9	0	0.00	6	0	0.00				3	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	703	11	0.02	485	4	0.01	119	4	0.03	99	3	0.03			
		Drinking Water	250.	703	65	0.09	485	51	0.11	119	7	0.06	99	7	0.07			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	740	1	0.00	496	0	0.00	118	0	0.00	126	1	0.01			
		Drinking Water	250.	740	59	0.08	496	46	0.09	118	6	0.05	126	7	0.06			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	320	90	0.28	214	66	0.31	67	16	0.24	39	8	0.21			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1005	271	0.27	699	203	0.29	145	23	0.16	161	45	0.28			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	514	1	0.00	351	1	0.00	100	0	0.00	63	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	229	0	0.00	155	0	0.00	29	0	0.00	45	0	0.00			
		Drinking Water	50.	229	6	0.03	155	3	0.02	29	2	0.07	45	1	0.02			
01002	ARSENIC, TOTAL	Fresh Acute	360.	515	1	0.00	371	0	0.00	70	0	0.00	74	1	0.01			
		Drinking Water	50.	515	1	0.00	371	0	0.00	70	0	0.00	74	1	0.01			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	229	0	0.00	156	0	0.00	29	0	0.00	44	0	0.00			
01007	BARIUM, TOTAL	Drinking Water	2000.	501	0	0.00	357	0	0.00	70	0	0.00	74	0	0.00			
01010	BERYLLIUM, DISSOLVED	Fresh Acute	130.	6	0	0.00	6	0	0.00									
		Drinking Water	4.	6	0	0.00	6	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	232 &	8	0.03	159	3	0.02	29	0	0.00	44	5	0.11			
		Drinking Water	5.	232 &	6	0.03	159	2	0.01	29	0	0.00	44	4	0.09			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	499	2	0.00	355	1	0.00	70	0	0.00	74	1	0.01			
		Drinking Water	5.	499	1	0.00	355	1	0.00	70	0	0.00	74	0	0.00			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	156	0	0.00	114	0	0.00	12	0	0.00	30	0	0.00			
01032	CHROMIUM, HEXAVALENT	Fresh Acute	16.	172	2	0.01	108	1	0.01	34	1	0.03	30	0	0.00			
		Drinking Water	100.	172	0	0.00	108	0	0.00	34	0	0.00	30	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	499	0	0.00	355	0	0.00	70	0	0.00	74	0	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	246	6	0.02	172	4	0.02	29	1	0.03	45	1	0.02			
		Drinking Water	1300.	246	0	0.00	172	0	0.00	29	0	0.00	45	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	500 &	39	0.08	357	32	0.09	69	1	0.01	74	6	0.08			
		Drinking Water	1300.	501	0	0.00	357	0	0.00	70	0	0.00	74	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	236	0	0.00	163	0	0.00	28	0	0.00	45	0	0.00			
		Drinking Water	15.	236	4	0.02	163	3	0.02	28	0	0.00	45	1	0.02			
01051	LEAD, TOTAL	Fresh Acute	82.	514	0	0.00	370	0	0.00	70	0	0.00	74	0	0.00			
		Drinking Water	15.	512 &	17	0.03	369	10	0.03	69	3	0.04	74	4	0.05			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	80	0	0.00	44	0	0.00	19	0	0.00	17	0	0.00			
		Drinking Water	100.	80	1	0.01	44	1	0.02	19	0	0.00	17	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	157	0	0.00	101	0	0.00	29	0	0.00	27	0	0.00			
		Drinking Water	100.	157	1	0.01	101	1	0.01	29	0	0.00	27	0	0.00			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	215 &	6	0.03	143	5	0.03	28	0	0.00	44	1	0.02			
		Drinking Water	100.	219	0	0.00	147	0	0.00	28	0	0.00	44	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	494 &	5	0.01	350	2	0.01	70	1	0.01	74	2	0.03			
		Drinking Water	100.	498	0	0.00	354	0	0.00	70	0	0.00	74	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	240	8	0.03	166	5	0.03	29	0	0.00	45	3	0.07			
		Drinking Water	5000.	240	0	0.00	166	0	0.00	29	0	0.00	45	0	0.00			

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EPA Water Quality Criteria Analysis for Entire ZION Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01092	ZINC, TOTAL	Fresh Acute	120.	500	7	0.01	357	7	0.02	69	0	0.00	74	0	0.00			
		Drinking Water	5000.	500	0	0.00	357	0	0.00	69	0	0.00	74	0	0.00			
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	5	0	0.00	5	0	0.00									
		Drinking Water	6.	3 &	3	1.00	3	3	1.00									
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	227	3	0.01	155	3	0.02	29	0	0.00	43	0	0.00			
		Drinking Water	50.	227	3	0.01	155	3	0.02	29	0	0.00	43	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	514	0	0.00	370	0	0.00	70	0	0.00	74	0	0.00			
		Drinking Water	50.	514	0	0.00	370	0	0.00	70	0	0.00	74	0	0.00			
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE	Fresh Acute	20.	50	0	0.00	36	0	0.00	11	0	0.00	3	0	0.00			
		Drinking Water	50.	50	0	0.00	36	0	0.00	11	0	0.00	3	0	0.00			
07000	TRITIUM, TOTAL	Drinking Water	20000.	5	0	0.00	4	0	0.00				1	0	0.00			
07005	TRITIUM, DISSOLVED	Drinking Water	20000.	15	0	0.00	15	0	0.00									
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	53	1	0.02	33	1	0.03				20	0	0.00			
30191	DINOSEB, WATER, WHOLE RECOVERABLE	Drinking Water	7.	2	0	0.00	1	0	0.00				1	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	59	11	0.19	38	10	0.26	5	1	0.20	16	0	0.00			
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	39	37	0.95	39	37	0.95									
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	121	53	0.44	74	24	0.32	26	17	0.65	21	12	0.57			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	90	46	0.51	52	29	0.56	19	13	0.68	19	4	0.21			
31613	FECAL COLIFORM, MEMBRANE FILTER, AGAR	Other-Hi Lim.	200.	102 &	8	0.08	65	8	0.12	5	0	0.00	32	0	0.00			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	85 &	41	0.48	48	30	0.63	18	9	0.50	19	2	0.11			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	85	23	0.27	54	12	0.22	15	6	0.40	16	5	0.31			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	78	27	0.35	68	25	0.37	6	2	0.33	4	0	0.00			
32101	BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	6	0	0.00	1	0	0.00				5	0	0.00			
32102	CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	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			
32103	1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	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			
32104	BROMOFORM, WHOLE WATER	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
32105	DIBROMOCHLOROMETHANE, WHOLE WATER	Drinking Water	100.	4	0	0.00							4	0	0.00			
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	6	0	0.00	1	0	0.00				5	0	0.00			
		Drinking Water	100.	6	0	0.00	1	0	0.00				5	0	0.00			
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE E	Fresh Acute	17500.	1	0	0.00							1	0	0.00			
		Drinking Water	1000.	1	0	0.00							1	0	0.00			
34301	CHLOROBENZENE, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
34306	CHLORODIBROMOMETHANE, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
34356	ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
34361	ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	6	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00			
34371	ETHYLBENZENE, TOTAL	Fresh Acute	32000.	1	0	0.00							1	0	0.00			
		Drinking Water	700.	1	0	0.00							1	0	0.00			
34391	HEXACHLOROBUTADIENE, TOTAL	Fresh Acute	90.	1	0	0.00	1	0	0.00									
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
34475	TETRACHLOROETHYLENE, TOTAL	Fresh Acute	5280.	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			
34501	1,1-DICHLOROETHYLENE, TOTAL	Drinking Water	7.	2	0	0.00	1	0	0.00				1	0	0.00			
34506	1,1,1-TRICHLOROETHANE, TOTAL	Drinking Water	200.	2	0	0.00	1	0	0.00				1	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	2	0	0.00	1	0	0.00				1	0	0.00			
34541	1,2-DICHLOROPROPANE, TOTAL	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	2	0	0.00	1	0	0.00				1	0	0.00			
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	1	0	0.00	1	0	0.00									
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	2	0	0.00	1	0	0.00				1	0	0.00			
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	2	0	0.00	1	0	0.00				1	0	0.00			
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	1	0	0.00	1	0	0.00									
38760	DBCP, WATER, TOTAL	Drinking Water	0.2	0 &	0	0.00												
39033	ATRAZINE IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39053	ALDICARB IN WHOLE WATER	Drinking Water	3.	1	0	0.00	1	0	0.00									
39055	SIMAZINE IN WHOLE WATER	Drinking Water	4.	1	0	0.00							1	0	0.00			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	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			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	7	0	0.00	5	0	0.00	1	0	0.00	1	0	0.00			

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EPA Water Quality Criteria Analysis for Entire ZION Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-3/19 Obs	7/01-3/19 Exceed	7/01-3/19 Prop.	3/20-5/09 Obs	3/20-5/09 Exceed	3/20-5/09 Prop.	5/10-6/30 Obs	5/10-6/30 Exceed	5/10-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	8	0	0.00	6	0	0.00	1	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	0.2	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	2.	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39360	DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0.00							1	0	0.00			
39365	DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0.00							1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39388	ENDOSULFAN IN WHOLE WATER SAMPLE	Fresh Acute	0.22	2	0	0.00	1	0	0.00				1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	9	0	0.00	6	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	2.	9	0	0.00	6	0	0.00	1	0	0.00	2	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	9	0	0.00	6	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	3.	9	0	0.00	6	0	0.00	1	0	0.00	2	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	0.4	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
		Drinking Water	0.2	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	8	0	0.00	5	0	0.00	1	0	0.00	2	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	9	0	0.00	6	0	0.00	1	0	0.00	2	0	0.00			
39782	LINDANE IN WHOLE WATER SAMPLE	Fresh Acute	2.	4	0	0.00	4	0	0.00									
		Drinking Water	0.2	4	0	0.00	4	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	12	7	0.58	9	5	0.56	2	1	0.50	1	1	1.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	27	0	0.00	22	0	0.00	1	0	0.00	4	0	0.00			
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	1	0	0.00	1	0	0.00									
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	155	0	0.00	117	0	0.00	10	0	0.00	28	0	0.00			
		Drinking Water	2.	155	0	0.00	117	0	0.00	10	0	0.00	28	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	575	10	0.02	395	10	0.03	89	0	0.00	91	0	0.00			
		Drinking Water	2.	575	11	0.02	395	11	0.03	89	0	0.00	91	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.	2	0	0.00	1	0	0.00				1	0	0.00			
77651	1,2-DIBROMOETHANE, WHOLE WATER	Drinking Water	0.05	0 &	0	0.00												
80020	URANIUM, DISS. BY EXTRACTION FLUOROMETRI	Drinking Water	20.	1	0	0.00	1	0	0.00									
81405	CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	Drinking Water	40.	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

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Missing Level I Groups

There are STORET Data for Every Level I I&M Parameter Group Within the ZION Study Area

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Present Level I Groups

STORET Data Within the ZION Study Area Exist for These Groups:

Alkalinity		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1068	703	287	78	208
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	114	0	59	55	34
00440	BICARBONATE ION (MG/L AS HCO3)	915	620	219	76	126
00445	CARBONATE ION (MG/L AS CO3)	867	605	188	74	100
		2964	1928	753	283	468(235)[!]

pH		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00400	PH (STANDARD UNITS)	1636	924	572	140	258
00403	PH, LAB (STANDARD UNITS)	971	590	381	0	193
00406	PH, FIELD (STANDARD UNITS)	91	76	15	0	19
		2698	1590	968	140	470(329)[!]

Conductivity		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	1254	923	311	20	66
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	2673	956	1414	303	312
		3927	1879	1725	323	378(342)[!]

Dissolved Oxygen		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	157	47	49	61	34
00300	OXYGEN, DISSOLVED (MG/L)	1317	889	428	0	108
		1474	936	477	61	142(142)[!]

Water Temperature		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3336	1351	1450	535	296
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	122	0	62	60	8
		3458	1351	1512	595	304(297)[!]

Flow		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00058	FLOW RATE, GALLONS/MIN.	9	2	7	0	5
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	56	25	31	0	43
00060	FLOW, STREAM, MEAN DAILY CFS	502	0	6	496	19
00061	FLOW, STREAM, INSTANTANEOUS CFS	2084	883	1153	48	125
		2651	910	1197	544	192(170)[!]

[!]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Clarity/Turbidity		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00070	TURBIDITY, (JACKSON CANDLE UNITS)	88	0	38	50	27
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	898	634	264	0	86
00077	TRANSPARENCY, SECCHI DISC (INCHES)	2	0	2	0	2
00078	TRANSPARENCY, SECCHI DISC (METERS)	102	101	1	0	8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1003	733	154	116	65
		2093	1468	459	166	188(115)[!]

Nitrate/Nitrogen		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00600	NITROGEN, TOTAL (MG/L AS N)	52	52	0	0	6
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	65	0	5	60	20
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	1040	811	229	0	68
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	423	269	93	61	43
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	318	111	180	27	65
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	793	586	207	0	44
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	321	136	185	0	31
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	654	429	221	4	149
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	4	0	0	4	1
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	3	0	3	0	3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	27	0	10	17	22
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	1	0	1	0	1
		3701	2394	1134	173	453(248)[!]

Phosphate/Phosphorus		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	99	0	76	23	9
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	175	0	102	73	80
00665	PHOSPHORUS, TOTAL (MG/L AS P)	1118	852	205	61	67
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	418	418	0	0	30
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	573	293	276	4	100
		2383	1563	659	161	286(157)[!]

Chlorophyll		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	151	90	0	61	23
32217	CHLOROPHYLL A (UG/L) FLUOROMETRIC UNCORRECTED	4	0	4	0	2
		155	90	4	61	25 (25)[!]

Sulfates/Total Dissolved Solids/Hardness		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00900	HARDNESS, TOTAL (MG/L AS CACO3)	1229	684	455	90	221
00945	SULFATE, TOTAL (MG/L AS SO4)	320	30	201	89	153
00946	SULFATE, DISSOLVED (MG/L AS SO4)	1005	719	285	1	110
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	1219	832	301	86	160
		3773	2265	1242	266	644(270)[!]

[!]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Bacteria		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
31501	COLIFORM, TOT, MEMBRANE FILTER,IMMED.M-ENDOMED,35C	59	26	33	0	18
31503	COLIFORM, TOT, MEMBRANE FILTER,DELAY,M-ENDOMED,35C	39	0	39	0	5
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	121	0	7	114	16
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	90	0	90	0	12
31613	FECAL COLIFORM, MEMBR, FILTER,M-FC AGAR,44.5C,24HR	104	29	75	0	26
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	86	0	86	0	12
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	85	0	26	59	21
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	78	0	51	27	11
		662	55	407	200	121 (58)[!]

[!]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	5	0	5	0	5
01000	ARSENIC, DISSOLVED (UG/L AS AS)	229	135	29	65	58
82702	ARSENIC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01002	ARSENIC, TOTAL (UG/L AS AS)	515	328	187	0	62
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	6	1	5	0	6
01025	CADMIUM, DISSOLVED (UG/L AS CD)	233	137	31	65	61
82705	CADMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01027	CADMIUM, TOTAL (UG/L AS CD)	499	328	171	0	56
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	156	128	28	0	38
82706	CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	172	14	93	65	59
01034	CHROMIUM, TOTAL (UG/L AS CR)	499	328	171	0	56
01040	COPPER, DISSOLVED (UG/L AS CU)	246	137	39	70	71
82708	COPPER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01042	COPPER, TOTAL (UG/L AS CU)	501	328	173	0	56
01049	LEAD, DISSOLVED (UG/L AS PB)	236	138	29	69	64
82711	LEAD, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01051	LEAD, TOTAL (UG/L AS PB)	514	328	186	0	62
71890	MERCURY, DISSOLVED (UG/L AS HG)	155	135	20	0	35
82713	MERCURY, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
71900	MERCURY, TOTAL (UG/L AS HG)	575	329	195	51	80
01065	NICKEL, DISSOLVED (UG/L AS NI)	80	1	14	65	29
01067	NICKEL, TOTAL (UG/L AS NI)	157	2	155	0	37
01145	SELENIUM, DISSOLVED (UG/L AS SE)	227	136	26	65	56
01147	SELENIUM, TOTAL (UG/L AS SE)	514	328	186	0	62
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	50	50	0	0	13
01075	SILVER, DISSOLVED (UG/L AS AG)	219	130	25	64	50
82716	SILVER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01077	SILVER, TOTAL (UG/L AS AG)	498	328	170	0	56
01090	ZINC, DISSOLVED (UG/L AS ZN)	240	130	40	70	68
82719	ZINC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	50	50	0	0	13
01092	ZINC, TOTAL (UG/L AS ZN)	500	328	172	0	56
00720	CYANIDE, TOTAL (MG/L AS CN)	4	1	3	0	3
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	9	0	9	0	4
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	1	1	0	0	1
78124	BENZENE IN WATER (VOLATILE ANALYSIS) (UG/L)	1	1	0	0	1
32104	BROMOFORM, WHOLE WATER, (UG/L)	2	2	0	0	2
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	2	2	0	0	2
34301	CHLOROBENZENE, TOTAL (UG/L)	2	2	0	0	2
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	4	1	3	0	2
34306	CHLORODIBROMOMETHANE, TOTAL (UG/L)	1	1	0	0	1
34311	CHLOROETHANE, TOTAL (UG/L)	2	2	0	0	2
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	1	1	0	0	1
32106	CHLOROFORM, WHOLE WATER (UG/L)	6	2	4	0	2
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	6	2	4	0	2
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	2	2	0	0	2
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	2	2	0	0	2
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	2	2	0	0	2
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	2	2	0	0	2
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	2	2	0	0	2
34371	ETHYLBENZENE, TOTAL (UG/L)	1	1	0	0	1
78113	ETHYL BENZENE WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1
34413	METHYL BROMIDE, TOTAL (UG/L)	2	2	0	0	2
34418	METHYL CHLORIDE, TOTAL (UG/L)	2	2	0	0	2
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	2	2	0	0	2

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 12/11/96	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	2	2	0	0	2
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	2	2	0	0	2
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	1	1	0	0	1
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) (UG/L)	1	1	0	0	1
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	2	2	0	0	2
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	2	2	0	0	2
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	2	2	0	0	2
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	2	2	0	0	2
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	2	2	0	0	2
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	2	2	0	0	2
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	2	2	0	0	2
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	2	2	0	0	2
34391	HEXACHLOROBUTADIENE, TOTAL (UG/L)	1	1	0	0	1
34696	NAPHTHALENE, TOTAL (UG/L)	1	1	0	0	1
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	1	1	0	0	1
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	6	6	0	0	1
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	7	7	0	0	1
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	4	4	0	0	2
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	1
46323	3,3'-DICHLOROBENZIDINE, DISSOLVED (UG/L)	6	6	0	0	1
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	8	8	0	0	2
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	1
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	7	7	0	0	1
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	6	6	0	0	1
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	6	6	0	0	1
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	6	6	0	0	1
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	9	9	0	0	2
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	8	8	0	0	2
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	6	6	0	0	1
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	6	6	0	0	1
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	6	6	0	0	1
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	6	6	0	0	1
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	6	6	0	0	1
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	7	7	0	0	1
34671	PCB - 1016, TOTAL (UG/L)	6	6	0	0	1
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	9	9	0	0	2
		7681	4859	2173	649	1404(116)[1]

[1]Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Park Summary: Level I Group Currentness and Distribution

Parameter Group	Total Obs.	Obs. Since 1985	% Obs. Since 1985	Stations Measuring This Group	% of Total Stations Measuring This Group	Obs. Per Station Measuring This Group	Period of Record For This Group	Observations Per Year of Period of Record
Alkalinity	2964	1928	65.0	235	65.5	12.6	07/14/62-12/11/96	86.1
pH	2698	1590	58.9	329	91.6	8.2	07/14/62-12/11/96	78.4
Conductivity	3927	1879	47.8	342	95.3	11.5	07/14/62-12/11/96	114.1
Dissolved Oxygen	1474	936	63.5	142	39.6	10.4	10/31/73-12/11/96	63.8
Water Temperature	3458	1351	39.1	297	82.7	11.6	10/19/62-12/11/96	101.3
Flow	2651	910	34.3	170	47.4	15.6	10/19/62-12/11/96	77.6
Clarity/Turbidity	2093	1468	70.1	115	32.0	18.2	01/04/67-12/11/96	69.9
Nitrate/Nitrogen	3701	2394	64.7	248	69.1	14.9	07/14/62-12/11/96	107.5
Phosphate/Phosphorus	2383	1563	65.6	157	43.7	15.2	07/14/62-12/11/96	69.2
Chlorophyll	155	90	58.1	25	7.0	6.2	10/31/73-07/31/96	6.8
Sulfates/Total Dissolved Solids/Hardness	3773	2265	60.0	270	75.2	14.0	07/14/62-12/11/96	109.6
Bacteria	662	55	8.3	58	16.2	11.4	01/04/67-09/03/96	22.3
Toxic Elements	7681	4859	63.3	116	32.3	66.2	07/14/62-10/30/96	223.9

Water Quality Observations
Outside STORET Edit Criteria for ZION

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
ZION0003	00405	CARBON DIOXIDE (MG/L AS CO2)	770621		177.0000000	112WRD	372816112291301	
ZION0018	00405	CARBON DIOXIDE (MG/L AS CO2)	770622		182.0000000	112WRD	372017112361101	
ZION0032	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	961210	1258	5630.0000000	21UTAH	495156	
ZION0032	00440	BICARBONATE ION (MG/L AS HCO3)	960424	1552	494.0000000	21UTAH	495156	
ZION0032	00440	BICARBONATE ION (MG/L AS HCO3)	960522	1554	460.0000000	21UTAH	495156	
ZION0032	00440	BICARBONATE ION (MG/L AS HCO3)	960821	0844	472.0000000	21UTAH	495156	
ZION0032	00440	BICARBONATE ION (MG/L AS HCO3)	960918	1342	528.0000000	21UTAH	495156	
ZION0032	00440	BICARBONATE ION (MG/L AS HCO3)	961030	0936	470.0000000	21UTAH	495156	
ZION0032	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	930203	1545	14640.0000000	21UTAH	495156	
ZION0034	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	930317	1430	11120.0000000	21UTAH	495157	
ZION0073	01045	IRON, TOTAL (UG/L AS FE)	810422	1255	74000.0000000	112WRD	372603112475201	
ZION0073	01045	IRON, TOTAL (UG/L AS FE)	820304	1105	64000.0000000	112WRD	372603112475201	
ZION0112	00405	CARBON DIOXIDE (MG/L AS CO2)	771112		122.0000000	112WRD	371512112501201	
ZION0112	00440	BICARBONATE ION (MG/L AS HCO3)	771112		480.0000000	112WRD	371512112501201	
ZION0137	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	800617	1530	135.0000000	21UTAH	495120	
ZION0139	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	781017	1615	21.0000000	21UTAH	495112	
ZION0139	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	781212	2000	27.0000000	21UTAH	495112	
ZION0141	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	720104		28.0000000	21UTAH	495110	
ZION0141	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	721205		30.0000000	21UTAH	495110	
ZION0141	00400	PH (STANDARD UNITS)	740604		300.0000000	21UTAH	495110	X
ZION0175	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	770106		70.0000000	112WRD	09405500	X
ZION0177	00946	SULFATE, DISSOLVED (MG/L AS SO4)	931110	0830	4510.0000000	21UTAH	595169	
ZION0177	00946	SULFATE, DISSOLVED (MG/L AS SO4)	940727	0930	5412.0000000	21UTAH	595169	
ZION0177	00946	SULFATE, DISSOLVED (MG/L AS SO4)	940907		4578.0000000	21UTAH	595169	
ZION0177	00946	SULFATE, DISSOLVED (MG/L AS SO4)	950712	0857	4307.0000000	21UTAH	595169	
ZION0177	00946	SULFATE, DISSOLVED (MG/L AS SO4)	951206	1039	3122.0000000	21UTAH	595169	
ZION0177	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	931110	0830	7346.0000000	21UTAH	595169	
ZION0177	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	940727	0930	8510.0000000	21UTAH	595169	
ZION0177	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	940907		8118.0000000	21UTAH	595169	
ZION0177	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	950712	0857	7114.0000000	21UTAH	595169	
ZION0177	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	951206	1039	6384.0000000	21UTAH	595169	
ZION0179	31501	COLIFORM,TOT,MEM. FILTER,IMMED.M-ENDO MED,35C	910807	1815	99990000.0000000	21UTAH	595171	X
ZION0180	00665	PHOSPHORUS, TOTAL (MG/L AS P)	740715	1140	10.4690000	21USU	000205	
ZION0182	00440	BICARBONATE ION (MG/L AS HCO3)	771207		530.0000000	112WRD	371146112593601	
ZION0192	00405	CARBON DIOXIDE (MG/L AS CO2)	921014	0730	274.0000000	21UTAH	495095	
ZION0205	00950	FLUORIDE, DISSOLVED (MG/L AS F)	801029	0700	111.0000000	21UTAH	495090	
ZION0212	31501	COLIFORM,TOT,MEM. FILTER,IMMED.M-ENDO MED,35C	910529	1230	99990000.0000000	21UTAH	495135	X
ZION0212	31501	COLIFORM,TOT,MEM. FILTER,IMMED.M-ENDO MED,35C	910814	1130	99990000.0000000	21UTAH	495135	X
ZION0212	31613	FECAL COLIFORM,MEMBR FILTER,M-FC AGAR,44.5C,24HR	910814	1130	99990000.0000000	21UTAH	495135	X
ZION0272	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	740409	1130	41.0000000	21USU	000209B	
ZION0272	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	740528	1120	41.0000000	21USU	000209B	

Water Quality Observations
Outside STORET Edit Criteria for ZION

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
ZION0272	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	740716	0820	41.0000000	21USU	000209B	
ZION0272	00405	CARBON DIOXIDE (MG/L AS CO2)	740409	1130	320.0000000	21USU	000209B	
ZION0272	00405	CARBON DIOXIDE (MG/L AS CO2)	740528	1120	155.0000000	21USU	000209B	
ZION0272	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	740409	1130	1042.0000000	21USU	000209B	
ZION0272	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	740528	1120	1007.0000000	21USU	000209B	
ZION0272	00440	BICARBONATE ION (MG/L AS HCO3)	740409	1130	1271.0000000	21USU	000209B	
ZION0272	00440	BICARBONATE ION (MG/L AS HCO3)	740528	1120	1228.0000000	21USU	000209B	
ZION0272	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	740409	1130	196.0000000	21USU	000209B	
ZION0272	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	740528	1120	288.0000000	21USU	000209B	
ZION0272	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	740716	0820	348.0000000	21USU	000209B	
ZION0272	00690	CARBON, TOTAL (MG/L AS C)	740409	1130	256.0000000	21USU	000209B	
ZION0272	00690	CARBON, TOTAL (MG/L AS C)	740528	1120	296.0000000	21USU	000209B	
ZION0272	00690	CARBON, TOTAL (MG/L AS C)	740716	0820	368.0000000	21USU	000209B	
ZION0272	00935	POTASSIUM, DISSOLVED (MG/L AS K)	740409	1130	240.0000000	21USU	000209B	
ZION0272	00935	POTASSIUM, DISSOLVED (MG/L AS K)	740528	1120	230.0000000	21USU	000209B	
ZION0272	00935	POTASSIUM, DISSOLVED (MG/L AS K)	740716	0820	240.0000000	21USU	000209B	
ZION0272	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	740409	1130	9410.0000000	21USU	000209B	
ZION0272	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	740528	1120	9200.0000000	21USU	000209B	
ZION0272	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	740716	0820	9312.0000000	21USU	000209B	
ZION0273	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	810825		41.5000000	112WRD	371119113161501	
ZION0273	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	820505	1330	41.5000000	112WRD	371119113161501	
ZION0273	01020	BORON, DISSOLVED (UG/L AS B)	820505	1330	5200.0000000	112WRD	371119113161501	
ZION0276	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	830426	2100	8930.0000000	21UTAH	495077	
ZION0276	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	850909	1840	1250.0000000	21UTAH	495077	
ZION0278	00405	CARBON DIOXIDE (MG/L AS CO2)	731031	1215	166.1000000	21USU	000209	
ZION0278	00405	CARBON DIOXIDE (MG/L AS CO2)	740212	1235	192.0000000	21USU	000209	
ZION0278	00405	CARBON DIOXIDE (MG/L AS CO2)	740409	1140	106.0000000	21USU	000209	
ZION0278	00440	BICARBONATE ION (MG/L AS HCO3)	740409	1140	531.0000000	21USU	000209	
ZION0278	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	740528	1135	108.0000000	21USU	000209	
ZION0278	00685	CARBON, TOTAL INORGANIC (MG/L AS C)	740716	0830	114.0000000	21USU	000209	
ZION0279	00405	CARBON DIOXIDE (MG/L AS CO2)	830621	2045	405.0000000	21UTAH	495076	
ZION0279	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	830621	2045	1041.0000000	21UTAH	495076	
ZION0279	00440	BICARBONATE ION (MG/L AS HCO3)	830621	2045	1270.0000000	21UTAH	495076	
ZION0279	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	830621	2045	108.5000000	21UTAH	495076	
ZION0279	00935	POTASSIUM, DISSOLVED (MG/L AS K)	830621	2045	220.0000000	21UTAH	495076	
ZION0279	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	830621	2045	9498.0000000	21UTAH	495076	
ZION0281	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	660325		41.7000000	112WRD	371125113162501	
ZION0281	00440	BICARBONATE ION (MG/L AS HCO3)	660325		721.0000000	112WRD	371125113162501	
ZION0281	00935	POTASSIUM, DISSOLVED (MG/L AS K)	660325		220.0000000	112WRD	371125113162501	
ZION0281	70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	660325		9680.0000000	112WRD	371125113162501	
ZION0286	71900	MERCURY, TOTAL (UG/L AS HG)	760314	0930	11.0000000	11NPSWRD	ZION_EPA_LVC1	

Water Quality Observations
Outside STORET Edit Criteria for ZION

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter		Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
ZION0303	00690	CARBON, TOTAL (MG/L AS C)	731031	1100	458.0000000	21USU	000208	
ZION0308	00310	BOD, 5 DAY, 20 DEG C MG/L	800402	0900	1900.0000000	21UTAH	495040	
ZION0308	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	800220	1845	20.9000000	21UTAH	495040	
ZION0308	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	800402	0900	23.1000000	21UTAH	495040	
ZION0324	31501	COLIFORM,TOT,MEM. FILTER,IMMED.M-ENDO MED,35C	910522	1515	99990000.0000000	21UTAH	495037	X
ZION0330	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	830426	2040	6900.0000000	21UTAH	495032	
ZION0330	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	950308	1247	0.0000000	21UTAH	495032	X
ZION0330	00403	PH, LAB, STANDARD UNITS SU	950308	1247	0.0000000	21UTAH	495032	X
ZION0331	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	721116	1010	85.0000000	112WRD	09408150	X
ZION0333	31501	COLIFORM,TOT,MEM. FILTER,IMMED.M-ENDO MED,35C	910522	1730	99990000.0000000	21UTAH	495038	X

APPENDICES

Appendix A

Computer Files Transmitted With

Park Baseline Water Quality Data Inventory and Analysis

Computer disk(s) accompanying this report include up to seven (depending on the presence or absence of certain data elements) compressed (ZIP) files containing digital copies of nearly all the tables, figures, and other materials used to produce this report. To decompress these files, you must use the commonly available shareware program PKUNZIP. The command to type at the DOS prompt is:

PKUNZIP -E *COMPRESS.ZIP FILENAME.EXT*

where COMPRESS.ZIP is the name of one of the seven compressed (ZIP) files listed below and FILENAME.EXT is the name of the file you wish to extract. If you want to decompress all of the files in COMPRESS.ZIP, simply omit the FILENAME.EXT. To obtain a listing of all the files compressed into a particular ZIP file, type the following:

PKUNZIP -V *COMPRESS.ZIP* |MORE

where COMPRESS.ZIP is the name of one of the seven compressed ZIP files listed below. If a ZIP file spans multiple disks, use the last disk of the series (span) when obtaining a listing of all the files compressed into a particular ZIP file. Once you see the file you wish to obtain, substitute this file name for FILENAME.EXT in the first command line above to extract and decompress this particular file.

Included on one of the disk(s) accompanying this report is a program named PRINTZIP. This program will decompress ZIP files which don't span multiple disks and print certain files to a Hewlett-Packard (or compatible) Laser Printer. To use PRINTZIP, however, you must still have a copy of PKUNZIP in a directory listed in your path or in the same directory as the PRINTZIP program. PRINTZIP provides an easy, menu-driven interface for using PKUNZIP to decompress files and then send them to the printer. PRINTZIP allows you to send individual files, groups of files, or all files to the printer. PRINTZIP will not work with ZIP files that span multiple disks.

The following compressed (ZIP) files are included on the disk(s) accompanying this report:

(1) ZIONTABS.ZIP

This compressed file contains all the tables presented in the report. The files compressed into this file include:

(a) ZIONSITE.DOC - Descriptive listing of select fields from the industrial facilities discharges, drinking water intakes, and EPA-USGS stream gages databases.

(b) ZIONAGNC.DOC - Contacts for agencies whose data were retrieved within the study area.

(c) ZIONAGNQ.DOC - Number of stations, observations, and parameters retrieved by agency code within the study area and park.

(d) ZIONOV0.DOC - Overview of park and retrieved data.

(e) ZIONOV1.DOC - Station period of record table.

(f) ZIONOV2.DOC - Parameter period of record table.

(g) ZIONOV3.DOC - Station/parameter period of record table.

(h) ZIONINV.DOC - Station by station descriptive statistics over the entire period of record and comparison against EPA Water Quality Criteria for each station.

(i) ZIONSEAN.DOC - Seasonal and annual water quality descriptive statistics at stations with water quality data meeting the default seasonal and annual criteria.

(j) ZIONEPAS.DOC - EPA Water Quality Criteria comparison for data at all stations combined within the study area.

(k) ZIONIDEA.DOC - Comparison of downloaded STORET data with NPS Servicewide Inventory and Monitoring Program "Level I" water quality parameters.

(l) ZIONBAD.DOC - Water quality observation values that were outside the range of one of 190 STORET edit criteria and were either discarded or retained.

All these compressed document files are in ASCII format and contain printer codes appropriate to Hewlett-Packard (or compatible) Laser Printers. While at the DOS prompt, any of these document files may be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the PRINT command. For example, if the document ZIONOV1.DOC is in the subdirectory C:\WATER, you could type: PRINT C:\WATER\ZIONOV1.DOC. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). Alternatively, you can use the PRINTZIP program to decompress and print any of these files provided the ZIP file doesn't span multiple disks. These ASCII files can also be imported into word-processed documents, but the printer codes will then have to be removed.

(2) ZIONFIGS.ZIP

This compressed file contains graphics files for all the statistical figures (time series plots; annual box and whiskers plots; seasonal box and whiskers plots) in the report in two different formats: Computer Graphic Metafile (CGM) and Hewlett-Packard Printer Control Language (PCL). The files are named with the last three digits of the Station Name followed by the five digit STORET code. The file name extension begins with either a 1 (time series), 2 (annual), or 3 (seasonal) and then either GM for CGM or CL for PCL. For example, 00100300.2GM would denote the file contains an annual box and whiskers plot in CGM format for parameter 00300 (dissolved oxygen) at station ZION0001. While at the DOS prompt, any PCL file can be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the COPY command. For example, if the graphic 00100300.2CL (an annual box and whiskers plot of parameter 00300, dissolved oxygen, at station ZION0001) is in the subirectory C:\WATER, you would type: COPY C:\WATER\00100300.2CL LPT1: /B. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). The /B is necessary because the PCL file is in a binary format. Alternatively, you can use the PRINTZIP program to decompress and print any of the PCL files provided the ZIP file doesn't span multiple disks. The CGM files can be imported and/or edited in most graphics packages, including WordPerfect.

(3) ZIONPARM.ZIP

This file compresses ZIONPARM.DBF which contains all the actual values (raw data) of all the water quality data downloaded from STORET and summarized in the report. The detailed database structure for this file is contained in Appendix B.

(4) ZIONSITE.ZIP

This compressed file contains up to five geo-referenced, DBASE III+ compatible site (point location) files documenting the location in the study area of water quality monitoring stations, industrial facilities discharges, drinking water intakes, water gages, and water impoundments. These files include:

(a) ZIONWQ.DBF - All water quality monitoring station locations within the project's study area downloaded from STORET.

(b) ZIONIFD.DBF - All municipal and industrial facility discharges within the project's study area downloaded from the IFD database.

(c) ZIONDRIN.DBF - All drinking water intakes within the project's study area downloaded from the DRINKS database.

(d) ZIONGAGE.DBF - All water gages within the project's study area downloaded from the GAGES database.

(e) ZIONDAMS.DBF - All water impoundments within the project's study area downloaded from the DAMS database.

The absence of any of these files indicates that none of the particular sites were found within the study area. Detailed database structures for each of these files are contained in Appendix B.

(5) ZIONMISC.ZIP

This compressed file contains a variety of graphic and document files that are contained in the report. They are grouped into this miscellaneous compressed (ZIP) file because they don't fit neatly into any of the other compressed files. The files contained in this compressed file include:

(a) ZIONEXEC.DOC - WordPerfect Ver. 5.1 copy of the Executive Summary in the report.

(b) ZIONTOC.DOC - WordPerfect Ver. 5.1 copy of the report's Table of Contents.

(c) INTRO.DOC - WordPerfect Ver. 5.1 copy of all the text in the report from the Introduction through the Interpretive Guide to Water Quality Results.

(d) APPENDIX.DOC - WordPerfect Ver. 5.1 copy of all the Appendices in the report.

(e) ZIONREGI - PCL and CLP (Windows Clipboard) copies of map displaying the regional location of the park and study area.

(f) ZIONWQ - PCL and CLP (Windows Clipboard) copies of park maps displaying water quality station locations within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (ZIONWQA, ZIONWQB, ZIONWQC, etc.) and the index map name will end with an ampersand (&).

(g) ZIONIDG - PCL and CLP (Windows Clipboard) copies of park maps displaying locations of industrial facilities discharges, drinking water intakes, and stream gages within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (ZIONIDGA, ZIONIDGB, ZIONIDGC, etc.) and the index map name will end with an ampersand (&). If no industrial facilities discharges, drinking water intakes, water gages, or water impoundments exist within the park's study area, these files will not be in the compressed (ZIP) file.

(h) ZIONSEHY - PCL and CLP (Windows Clipboard) copies of the hydrographs or other materials used by WRD staff as the basis for a first attempt at a seasonal analysis of the park's water quality data.

Other materials may also be included in this miscellaneous compressed (ZIP) file as warranted by conditions at the park. As with ZIONFIGS.ZIP and ZIONTABS.ZIP, you can use the PRINTZIP program to print any of the PCL files in ZIONMISC.ZIP provided the ZIP file doesn't span multiple disks. You should not, however, use PRINTZIP to print the WordPerfect document files. The CLP (Windows Clipboard) files can be imported (pasted) and/or edited in most Windows-based word processors and graphics packages.

(6) ZIONRF3.ZIP

This compressed file contains the Environmental Protection Agency's River Reach File Ver. 3.0 provisional data for the USGS catalog unit(s) encompassing the study area. The attribute data exist in both ASCII and DBASE III+ format, while the geographic traces exist in ASCII format. This compressed file contains four files for each catalog unit that touches the study area. Catalog units are identified by unique 8-character numeric names which identify the region, subregion, accounting unit, and catalog unit. Examples (your 8-character numeric names will be different) of the file types included in this compressed file are:

(a) 12345678.RF3 - ASCII formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(b) 12345678.DBF - DBASE III+ formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(c) 12345678.TRC - ASCII formatted geographic file from the River Reach File containing digital, geo-referenced descriptions of all hydrographic traces within the catalog unit at a scale of 1:100,000 suitable for import into a geographic information system.

(d) 12345678.CUB - ASCII formatted geographic file from the River Reach File containing a digital, geo-referenced description of the catalog unit boundary suitable for import into a geographic information system.

Detailed database structures for RF3-related files are contained in Appendix B.

(7) ZIONWQMW.ZIP

Between 2000 and 2002, all Baseline Water Quality Data Inventory and Analysis Reports were compiled or re-compiled in Microsoft Word 2000 (Ver. 9.0) format. This complete, digital version of the report will be made available through various means, including the Internet. Although the reports can be opened in Microsoft Word 1997 (Ver. 8.0), the time series and annual and seasonal box-plots may not be centered appropriately on a page due to discrepancies with how Word 2000 formats pictures and how Word 1997 formatted pictures. Consequently, Word 2000 is the recommended software for viewing the report. Prior to printing the report from Word, be sure to enable "Print Text as Graphics" or "Print True Type Font as Graphics" in the Printer Properties. This ensures a more faithful reproduction of the maps included in the Word document.

The Microsoft Word version of the Baseline Water Quality Data Inventory and Analysis Report may differ slightly from the original analog version. Reports issued during 1994-1996 didn't have as many "bells-and-whistles" as subsequent reports. In compiling digital Microsoft Word versions of these earlier reports, attempts were made to bring these 1994-1996 reports up to the current standard wherever feasible and practicable. Unfortunately, some changes were not feasible or practicable. For example, water quality criteria screens were added or modified over time when newer criteria became available. The digital Microsoft Word version of Appendix F presents the latest criteria screening parameters and values. Some of these parameters and/or values may not have been screened against in the EPA water quality criteria analyses for each station and the entire study area in the 1994-1996 analog versions of the report. Similarly, the Introduction, Methodology, and Interpretive Guide to Water Quality Results may mention certain features that aren't included in the 1994-1996 reports. Additionally, to prepare a Microsoft Word version of this report, data were processed through different versions of software than used originally. Consequently, some results presented in the Overview and Executive Summary may differ slightly from those presented in the analog report (eg. # of In Park and Longer Term Stations).

Appendix B

Water Quality Database File Structures

The following table provides the DBASE III+ database field structure for all the water quality parameter data downloaded from STORET. This data will allow parks or other interested parties to replicate the statistical analyses and graphics contained in this report; perform more sophisticated analyses; or to establish a baseline park water quality database.

Parameter Data File: ZIONPARM.DBF in ZIONPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
BEGDATE	9	14	6	Measurement Start Date [yymmdd]
BEGTIME	15	18	4	Measurement Start Time [hhmm]
PARMCODE	19	23	5	STORET Parameter Code
PARMVALU	24	39	16.7	Parameter Value
REMARK	40	40	1	Parameter Remark Value
				A=Value is Mean of 2 or More Determinations
				B=Results Based Upon Colony Counts Outside Acceptable Range
				C=Value Calculated
				D=Field Measurement
				E=Extra Sample Taken in Compositing Process
				F=Female Species
				G=Maximum of 2 or More Determinations
				H=Based on Field Kit Determination
				I=Value is Less Than Practical Quantitation Limit and Greater Than or Equal to the Method Detection Limit
				J=Estimated, Not the Result of Analytic Measurement
				K=Off-scale Low, Actual Value Not Known, But Known to be Less Than Value Shown
				L=Off-scale High, Actual Value Not Known, But Known to be Greater Than Value Shown

Parameter Data File: ZIONPARM.DBF in ZIONPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				M=Presence Verified, But Not Quantified, Below Quantification Limit; For Species, Male; For Oxygen Reduction Potential, Indicates a Negative Value
				N=Presumptive Evidence of Presence
				O=Analysis Lost
				P=Too Numerous to Count
				Q=Exceeded Normal Holding Time
				R=Significant Rain in Last 48 Hours
				S=Laboratory test
				T=Less Than Detection Criteria
				U=Analyzed For But Not Detected, Value is Detection Limit For Process Used; If Species, Undetermined
				V=Analyte was Detected in Sample and Method Blank
				W=Less Than Lowest Value Reportable Under Remark "T"
				X=Quasi Vertically-Integrated Sample
				Y=Analysis of Unpreserved Sample
				Z=Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value
				$=Calculated By Retrieval Software
MEDIA	41	46	6	Sample Media
DEPTH	47	55	9.3	Depth of Sample [in feet]
ENDDATE	56	61	6	Measurement End Date [yymmdd] [all composite samples]
ENDTIME	62	65	4	Measurement End Time [hhmm] [all composite samples]
SAMPTYPE	66	69	4	Type of Sample ["sophisticated" composite samples]
				C=Continuous Collection
				G=Collection of Individual Grab Samples
				GNxx=xx is the Number of Individual Grab Samples
				B=N/A

Parameter Data File: ZIONPARM.DBF in ZIONPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
COMPTYPE	70	70	1	Composite Value Type ["sophisticated" composite samples]
				A=Average
				H=Maximum
				L=Minimum
				N=Number of Observations
				#=Number of Observations
				S=Standard Deviation
				U=Sum of Squares
				V=Variance
				C=Coefficient of Error
				X=Coefficient of Variance
				E=Skewness
				F=Kurtosis
				Z=Number of Observations That Exceed an Established Limit
				%=Precision
				$=Accuracy
				B=N/A
				D=Indicates Replicate Sample
COMPST	71	71	1	Composite Space/Time Indicator
				S=Space
				T=Time
				B=Space and Time
				F=Flow Proportional
				1-9=Replicate Number

Note: DBASE III+ record lengths will be one greater than the last stop column displayed (71 here) because DBASE III+ reserves the first space/column of every record for a deletion flag. Hence, DBASE III+ will display a record length of 72 for this database.

The following table provides the DBASE III+ database field structure for all the water quality station locations downloaded from STORET. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Quality Station Data File: ZIONWQ.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
AGENCY	9	16	8	Agency Code of Station Owner
STORIDP	17	31	15	STORET Primary Station Code
STORIDS1	32	43	12	STORET First Secondary Station Code
STORIDS2	44	55	12	STORET Second Secondary Station Code
STORIDS3	56	65	10	STORET Third Secondary Station Code
LATITUDE	66	73	8	Station Latitude [degrees:minutes:seconds]
LONGITUDE	74	82	9	Station Longitude [degrees:minutes:seconds]
LAT	83	93	11.6	Station Latitude [decimal degrees, (-) below equator]
LON	94	104	11.6	Station Longitude [decimal degrees, (-) western hemisphere]
LLPREC	105	105	1	Latitude/Longitude Precision Code
RMI	106	329	224	River Mile Index
STATLOC	330	377	48	Station Location Description
CNTYCODE	378	382	5	FIPS State/County Code
STNAME	383	398	16	State Name
CNTYNAME	399	418	20	County Name
HYDUNIT	419	426	8	Hydrologic Unit Code (MAJ/MIN/SUB = Catalog Unit)
MAJBASN	427	450	24	Major Basin Name
MINBASN	451	490	40	Minor Basin Name
STATTYPE	491	550	60	Station Type
STORDATE	551	556	6	Date Station was Stored in STORET
RF1INDEX	557	567	11	RF1 Reach Number Location [2]
RF1MILE	568	575	8.3	Mile Point on RF1 Reach [2]
RF1LOC	576	578	3	Indicates the Location as ON or OFF RF1 Reach [2]
RF1DIST	579	584	6.2	Distance From RF1 Reach

Water Quality Station Data File: ZIONWQ.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
RF3INDEX	585	601	17	RF3 Reach Number Location [3]
RF3MILE	602	607	6.2	Mile point on RF3 Reach [3]
RF3LOC	608	610	3	Indicates the Location as ON or OFF RF3 Reach [2]
RF3DIST	611	616	6.2	Distance From RF3 Reach
DEPH2O	617	620	4	Depth of Water at Station Location [in feet]
ELEV	621	625	5	Station Elevation
ECOREG	626	628	3	ECO Region
H2OBODY	629	678	50	Waterbody ID
AQUIFERS	679	718	40	Aquifer Description
STATDESC1	719	790	72	Station Sentence Description
STATDESC2	791	862	72	Station Sentence Description
STATDESC3	863	934	72	Station Sentence Description
STATDESC4	935	1006	72	Station Sentence Description
STATDESC5	1007	1078	72	Station Sentence Description
STATDESC6	1079	1150	72	Station Sentence Description
STATDESC7	1151	1222	72	Station Sentence Description
STATDESC8	1223	1294	72	Station Sentence Description
STATDESC9	1295	1366	72	Station Sentence Description
STATDESC10	1367	1438	72	Station Sentence Description
STATDESC11	1439	1510	72	Station Sentence Description
STATDESC12	1511	1582	72	Station Sentence Description
STATDESC13	1583	1654	72	Station Sentence Description
STATDESC14	1655	1726	72	Station Sentence Description
STATDESC15	1727	1798	72	Station Sentence Description
STATLOCKED	1799	1799	1	Station Locked (Logical) True/False

The following table provides the DBASE III+ database field structures for the EPA Industrial Facilities Discharge database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Industrial Facilities Discharges File: ZIONIFD.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	9	9	Site Identifier (NPDES Number)
LATITUDE	10	17	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	18	26	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	27	37	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	38	48	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	49	59	11	RF1 Reach Number Location
RF1MILE	60	65	6.2	Mile Point on RF1 Reach
RF1DIST	66	71	6.2	Distance From RF1 Reach
RF3INDEX	72	88	17	RF3 Reach Number Location
RF3MILE	89	94	6.2	Mile Point on RF3 Reach
RF3DIST	95	100	6.2	Distance From RF3 Reach
ADR	101	125	25	Address
BFL	126	132	7.2	Total Direct Combined C&P Flow (1000 GPD)
CCFLG	133	133	1	Coastal County Flag "Y"/"N"/"E"=Estuary
CC1	134	138	5	City Code #1 (EPA Code)
CFL	139	145	7.2	Total Direct Cooling Flow (1000 GPD)
CNC	146	148	3	County Code (FIPS)
CTY	149	168	20	City Name
CZIP	169	177	9	Canadian Zip Code
DNB	178	186	9	Dunn & Bradstreet Number
DNBFLG	187	187	1	Dunn & Bradstreet PCS Source Flag
EGF	188	202	15.4	Flow From Effluent Guidelines (1000 GPD)
EGS	203	208	6	Effluent Guidelines Subcategory
EXPDT	209	216	8	Expiration Date (mm/dd/yy)
E308SN	217	220	4	Effluent Guidelines Survey Number
FAC	221	229	9	SCS Facility Identifier (Cross-Reference)
FDS	230	232	3	Facility Data Source

Industrial Facilities Discharges File: ZIONIFD.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
FFL	233	239	7.2	Total Facility Flow (1000 GPD)
FHF	240	240	1	Fac. Hit Flag (Reach File) V=Versar Assumed
FLOTYP	241	243	3	I=Blow Down, R=Bottom Ash, S=Fly Ash
FLR	244	250	7.2	Flow Recvd-Industrial (1000 GPD) Permit Data
FRDS	251	259	9	FRDS ID# - XREF To Water Supply
FRW	260	289	30	Facility Receiving Water Name
FS1	290	293	4	Facility SIC Code (From PCS)
FS2	294	297	4	Facility SIC Code #1
FS3	298	301	4	Facility SIC Code #2
FS4	302	305	4	Facility SIC Code #3
FS5	306	309	4	Facility SIC Code #4
FUD	310	317	8	Facility Level Last Date Updated (mm/dd/yy)
IACC	318	318	1	Inactive/Active Indicator ("I" or "A")
ICAT	319	320	2	WQAB Industrial Category
ICAT2	321	322	2	WQAB Industrial Category 2
ICAT3	323	324	2	WQAB Industrial Category 3
IFL	325	331	7	Total Indirect Flow (1000 GPD)
IFT	332	332	1	Illinois Facility Type (A thru Z)
IG1	333	334	2	Facility Industrial Group #1
IG2	335	336	2	Facility Industrial Group #2
IJCN	337	346	10	Canadian Record Identifier
INACT	347	353	7	Inactive/Rescinded P=Based on Permit;A=Actual
INDCNT	354	357	4	Computed Number of Indirect Dischargers
LATLON	358	372	15	Polygon Retrieval Lat/Long.
MAJ	373	373	1	Major-Minor Flag (From PCS)
MAPID	374	377	4	Map Identifier
MJMN	378	381	4	Major/Minor Basin (EPA-STORET)
NAM	382	441	60	Facility Name
NDC	442	444	3	Number of Discharges (Pipes)

Industrial Facilities Discharges File: ZIONIFD.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NDSFLO	445	451	7.2	NEEDS Flow (1000 GPD)
NDSIFLO	452	458	7.2	NEEDS Industrial Flow (1000 GPD)
NID	459	462	4	Number of Indirect Dischargers
NPC	463	463	1	NEEDS Pre-Treatment Code "Y"=Yes, "N"=No
NPS	464	464	1	NPDES Facility Source/Status
NSN	465	473	9	NEEDS Survey Number
NTC	474	474	1	NEEDS Treatment Code
OCP	475	480	6	Organic Chemical Producers ID Number
ODESCC	481	481	1	ODES Coastal County "Y"=Yes; "N"=No
OFL	482	488	7.2	Total Non-Direct Other Flow (1000 GPD)
OWN	489	491	3	Ownership Code
PFL	492	498	7.2	Total Direct Process Flow (1000 GPD)
REG	499	500	2	EPA Region
REGKEY	501	504	4	Region Key
RSLOFLO	505	511	7.2	Receiving Stream Low Flow
RSMNFLO	512	518	7.2	Receiving Stream Mean Flow
STA	519	520	2	State Postal Abbreviation
STAID	521	535	15	State Identifier
STC	536	537	2	State Code (FIPS)
STCITY	538	544	7	State/City Code
TFLOW	545	551	7.2	Type Flow (1000 GPD)
UFL	552	558	7.2	Total Direct Undefined Flow (1000 GPD)
XEGS	559	561	3	Effluent Guidelines Subcat Index
XKEY	562	562	1	"1","2","3","4","5","6","7","8","9"
XNME	563	565	3	GLP,DIR,F2C,ENF,CET,LAG,PPB,M85,M86
ZIP	566	570	5	Zip Code

The following table provides the DBASE III+ database field structures for drinking water intakes from the EPA DRINKS database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Drinking Water Intakes File: ZIONDRIN.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	29	37	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
AQCD	112	115	4	Aquifer Code
ASC	116	138	23	STORET Agency/Station Code
AVGD	139	142	4	Average Depth
BUY	143	143	1	Purchase Code
CC1	144	148	5	City Code #1 (EPA Code)
CNC	149	151	3	County Code (FIPS)
CNME	152	166	15	Contact Name
CNN	167	186	20	County Name
CTITLE	187	201	15	Contact Title
CTY	202	221	20	City Name
DUD	222	229	8	Date of Update
FRDS	230	238	9	FRDS ID# - Cross-Reference
GEOAG	239	258	20	Geologic Age
GEOCDE	259	261	3	Geologic Age Code
IDAT	262	269	8	Date (mm/dd/yy)

Drinking Water Intakes File: ZIONDRIN.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
INTAKET	270	270	1	Type Source G/S/B
INTRVWR	271	285	15	Interviewer
MAXD	286	289	4	Maximum Depth
MILES	290	296	7.2	Miles
MIND	297	300	4	Minimum Depth
NAME	301	320	20	Name
NPD	321	329	9	NPDES# XREF to IFD Database
NWLS	330	332	3	Number of Wells
OWN	333	335	3	Ownership
PAVGF	336	342	7.2	Production Avg. Daily (Gal/Day)
PCTSUP	343	345	3	%Surface / %Ground
PHONE	346	355	10	Telephone Number
PMAXF	356	362	7.2	Production Max. Daily (Gal/Day)
POPSV	363	371	9	Population Served
REG	372	373	2	EPA Region
SHLAT	374	379	6	Sitehelp Latitude (DDMMSS)
SHLNG	380	386	7	Sitehelp Longitude (DDDMMSS)
SHMILES	387	393	7.2	Sitehelp Miles
SHNME	394	403	10	Sitehelp Source Name
SHPCT	404	410	7.2	Sitehelp Percent of Reach Miles
SRC	411	413	3	Sitehelp Source Code
STA	414	415	2	State Abbreviation
STC	416	417	2	State Code (FIPS)
TUF	418	424	7.2	Total Utility Flow
TYPCDE	425	425	1	Type Code
UHF	426	426	1	Utility Hit Flag (Reach File)
VCDE	427	427	1	Versar Code='V'=>25K; '*'=<25K POPSVD
WFPC	428	428	1	Wellfield Precision Code
WFTYP	429	429	1	Well Type (Cassing,Artesian,Infiltration,etc.)

Drinking Water Intakes File: ZIONDRIN.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
WUN	430	449	20	Water Utility Name

The following table provides the DBASE III+ database field structures for the Water Gage database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Gage File: ZIONGAGE.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (DDMMSS)
LONGITUDE	29	37	9	Facility Longitude (DDDMMSS)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
JAN	112	118	7.2	Monthly Flow - January
FEB	119	125	7.2	Monthly Flow - February
MAR	126	132	7.2	Monthly Flow - March
APR	133	139	7.2	Monthly Flow - April
MAY	140	146	7.2	Monthly Flow - May
JUN	147	153	7.2	Monthly Flow - June
JUL	154	160	7.2	Monthly Flow - July
AUG	161	167	7.2	Monthly Flow - August
SEP	168	174	7.2	Monthly Flow - September
OCT	175	181	7.2	Monthly Flow - October
NOV	182	188	7.2	Monthly Flow - November
DEC	189	195	7.2	Monthly Flow - December
RGN	196	197	2	Region Code
AREA	198	204	7.2	Drainage Area (SQ.MI.)
DUD	205	212	8	Date of Update

Water Gage File: ZIONGAGE.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
FBCF	213	213	1	Flag - Basic Characteristic File ('Y')
FDFF	214	214	1	Flag - Daily Flows File ('Y')
FQMINV	215	224	10	IHS Pt. Files Index
GHF	225	225	1	Hit Flag (Reach File)
ICDE	226	226	1	Integrity Code
LFVEL	227	233	7.2	Low Flow Velocity
METHOD	234	236	3	Calculation Method Code
MFVEL	237	243	7.2	Mean Flow Velocity
MNFLO	244	250	7.2	USGS Mean Annual Flow
NME	251	298	48	Station Name
SHLAT	299	304	6	Sitehelp Latitude (DDMMSS)
SHLNG	305	311	7	Sitehelp Longitude (DDDMMSS)
SHMILES	312	318	7.2	Sitehelp Miles
SHNME	319	328	10	Sitehelp Source Name
SHPCT	329	335	7.2	Sitehelp Percent of Reach Miles
SITE	336	337	2	Site Location
SRC	338	340	3	Sitehelp Source Code
STCTY	341	345	5	State/County Numeric Code
SVTEN	346	352	7.2	USGS 7-10 Year Flow
BEG_WYR	353	356	4	Beginning Water Year
END_WYR	357	359	4	Ending Water Year
ELEV	361	368	8.2	Elevation (Feet)
WELL_DP	369	376	8.2	Well Depth (Feet)

The following table provides the DBASE III+ database field structures for the Water Impoundment database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Impoundment File: ZIONDAMS.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	7	7	Site Identifier
SOURCE	8	10	3	Source of Data
ST1	11	12	2	Primary State Code Abbreviation
STCTY1	13	17	5	State/County Numeric Code
NAME	18	47	30	Official Name of Dam
LATITUDE	48	53	6	Facility Latitude (DDMMSS)
LONGITUDE	54	60	7	Facility Longitude (DDDMMSS)
LAT	61	70	10.6	Facility Latitude (decimal degrees, (-) below equator)
LON	71	81	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
INME	82	111	30	Impoundment Name
RNME	112	139	28	River, Stream, or Tributary Name on Which Dam Built
CUSEGMI	140	149	10	Catalog Unit, Segment, and Segment Length
REGN	150	151	2	Water Resources Council Region Code
RGBSN	152	155	4	Water Resources Region/Basin Code
CU	156	163	8	Catalog Unit
SEG	164	166	3	Reach Segment of Dam
SEGL	167	171	5.2	Reach Segment Length
PURP	172	172	1	Major Purpose of Dam
				I=Irrigation
				H=Hydroelectric
				N=Navigation
				S=Water Supply
				R=Recreation
				P=Stock/Farm Pond
				D=Debris Control
				F=Flood Control

Water Impoundment File: ZIONDAMS.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				O=Other
FRF3	173	189	17	RF3 Reach Number Location
FRF3MI	190	194	5	Mile Point on RF3 Reach
PURPKEY	195	195	1	Purpose Key
PUR2	196	196	1	Purpose of Dam 2 (See Above)
PUR3	197	197	1	Purpose of Dam 3 (See Above)
PUR4	198	198	1	Purpose of Dam 4 (See Above)
PUR5	199	199	1	Purpose of Dam 5 (See Above)
PUR6	200	200	1	Purpose of Dam 6 (See Above)
PUR7	201	201	1	Purpose of Dam 7 (See Above)
PUR8	202	202	1	Purpose of Dam 8 (See Above)
PUR9	203	203	1	Purpose of Dam 9 (See Above)
PUR10	204	204	1	Purpose of Dam 10 (See Above)
TYPDAM	205	206	2	Major Dam Portion Type
				RE=Earth
				VA=Vaulted Arch
				CD=Buttress
				PG=Gravity
				ER=Rockfill
				MV=Multi-Arch
				OT=Other
YRCMP	207	210	4	Year Dam Completed
SHGT	211	214	4	Structural Height (Feet)
HHGT	215	218	4	Hydraulic Height (Feet)
VNORM	219	236	8	Normal Storage of Impoundment (Acre-Feet)
VMAX	227	234	8	Maximum Storage of Impoundment (Acre-Feet)
LCRST	235	239	5	Crest Length of Dam (Feet)
TSPL	240	240	1	Spillway Type
				C=Controlled

Water Impoundment File: ZIONDAMS.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				U=Uncontrolled
				N=None
				X=Unknown
WSPL	241	244	4	Dam Spillway Width (Feet)
QMAX	245	251	7	Maximum Spillway Discharge (CFS)
PINS	252	258	7.2	Quantity of Installed Power (Megawatts)
PPRO	259	265	7.2	Quantity of Proposed Power (Megawatts)
LOCK	266	266	1	Number of Navigational Locks
OWNR	267	290	24	Name of Impoundment Owner
PFOWN	291	291	1	Ownership Code
				N=Non-Federal
				G=Federal Government Agency
				C=Corps of Engineers
				X=Unknown
FEDR	292	292	1	Federally Regulated (Y=Yes, N=No, X=Unknown)
FLND	293	293	1	Private Dam on Federal Land (Y=Yes, N=No, X=Unknown)
SCSA	294	294	1	Type of Soil Conservation Service Assistance
				N=No Assistance
				T=Technical Assistance
				F=Financial Assistance
				B=Both Technical and Financial Assistance
				X=Unknown
DHAZ	295	295	1	Degree of Downstream Hazard
				1=High (More than a Few Lives Lost; Excessive Economic Loss)
				2=Significant (A Few Lives Lost; Appreciable Economic Loss)
				3=Low (No Lives Expected Lost; Minimal Economic Loss)
DCITY	296	319	24	Nearest Downstream City

Water Impoundment File: ZIONDAMS.DBF in ZIONSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
POP	320	326	7	Population of Downstream City
DMILE	327	331	5.2	Distance of Downstream City From Dam (Miles)
RET	332	342	11.2	Retention Coefficient (Dimensionless)
MIX	343	353	11.2	Mixing Coefficient (Dimensionless)
SAREA	354	361	8	Surface Area of Impoundment (Acres)
SAFLG	362	362	1	Surface Area Flag (C=Calc., M=Measured, O=Other)
ILNTH	363	367	5	Length of Impoundment (Feet)
ILFLG	368	368	1	Impoundment Length Flag (C=Calc., M=Measured, O=Other)
UPKEY	369	374	6	Update Key (YYMMDD)

The following table provides the ASCII and DBASE III+ database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) attributes. The actual numeric file names will vary depending on the catalog unit(s). This information can be readily incorporated into the park's Geographic Information System.

RF3 Structure File: 12345678.RF3 and 12345678.DBF in ZIONRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
CATUNIT	1	8	8	Cataloging Unit (CU)
SEGM	9	12	4	Segment Number (SEG)
MI	13	17	5.2	Mile Point (MI)
UPMI	18	22	5.2	Upstream Mile Pt.
SEQNO	23	33	11.6	Hydro Sequence No.
RFLAG	34	34	1	Reach Flag (0,1)
OWFLAG	35	35	1	Open Water Flag (0,1)
TFLAG	36	36	1	Terminal Flag (0,1)
SFLAG	37	37	1	Start Flag (0,1)
RCHTYPE	38	38	1	Reach Type Code
LEV	39	40	2	Stream Level
JUNC	41	42	2	Level of Downstream Reach
DIVERGENCE	43	43	1	Divergence Code
STARTCU	44	51	8	Start CU
STRTSG	52	55	4	Start SEG
STOPCU	56	63	8	Stop CU
STOPSG	64	67	4	Stop SEG
USDIR	68	68	1	Upstream Direction
TERMID	69	73	5	Terminal Stream ID
TRMBLV	74	74	1	Terminal Base Level
PNAME	75	104	30	Primary Name
PNMCD	105	115	11	Primary Name Code
CNAME	116	145	30	Complement Name
CNMCD	146	156	11	Complement Name Code

RF3 Structure File: 12345678.RF3 and 12345678.DBF in ZIONRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
OWNAME	157	186	30	Open Water Name
OWNMCD	187	197	11	Open Water Name Code
DSCU	198	205	8	Downstream CU
DSSEG	206	209	4	Downstream SEG
DSMI	210	214	5.2	Downstream MI
CCU	215	222	8	Complement CU
CSEG	223	226	4	Complement SEG
CMILE	227	231	5.2	Complement MI
CDIR	232	232	1	Complement Direction
ULCU	233	240	8	Upstream Left CU
ULSEG	241	244	4	Upstream Left SEG
ULMI	245	249	5.2	Upstream Left MI
URCU	250	257	8	Upstream Right CU
URSEG	258	261	4	Upstream Right SEG
URMI	262	266	5.2	Upstream Right MI
SEGL	267	272	6.2	Reach Length (Miles)
RFORGFLAG	273	273	1	RF Orgin flag(1,2,3)
ALTPNMCD	274	281	8	Alt. Primary Name Code
ALTOWNMC	282	289	8	Alt. OW Name Code
DLAT	290	297	8.4	Downstream Latitude
DLONG	298	305	8.4	Downstream Longitude
ULAT	306	313	8.4	Upstream Latitude
ULONG	314	321	8.4	Upstream Longitude
MINLAT	322	329	8.4	Minimum Latitude
MINLONG	330	337	8.4	Minimum Longitude
MAXLAT	338	345	8.4	Maximum Latitude
MAXLONG	346	353	8.4	Maximum Longitude
NDLGREC	354	357	4	No. of DLG Records
LL1KEY1	358	367	10	Starting DLG LL Key1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in ZIONRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
LL2KEY1	368	377	10	Ending DLG LL Key1
LL1KEY2	378	387	10	Starting DLG LL Key2
LL2KEY2	388	497	10	Ending DLG LL Key2
LL1KEY3	398	407	10	Starting DLG LL Key3
LL2KEY3	408	417	10	Ending DLG LL Key3
LL1KEY4	418	427	10	Starting DLG LL Key4
LL2KEY4	428	437	10	Ending DLG LL Key4
LL1KEY5	438	447	10	Starting DLG LL Key5
LL2KEY5	448	457	10	Ending DLG LL Key5
LL1KEY6	458	467	10	Starting DLG LL Key6
LL2KEY6	468	477	10	Ending DLG LL Key6
LL1KEY7	478	487	10	Starting DLG LL Key7
LL2KEY7	488	597	10	Ending DLG LL Key7
LL1KEY8	498	507	10	Starting DLG LL Key8
LL2KEY8	508	517	10	Ending DLG LL Key8
LL1KEY9	518	527	10	Starting DLG LL Key9
LL2KEY9	528	537	10	Ending DLG LL Key9
LL1KEY10	538	547	10	Start DLG LL Key 10
LL2KEY10	548	557	10	Ending DLG LL Key10
LN1AT2	558	561	4	DLG Line Attr. 1
LN2AT2	562	565	4	DLG Line Attr. 2
AREA1	566	569	4	DLG Area ID 1
AREA2	570	573	4	DLG Area ID 2
AR1AT2	574	577	4	DLG Area Attribute
AR1AT4	578	581	4	DLG Area Attribute
AR2AT2	582	585	4	DLG Area Attribute
AR2AT4	586	589	4	DLG Area Attribute
UPDATE1	590	595	6	Update Date #1 (mmddyy)
UPDTCD1	596	603	8	Update Type Code #1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in ZIONRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
UPDTSRC1	604	611	8	Update Source #1
UPDATE2	612	617	6	Update Date #2 (mmddyy)
UPDTCD2	618	625	8	Update Type Code#2
UPDTSRC2	626	633	8	Update Source #2
UPDATE3	634	639	6	Update Date #3 (mmddyy)
UPDTCD3	640	647	8	Update Type Code #3
UPDTSRC3	648	655	8	Update Source #3
DIVCU	656	663	8	Divergent CU
DIVSEG	664	667	4	Divergent SEG
DIVMILE	668	672	5.2	Divergent MI
DLGID	673	678	6	DLG Number Special Use For Internal State Codes
FILLER	678	685	7	Filler: Future Use

Note: The structure for the .DBF file varies slightly from the RF3 structure displayed here in that the fields UPDATE1, UPDATE2, and UPDATE3 have a width of 8 and the last two fields, DLGID and FILLER, have been replaced with a field named ID of length 17. This ID field combines the CATUNIT, SEGM, and MI fields.

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) traces. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual hydrographic network and is suitable for conversion into a variety of Geographic Information System formats.

RF3 Trace File: 12345678.TRC in ZIONRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
(Header Record)				
CATUNIT	1	8	8	Cataloging Unit
SEGM	9	12	4	Segment Number
MI	13	17	5.2	Mile Point
NPTS	18	21	4	Number of Lat/Lon Coordinates
(Coordinate Record)				
LATITUDE	1	8	8.4	Latitude in Decimal
LONGITUDE	9	16	8.4	Longitude in Decimal
FILLER	17	21	5	

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) catalog unit boundary file. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual catalog unit boundary and is suitable for conversion into a variety of Geographic Information System formats.

Catalog Unit Boundary File: 12345678.CUB in ZIONRF3.ZIP
First Line = Catalog Unit Number (8 Characters)
Subsequent Lines:
L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS, ...
Example:
02070010
L=391259,L=0770809,L=391220,L=0770749,L=391147,L=0770715,L=391120,L=0770633,
L=391058,L=0770535,L=391042,L=0770520,L=391016,L=0770427,L=390948,L=0770416,
L=390526,L=0765331,L=390500,L=0765149,L=390456,L=0765139,L=390357,L=0765123,
...
L=390744,L=0771007,L=390826,L=0771022,L=390910,L=0771022,L=390950,L=0771003,
L=391107,L=0770922,
There can be as many as four latitude/longitude pairs per line.

The following table provides the DBASE III+ database field structure of the Water Resources Division's "encyclopedia" file that documents the minimum and maximum parameter values found and the park(s) where they occurred. This file is intended for Water Resources Division internal use, but will be available to anyone upon request after Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks.

Encyclopedia File: WRD File For Internal Use Only				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
PARM	1	5	5	STORET Parameter Code
PARMNAME	6	45	40	Parameter Name
MINVAL	46	61	16.7	Minimum Value
MINVALPARK	62	65	4	Park Unit with Minimum Value
MAXVAL	66	71	16.7	Maximum Value
MAXVALPARK	72	75	4	Park Unit with Maximum Value

Appendix C

STORET Water Quality Control/Edit Checking

The following table provides the high and low values used by STORET since November 1983 for 190 common water quality parameters to screen or error check data. Data entered into STORET prior to November 1983, however, were not subjected to this edit/bounds check. Additionally, data from the USGS WATSTORE system that is loaded into STORET is never subjected to these edit criteria and agencies entering data in STORET can override these edit criteria to enter data values that fall outside a range. As a consequence, all data downloaded from STORET for the purposes of this project were filtered through these edit criteria to document values outside the generally accepted ranges. Decisions were then made on a case-by-case basis to retain or discard obviously incorrect data. Refer to the Water Quality Observations Outside STORET Edit Criteria section of the Interpretive Guide To Water Quality Results chapter for more information on this subject.

STORET Code	STORET Parameter Description	High Value	Low Value
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	37.0	-2.0
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	98.0	31.0
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	52.0	-40.0
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	125.0	-40.0
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE	1990.9	1977.0
00032	CLOUD COVER (PERCENT)	101.0	0.0
00035	WIND VELOCITY (MILES PER HOUR)	85.0	0.0
00036	WIND DIRECTION IN DEGREES FROM TRUE N (CLOCKWISE)	361.0	0.0
00045	PRECIPITATION, TOTAL (INCHES PER DAY)	15.0	0.0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	1500.0	0.0
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	101.0	0.0
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	500.0	0.0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	1000.0	0.0
00077	TRANSPARENCY, SECCHI DISC (INCHES)	600.0	0.0
00080	COLOR (PLATINUM-COBALT UNITS)	500.0	0.0
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	500.0	0.0
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	250.0	0.0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	60000.0	1.0
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	60000.0	1.0
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	30.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00300	OXYGEN, DISSOLVED (MG/L)	30.0	0.0
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION%	200.0	0.0
00310	BOD, 5 DAY, 20 DEG C (MG/L)	150.0	0.0
00335	COD, .025N K2CR2O7 (MG/L)	1000.0	0.0
00340	COD, .25N K2CR2O7 (MG/L)	1000.0	0.0
00365	CHLORINE DEMAND, 15 MINUTE (MG/L)	15.0	0.0
00400	PH (STANDARD UNITS)	12.0	0.9
00403	PH, LAB, STANDARD UNITS, (STANDARD UNITS)	12.0	0.9
00405	CARBON DIOXIDE (MG/L AS CO2)	100.0	0.0
00406	PH, FIELD (STANDARD UNITS)	12.0	0.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	750.0	0.0
00435	ACIDITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00436	ACIDITY, MINERAL (METHYL ORANGE) (MG/L AS CACO3)	1000.0	0.0
00437	ACIDITY, CO2 (PHENOLPHTHALEIN) (MG/L AS CACO3)	750.0	0.0
00440	BICARBONATE ION (MG/L AS HCO3)	450.0	0.0
00445	CARBONATE ION (MG/L AS CO3)	100.0	0.0
00480	SALINITY - PARTS PER THOUSAND	40.0	0.0
00500	RESIDUE, TOTAL (MG/L)	15000.0	0.0
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10000.0	0.0
00510	RESIDUE, TOTAL FIXED (MG/L)	10000.0	0.0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C), (MG/L)	20000.0	0.0
00520	RESIDUE, VOLATILE FILTRABLE (MG/L)	10000.0	0.0
00525	RESIDUE, FIXED FILTRABLE (MG/L)	10000.0	0.0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10000.0	0.0
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10000.0	0.0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10000.0	0.0
00545	RESIDUE, SETTLEABLE (ML/L)	1000.0	0.0
00546	RESIDUE, SETTLEABLE (MG/L)	1000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00550	OIL & GREASE (SOXHLET EXTRACTION) TOTAL,REC., (MG/L)	250.0	0.0
00600	NITROGEN, TOTAL (MG/L AS N)	100.0	0.0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	15.0	0.0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	25.0	0.0
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20.0	0.0
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5.0	0.0
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	50.0	0.0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	50.0	0.0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	55.0	0.0
00635	NITROGEN, AMMONIA & ORG., TOTAL 1 DET (MG/L AS N)	70.0	0.0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	30.0	0.0
00653	PHOSPHATE, TOTAL SOLUBLE (MG/L)	30.0	0.0
00655	PHOSPHATE, POLY (MG/L AS PO4)	30.0	0.0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	30.0	0.0
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10.0	0.0
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10.0	0.0
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	100.0	0.0
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	100.0	0.0
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	100.0	0.0
00690	CARBON, TOTAL (MG/L AS C)	150.0	0.0
00720	CYANIDE, TOTAL (MG/L AS CN)	10.0	0.0
00745	SULFIDE, TOTAL (MG/L AS S)	1500.0	0.0
00746	SULFIDE, DISSOLVED (MG/L AS S)	1500.0	0.0
00760	SULFITE WASTE LIQUOR, PEARL BENSON INDEX (MG/L)	150.0	0.0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	5000.0	0.0
00910	CALCIUM (MG/L AS CACO3)	3000.0	0.0
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1000.0	0.0
00916	CALCIUM, TOTAL (MG/L AS CA)	1000.0	0.0
00920	MAGNESIUM (MG/L AS CACO3)	3000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1000.0	0.0
00927	MAGNESIUM, TOTAL (MG/L AS MG)	1000.0	0.0
00929	SODIUM, TOTAL (MG/L AS NA)	5000.0	0.0
00930	SODIUM, DISSOLVED (MG/L AS NA)	5000.0	0.0
00931	SODIUM ADSORPTION RATIO	50.0	0.0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	175.0	0.0
00937	POTASSIUM, TOTAL MG/L AS K)	175.0	0.0
00940	CHLORIDE, TOTAL IN WATER, (MG/L)	22000.0	0.0
00945	SULFATE, TOTAL (MG/L AS SO4)	2500.0	0.0
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2500.0	0.0
00950	FLUORIDE, DISSOLVED (MG/L AS F)	15.0	0.0
00951	FLUORIDE, TOTAL (MG/L AS F)	15.0	0.0
00955	SILICA, DISSOLVED (MG/L AS SI02)	2000.0	0.0
00956	SILICA, TOTAL (MG/L AS SI02)	2000.0	0.0
01000	ARSENIC, DISSOLVED (UG/L AS AS)	5000.0	0.0
01002	ARSENIC, TOTAL (UG/L AS AS)	5000.0	0.0
01005	BARIUM, DISSOLVED (UG/L AS BA)	2000.0	0.0
01007	BARIUM, TOTAL (UG/L AS BA)	2000.0	0.0
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	2000.0	0.0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	2000.0	0.0
01020	BORON, DISSOLVED (UG/L AS B)	5000.0	0.0
01022	BORON, TOTAL (UG/L AS B)	5000.0	0.0
01025	CADMIUM, DISSOLVED (UG/L AS CD)	500.0	0.0
01027	CADMIUM, TOTAL (UG/L AS CD)	500.0	0.0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2000.0	0.0
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	2000.0	0.0
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	2000.0	0.0
01034	CHROMIUM, TOTAL (UG/L AS CR)	2000.0	0.0
01040	COPPER, DISSOLVED (UG/L AS CU)	2000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
01042	COPPER, TOTAL (UG/L AS CU)	5000.0	0.0
01045	IRON, TOTAL (UG/L AS FE)	56000.0	0.0
01046	IRON, DISSOLVED (UG/L AS FE)	56000.0	0.0
01047	IRON, FERROUS (UG/L AS FE)	56000.0	0.0
01049	LEAD, DISSOLVED (UG/L AS PB)	1000.0	0.0
01051	LEAD, TOTAL (UG/L AS PB)	1000.0	0.0
01055	MANGANESE, TOTAL (UG/L AS MN)	5000.0	0.0
01056	MANGANESE, DISSOLVED (UG/L AS MN)	5000.0	0.0
01065	NICKEL, DISSOLVED (UG/L AS NI)	2000.0	0.0
01067	NICKEL, TOTAL (UG/L AS NI)	2000.0	0.0
01075	SILVER, DISSOLVED (UG/L AS AG)	5000.0	0.0
01077	SILVER, TOTAL (UG/L AS AG)	5000.0	0.0
01090	ZINC, DISSOLVED (UG/L AS ZN)	25000.0	0.0
01092	ZINC, TOTAL (UG/L AS ZN)	25000.0	0.0
01105	ALUMINUM, TOTAL (UG/L AS AL)	20000.0	0.0
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	20000.0	0.0
01145	SELENIUM, DISSOLVED (UG/L AS SE)	100.0	0.0
01501	ALPHA, TOTAL	200.0	0.0
01503	ALPHA, DISSOLVED	75.0	0.0
01505	ALPHA, SUSPENDED	150.0	0.0
03501	BETA, TOTAL	3500.0	0.0
03503	BETA, DISSOLVED	3000.0	0.0
03505	BETA, SUSPENDED	1500.0	0.0
09503	RADIUM 226, DISSOLVED	500.0	0.0
13501	STRONTIUM 90, TOTAL	500.0	0.0
22703	URANIUM, NATURAL, DISSOLVED	500.0	0.0
31501	COLIFORM, TOT,MEMBRANE FILTER,IMMED.M-ENDO MED, 35C	24000000.0	0.0
31502	COLIFORM, TOTAL, 10/ML	24000000.0	0.0
31503	COLIFORM, TOT,MEMBR FILTER, DELAYED,M-ENDO MED, 35C	24000000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
31504	COLIFORM, TOT,MEMBR FILTER,IMMED,LES ENDO AGAR, 35C	24000000.0	0.0
31613	FECAL COLIFORM, MEMBR FILTER, M-FC AGAR,44.5C, 24HR	10000000.0	0.0
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	10000000.0	0.0
31616	FECAL COLIFORM, MEMBR FILTER,M-FC BROTH, 44.5C	10000000.0	0.0
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48HR	500000.0	0.0
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	500000.0	0.0
31677	FECAL STREPTOCOCCI,MPN,AD-EVA, 35C (TUBE 31678)	500000.0	0.0
31679	FECAL STREPTOCOCCI, MF M-ENTEROCOCCUS AGAR,35C,48H	500000.0	0.0
31749	PLATE COUNT, TOTAL, TPC AGAR, 20C, 48 HRS	99999999.0	0.0
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	99999999.0	0.0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	500.0	0.0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	750.0	0.0
32212	CHLOROPHYLL-B UG/L TRICHROMATIC UNCORRECTED	1000.0	0.0
32214	CHLOROPHYLL-C UG/L TRICHROMATIC UNCORRECTED	200.0	0.0
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	500.0	0.0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	200.0	0.0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	2.0	0.0
32221	CHLOROPHYLL A,% OF(PHEOPHYTIN A+CHL A),SPEC-ACID.	101.0	0.0
32230	CHLOROPHYLL A (MG/L)	0.5	0.0
32231	CHLOROPHYLL B (MG/L)	0.8	0.0
32232	CHLOROPHYLL C (MG/L)	0.2	0.0
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	1.0	0.0
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	5.0	0.0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	1500.0	0.0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10.0	0.0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39340	GAMMA-BHC(LINDANE),WHOLE WATER, (UG/L)	20.0	0.0
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER, (UG/L)	20.0	0.0
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	5.0	0.0
60050	ALGAE, TOTAL (CELLS/ML)	700000.0	0.0
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	4000.0	0.0
70505	PHOSPHATE, TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10.0	0.0
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10.0	0.0
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	65.0	0.0
71886	PHOSPHORUS, TOTAL, AS PO4 - (MG/L)	30.0	0.0
71890	MERCURY, DISSOLVED (UG/L AS HG)	10.0	0.0
71895	MERCURY, SUSPENDED (UG/L AS HG)	10.0	0.0
71900	MERCURY, TOTAL (UG/L AS HG)	10.0	0.0
74010	IRON, TOTAL (MG/L AS FE)	56000.0	0.0

Appendix D

STORET Administrative Parameters

STORET Code	Description of STORET Administrative Parameters
00022	LENGTH OF EXPOSURE OF SAMPLE OR TEST - DAYS
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00073	SAMPLE LOC CODE DEFINED BY THERMAL STRUCT & DEPTH
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
00116	INTENSIVE SURVEY IDENTIFICATION NUMBER
00145	TOTAL PRODUCTION OF PRODUCT MANUFACTURED TONS/DAY
01273	TOTAL ACID PRIORITY POLLUTANTS MG/L
01274	TOTAL BASE-NEUTRAL PRIORITY POLLUTANTS MG/L
01275	TOTAL VOLATILE PRIORITY POLLUTANTS MG/L
01365	ANALYSIS DATE (DIOXIN) (YYMMDD)
04177	SAMPLE STABILIZATION, RECOVERY TEST CODE
04178	FIELD PROTOCOL(CONFDNCE ASSIGNED FIELD SAMPLE) CODE
04179	SAMPLE STATION LOCKED CODE
04180	CONDITION OF STATION SITE CODE
04181	LABORATORY QA/QC PLAN CONFIDENCE CODE
04182	SAMPLE TYPE CODE
04183	SAMPLE REMARKS CODE
30333	BAG MESH SIZE, BEDLOAD SAMPLER, MM
34772	NPDES NUMBER, CROSS REFERENCE CODE
34785	GAGE TYPE, METHOD CODE

STORET Code	Description of STORET Administrative Parameters
45575	GC MAKE AND MODEL INFORMATION CODE
45576	GC DETECTOR TYPE CODE
45577	GC COLUMN TYPE CODE
45580	METHOD OF ANALYSIS CODE
45581	LABORATORY LOCATION CODE
46107	SAMPLE LOCATION CODE (TREATMENT PLANT OPERATION)
46390	TOXICITY CHARACTERISTIC LEACHING PROCEDURE P OR F
46396	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS YES OR NO
46397	PROCESS TO FURTHER REDUCE PATHOGENS YES OR NO
47001	PERMIT EXPIRATION DATE (JULIAN CALENDAR)
47044	OBSERVATIONS,WASTE SITE-SEVERITY OF PROBLEMS CODE
47460	SUBSAMPLE - DECIMAL FRACTION OF WHOLE NUMBER
47477	COMPOSITION AND/OR DISPOSITION OF CATCH NUM CODE
70231	CURRENT DIRECTION (DEGREES FROM DOWNSTREAM FLOW)
71999	SAMPLE PURPOSE CODE
72032	NUMBER OF SPILLWAY GATES OPEN
73672	DATE OF ANALYSIS YYMMDD
73673	DATE OF EXTRACTION YYMMDD
74031	GRANT, PROJECT COST ELIGIBLE FOR CONSTRUCTION
74032	GRANT, AMOUNT OF PL 660 GRANT FOR THIS PROJECT
74033	GRANT, FEDERAL, OTHER THAN PL 660 GRANT
74034	GRANT, FUTURE PL 660 WHICH MAY APPLY TO THIS PROJ
74035	GRANT, TOTAL FEDERAL, WHICH APPLIES TO THIS PROJ
74036	GRANT, PROJ NUMBER ASSIGNED TO THIS APPLICATION
74037	GRANT, TYPE OF PROJECT TO WHICH GRANT APPLIES
74038	GRANT, STATUS OF PROJECT TO WHICH GRANT APPLIES
74039	PCS/STORET WATER QUALITY FILE INTERFACE YR/MO/DAY
74040	SURVEY NUMBER YYMMNO
74041	STORET STORAGE TRANSACTION DATE YR/MO/DAY

STORET Code	Description of STORET Administrative Parameters
74050	RADIOACTIVITY, GENERAL (PERMIT)
74051	ALGICIDES, GENERAL (PERMIT)
74052	CHLORINATED HYDROCARBONS, GENERAL (PERMIT)
74053	PESTICIDES, GENERAL (PERMIT)
74056	COLIFORM, TOTAL, GENERAL (PERMIT)
74065	STREAM FLOW CLASS
74066	ANNUAL RUNOFF
74067	SOIL CLASSIFICATION
74068	WATER QUALITY DESIGNATED USE CLASSIFICATION (IA)
74100	PRIMARY 1972 SIC CODE
74101	SECONDARY 1972 SIC CODE
74102	SECONDARY 1972 SIC CODE
74103	SECONDARY 1972 SIC CODE
74200	SAMPLE PRESERVATION METHODS ONE OR MORE IN COMB.
74205	LAND RESOURCE AREA (IOWA)
74206	SOIL EROSION POTENTIAL (IOWA)
74209	WATER QUALITY INDEX - STATE OF ILLINOIS, EPA
74210	FOREST STREAM WATER QUALITY INDEX CALC. NUMBER
74990	FISH SPECIES NUMERIC CODE - F&W SERVICE
74995	ANATOMY CODE
75000	SPECIES CODE-REMARK=SEX (M=MALE,F=FEMALE,U=UNK.)
81028	WITHDRAWAL OF GROUNDWATER (MILLION GAL/DAY)
82258	WATER CLASSIFICATION CODE (1-9) CODE
82292	DATA RELAY GROUND STATION SOURCE NODE CODE, CODE
82309	CONTAMINATION SOURCE POSSIBLE CODES NUMERIC CODE
82310	DEPTH CONFIDENCE IN REPORTED VALUES NUMERIC CODES
82373	FREQUENCY OF SAMPLING M=MON,Q=QUAR,Y=YR,R=RNFFCODE
82519	DRILLER REGISTRATION NUMBER ALPHA-NUMERIC CODE
82562	NARRATIVE REQUIREMENT EXCEEDANCES INTEGER

STORET Code	Description of STORET Administrative Parameters
82576	DAILY EXCURSION TIME, WATER MIN
82577	MONTHLY EXCURSION TIME, WATER TOTAL MIN
82578	DAY/MAXIMUM EXCURSION TIME, WATER MIN
82579	CODE NUMBER FOR PERSON COLLECTING SAMPLE
84002	CODE, GENERAL INFORMATION - ALPHA, NUMERIC CODE
84003	WATER SHED ID NUMBER (IOWA)
84005	FISH SPECIES CODE-FISH & WILDLIFE SER
84006	OWNERSHIP CLASSIFICATION OF LAKE, ILLINOIS SYSTEM
84010	PUBLIC ACCESS TO LAKE ILLINOIS SYSTEM
84011	CONFIDENCE CODE FOR GLC CONFIRMATION CODE
84012	PATIENT PARAMETERS (AGE, SEX, WT, ETC.) CODE
84013	SAMPLE PARAMETERS D=DESIGN SPECIMEN, S=SURPLUS
84027	CODE NUMBER FOR AGENCY COLLECTING SAMPLE
84028	CODE NO FOR AGENCY ANALYZING SAMPLE
84029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE FIELD
84033	EGD ANALYTICAL DATA COMPLETENESS Y=YES N=NO CODE
84034	EGD SMPL NO.(SMPL.IDENT) NUMERIC=SCS ALPH+4NUM=JRB
84035	EGD SAMPLE CLASSIFICATION CATEGORY ALPHA CODE
84036	EGD INDUSTRIAL CATEGORY NUMERIC CODE
84037	EGD INDUSTRIAL CATEGORY NAME ALPHA CODE
84038	EGD LABORATORY NUMERIC CODE
84039	EGD LABORATORY NAME ALPHA CODE
84040	EGD SAMPLE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84041	EGD ACID STATUS (1-5,9,AND BLANK) NUMERIC CODE
84042	EGD BASE STATUS (1-5,9AND BLANK) NUMERIC CODE
84043	EGD PESTICIDE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84044	EGD VOA FRACT. STATUS INDICATOR (1-5,9,BLANK) CODE
84045	EGD ACID EXTRACT DATE (YYMMDD) NUMERIC CODE
84046	EGD BASE EXTRACTION DATE (YYMMDD) NUMERIC CODE

STORET Code	Description of STORET Administrative Parameters
84047	EGD PESTICIDE EXTRACTION DATE (YYMMDD) NUMERIC CODE
84048	EGD VOA FRACTION INJECTION DATE YYMMDD NUMERIC CODE
84049	EGD ACID CONC. FACTOR (FIVE NUMERIC DIGITS) CODE
84050	EGD BASE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84051	EGD PESTICIDE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84052	EGD VOA FRACTION CONC. FACTOR (5 NUMERIC DIGITS) CODE
84053	SAMPLE TYPE AND FREQUENCY OF COLLECTION CODE
84054	LITHOLOGY ALPHA-NUMERIC CODE
84055	AVAILABLE LOGS ALPHA-NUMERIC CODE
84056	WATER USE CATEGORY ALPHA-NUMERIC CODE
84057	INSPECTION TYPE ALPHA-NUMERIC CODE
84058	HYDROGEOLOGIC SYSTEM ALPHA-NUMERIC CODE
84059	WELL OWNERSHIP ALPHA-NUMERIC CODE
84060	TOPOGRAPHY ALPHA-NUMERIC CODE
84061	WELL USE ALPHA-NUMERIC CODE
84062	MEASURING POINT DESCRIPTION ALPHA-NUMERIC CODE
84063	DRILLING METHOD ALPHA-NUMERIC CODE
84064	WELL DATA AVAILABILITY ALPHA-NUMERIC CODE
84065	PERMIT COMPLIANCE DATA ALPHA-NUMERIC CODE
84067	NATURE OF MONITORING ALPHA-NUMERIC CODE
84073	REPLACES EXISTING WELL ALPHA-NUMERIC CODE
84074	AQUIFER TYPE (SEE USGS HANDBOOK) ALPHA CODE
84075	WELL PERMIT NUMBER ALPHA-NUMERIC CODE
84076	TSD MONITORING WELL TYPE ALPHA CODE
84077	TSD MONITORING WELL SAMPLING METHOD ALPHA CODE
84083	POLLUTION VERIFICATION ALPHA CODE
84084	WELL SAMPLE PURPOSE ALPHA CODE
84090	SAMPLE FILE CONTROL PROJECT IDENTIFICATION A-CODE
84091	INFILTRATION DATE/BEGINNING 'YYMMDD'

STORET Code	Description of STORET Administrative Parameters
84092	INFILTRATION DATE/ENDING 'YYMMDD'
84093	ENFORCEMENT FORM #2-C,DATA IDENTIFICATION CODE
84102	SAMPLE SPECIES-SUB ID ALPHA CODE
84103	DIOXIN LABORATORY ALPHA CODE
84104	DIOXIN STUDY ALPHA CODE
84112	SOURCE OF GEOHYDROLOGIC DATA CODE
84119	SOURCE OF EVACUATION DATA CODE
84121	REGULATING AGENCY CODE
84122	SAMPLE PURPOSE CODE
84126	SOURCE OF DEPTH DATA CODE
84127	METHOD OF DEPTH MEASUREMENT CODE
84128	SOURCE OF WATER-LEVEL DATA CODE
84129	DATA QUALITY
84141	LAKE, PHYSICAL CONDITION AT SAMPLE TIME, 1-5, CODE
84142	LAKE,RECREATIONAL SUITABILITY @ SMPL TIME,1-5, CODE
84164	SAMPLER TYPE, CODE
85300	PROBLEM CODE NES SURVEY
85327	WATER LEVEL AT SAMPLE COLLECTION TIME-CODE-NES
85332	CLOUD COVER AT SAMPLE COLLECTION TIME-CODE-NES
85553	WELL COMPLETION DATE (MONTH/YEAR)
85554	WELL WORKOVER DATE, LATEST (MONTH/YEAR)

Appendix E

STORET Parameters Not Suitable for Statistical Analysis

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)
00006	DISTANCE FROM LOCATION IN X MILES
00007	DISTANCE FROM LOCATION IN Y MILES
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00009	X-SEC. LOC.(FT FROM LEFT BANK LOOKING DOWNSTRM)
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00033	WEATHER CODE FOR OCEAN-OBSERV. (WMO CODE 4677)
00037	WIND FORCE (BEAUFORT UNITS)
00038	WIND DIRECTION (WMO CODES 0885 + 0887)
00041	WEATHER (WMO CODE 4501)
00042	ALTITUDE IN FEET ABOVE MEAN SEA LEVEL
00043	CLOUD TYPE (WMO CODE 0500)
00044	CLOUD AMOUNT (WMO CODE 2700)
00047	TOTAL PARTIAL PRESSURE DISSOLVED GASES (MM HG)
00048	TOTAL PARTIAL PRESSURE DISSOLVED GASES (% SAT)
00049	SURFACE AREA IN SQUARE MILES
00050	EVAPORATION, TOTAL (INCHES PER DAY)
00051	SURFACE AREA IN SQUARE FEET
00053	SURFACE AREA, ACRES
00054	RESERVOIR STORAGE - ACRE FEET
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00067	TIDE STAGE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00069	SEA WAVES(0=NONE;1=0-3";2=4-20";3=21-48";4=4-8')
00097	SAMPLING STATION LOCATION, VERTICAL (FEET)
00098	SAMPLING STATION LOCATION, VERTICAL (METERS)
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
01300	OIL-GREASE (SEVERITY)
01305	DETERGENT SUDS (SEVERITY)
01310	GAS BUBBLES (SEVERITY)
01315	SLUDGE, FLOATING (SEVERITY)
01320	GARBAGE, FLOATING (SEVERITY)
01325	ALGAE, FLOATING MATS (SEVERITY)
01330	ODOR, ATMOSPHERIC (SEVERITY)
01331	TASTE (SEVERITY)
01335	SEWAGE SOLIDS, FRESH, FLOATING (SEVERITY)
01340	FISH, DEAD (SEVERITY)
01345	DEBRIS, FLOATING (SEVERITY)
01350	TURBIDITY (SEVERITY)
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE
01355	ICE COVER, FLOATING OR SOLID (SEVERITY)
03595	BIOASSAY (96 HR), EFFLUENT, TOTAL CODE
03596	BIOASSAY (48 HR), EFFLUENT, TOTAL CODE
03597	BIOASSAY (24 HR), EFFLUENT, TOTAL CODE
03598	TOXICITY, EFFLUENT, TOTAL CODE
03599	TOXICITY, CHOICE OF SPECIES, EFFLUENT CODE
03600	TOXICITY, TROUT, EFFLUENT, TOTAL CODE
03601	TOXICITY, SAND DOLLAR, EFFLUENT CODE
03602	BIOCHEMICAL OXYGEN DEMAND, EFFLUENT, TOTAL CODE
03603	SOLIDS, TOTAL SUSPENDABLE, EFFLUENT, TOTAL CODE
03605	FLOW METER CALIBRATION, WATER CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
03717	ONCORHYNCHUS MYKISS, WATER CODE
04117	TETHER LINE USED FOR COLLECTING SAMPLE CODE
04160	HALOCARBONS, PURGEABLE, SCAN, EFFLUENT CODE
04161	HALOCARBONS, PURGEABLE, SCAN, SLUDGE CODE
04162	AROMATIC, PURGEABLE, SCAN, EFFLUENT CODE
04163	AROMATIC, PURGEABLE, SCAN, SLUDGE CODE
04164	PHENOLIC, TOTAL, SCAN, EFFLUENT CODE
04165	PHENOLIC, TOTAL, SCAN, SLUDGE CODE
04166	PCB, TOTAL, SCAN, EFFLUENT CODE
04167	PCB, TOTAL, SCAN, SLUDGE CODE
04174	FREE LIQUIDS IN SEWAGE SLUDGE CODE
34765	AVIAN NUMERICAL SPECIES CODE (BIRDS)
34766	MAMMALIAN NUMERICAL SPECIES CODE
34771	MACROPHYTE, INSTREAM, VISUAL SIGHTING CODE
34773	ODOR, AMBIENT WATER CODE
34774	FISH, INSTREAM, VISUAL SIGHTING CODE
34775	STREAMBANK CHANNEL ALTERATIONS CODE
34776	HYDRAULIC STRUCTURES, INSTREAM CODE
34780	LAND USE, ADJACENT STREAM CODE
34781	SAMPLE POINTS, # OF LONGTDNL TRANSECTS, REACH CODE
34782	STREAM STAGE TREND CODE
34789	HABITATS, TYPES SAMPLED CODE
45613	FLOATING SOLIDS/VISIBLE FOAM, VISUAL, YES=1, NO=0, CODE
45614	SANITARY WASTE DISCHARGE ASSESSMENT, YES=1, NO=0, CODE
45615	INTERMITTENT DISCHARGE ASSESSMENT, YES=1, NO=0,CODE
46001	WATER APPEARANCE CODE (BASED ON FIELD ASSESSMENT)
46478	EQUIPMENT INSPECTION, VISUAL CODE
46486	TOXICITY,ACUTE 24HR(STATIC)CERIODAPHNIA (P/F) CODE
47454	FLOW METER REVOLUTIONS NUMBER

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
47455	LATITUDE, STARTING, OF A SAMPLE TOW DDMMSS
47456	LONGITUDE, STARTING, OF A SAMPLE TOW DDDMMSS
47457	LATITUDE, FINISHING, OF A SAMPLE TOW DDMMSS
47458	LONGITUDE, FINISHING, OF A SAMPLE TOW DDDMMSS
47459	LENGTH FREQUENCY NUMBER
47461	TIME THAT THE EQUIPMENT WAS SAMPLING MINUTES
47476	DIRECTION OF TOW IN RELATION TO CURRENT NUM CODE
50044	HYDROGRAPH LIMB, 1BASE, 2RISING, 3PEAK, 4FALLING, CODE
61390	DIATOMS,FIRST DOMINANT SPECIES OF UNITS - CODE
61391	DIATOMS,SECOND DOMINANT SPECIES OF UNITS - CODE
61392	DIATOMS,THIRD DOMINANT SPECIES OF UNITS - CODE
61393	DIATOMS,FOURTH DOMINANT SPECIES OF UNITS - CODE
70220	WAVE DIRECTION (WMO CODES 0885 + 0887)
70222	WAVE HEIGHT (WMO CODE 1555)
70223	WAVE PERIOD (WMO CODE 3155)
71090	BIVALVE SPECIES CODE
71500	EQUITABILITY INDEX,BENTHIC MACROINVER CODE
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)
72001	DEPTH, TOTAL OF HOLE (FT BELOW LAND SURFACE DATUM)
72002	DEPTH TO TOP OF WATER-BEARING ZONE SAMPLED (FT)
72003	DEPTH TO BOTTOM OF WATER-BEARING ZONE SAMPLED (FT)
72004	PUMP OR FLOW PERIOD PRIOR TO SAMPLING MINUTES
72005	SAMPLE SOURCE CODE (BM WELL DATA)
72006	SAMPLING CONDITION CODE (BM WELL DATA)
72007	FORMATION NAME CODE (BM WELL DATA)
72017	SERIES CODE (BM WELL DATA)
72018	SYSTEM CODE (BM WELL DATA)
72111	DIRECT READOUT GROUND STATN TRANSMIT EROR CODE NUM
74054	FECAL STREPTOCOCCI, GENERAL (PERMIT)

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
74055	FECAL COLIFORM, GENERAL (PERMIT)
80889	ACTIVATED SLUDGE PROCESS MODIFICATION CODE
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)
81637	SHELLFISH SPECIES NUMERIC CODE
82289	LAGOON OBSERVATION, VISUAL, Y=YES N=NO CODE
82398	SAMPLING METHOD (CODES)
82524	STORAGE COEFFICIENT NUMERICAL CODE
82923	ATMOSPHERIC DEPOSITION TYPE, WET CODE
83205	ATMOSPHERIC DEPOSITION TYPE, BULK CODE
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)
84001	AQUIFER NAME CODE (SEE USGS CATALOG)
84004	LAKE TYPE ILLINOIS CLASSIFICATION SYSTEM
84007	ANATOMY ALPHA CODE
84008	LIFE STYLE/HABITAT OF THE INDIVIDUALS IN THE SAMPLE
84009	SHELLFISH SPECIES ALPHANUMERIC CODE
84014	SPECIES SEX CODE
84030	CLOUD AMOUNT ALPHA WEATHER CODES
84031	PHYSICAL WEATHER ALPHA WEATHER CODES
84032	STREAM CONDITION ALPHA WEATHER CODES
84066	OIL AND GREASE, VISUAL, ALPHA-NUMERIC CODE
84068	SERIES CODE ALPHA-NUMERIC CODE
84069	FORMATION CODE ALPHA-NUMERIC CODE
84070	METHOD OF TESTING WELL YIELD ALPHA-NUMERIC CODE
84071	WATER LEVEL MEASUREMENT CONDITIONS ALPHA-NUM CODE
84072	WATER LEVEL MEASUREMENT METHOD ALPHA-NUMERIC CODE
84078	GIARDIA LAMBLIA, 2HSO4 OR SUC GRAD, MICRO, CODE
84079	BACTERIA, CELLUOLYTIC, AEROBIC-ANAEROBIC, RT 5-7, CODE
84080	BACTERIA, HYDROCARBONOCLASTIC, SHAKE INC 32C/WK, CODE
84081	YERSINIA ENTEROCOLITICA, SB BROTH, MAC AGAR,22C, CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84082	SALMONELLA/SHIGELLA, QUANT OR QUAL, HVF OR SWAB, CODE
84085	ORGANICS, VOLATILE, DETECTED, NUMERIC CODE, CODE
84086	MACROINVERTEBRATE SPECIES NUMERIC CODE
84087	MACROINVERTEBRATE HABITAT CODE
84088	BIOLOGY 1 MACROINVERTEBRATE CODE
84089	BIOLOGY 2 MACROINVERTEBRATE CODE
84094	PHYTOPLANKTON SPECIES CODE, NUMERIC
84095	PHYTOPLANKTON SPECIES CODE, ALPHA
84096	SEVERITY OF NON-PLANKTON ALGAE-MAT COVERAGE CODE
84097	LAGOON MOUTH CONDITION CODE
84098	COLOR OF NON-PLANKTONIC ALGAE CODE
84099	WATER - RELATIVE WATER LEVEL CODE
84100	SEX(1-MALE,2-FEMALE,3-MIXED,4-UNKNOWN) NUM CODE
84101	METAFORM, BENTHIC, ADULT(A), PUPAE(P), LARVAE(L) CODE
84105	OIL-SEPARATOR OBSERVATION ASSESS (0=DID NOT,1=DID)
84106	EVAPORAT/BED OBS ASSESS (0=DID NOT LOOK, 1=DID LOOK)
84107	AREA INSPECTION, VISUAL (0=DID NOT, 1=DID) CODE
84108	DRAIN FIELD INSPECTION ASSESS (0=DID NOT, 1=DID) CODE
84109	SLUDGE BUILD-UP IN WATER (0=DID NOT OBS, 1=OBS) CODE
84110	POND OBSERVATION ASSESS WATER (0=DID NOT, 1=DID) CODE
84111	LITHOLOGIC MODIFIER CODE
84113	WELL INTAKE FINISH CODE
84114	WELL CASING MATERIAL CODE
84115	TYPE OF MATERIAL FROM WHICH OPENING IS MADE CODE
84116	DRILLING FLUID CODE
84117	TYPE OF SURFACE SEAL CODE
84118	METHOD OF DEVELOPMENT CODE
84120	PACKING MATERIAL CODE
84124	METHOD OF EVACUTAION CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84125	METHOD OF WATER-LEVEL MEASUREMENT CODE
84130	OUTFALL OBSERVATION, VISUAL, Y=YES N=NO CODE
84131	SAMPLING METHOD, CONFIDENCE CODE (A,B,C,D) CODE
84132	STREAMBANK, VEGETATIVE STABILITY RATING CODE
84133	STREAMBANK, STABILITY (BANK EROSION) RATING CODE
84134	PARTICLES, DEGREE SURROUNDED BY FINE SEDIMENT, CODE
84135	STREAMSIDE, (SHORELINE) COVER RATING CODE
84136	CANOPY TYPE CODE
84137	CHANNEL STABILITY RATING CODE (E,G,F,P) CODE
84138	COLIFORM, TOTAL, WATER, WHOLE, MPN, PRES=1, ABSNT=2, CODE
84139	ENTEROBACTER AGGLOMERANS, WTR, MF, PRES=1, ABSNT=2, CODE
84140	KLEBSIELLA PNEUMONIAE, WTR, WH, MF, PRES=1, ABSNT=2, CODE
84143	WELL, PURGING CONDITION CODE
84144	WELL, SELECTION CRITERIA CODE
84145	PROJECT COMPONENT CODE
84146	LAND USE, PREDOMINANT, WITHIN 100 FT OF WELL, CODE
84147	LAND USE, PREDOMINANT, 1/4 MI.RADIUS OF WELL, CODE
84148	LAND USE, PREDMNT., FRAC., WITHIN 1/4 MI OF WELL, CODE
84149	LAND USE, CHANGE, LAST 10 YRS, WITHIN 1/4MI WELL, CODE
84150	HABITAT QUALITY INDEX RATING CODE
84151	AQUATIC LIFE, USE CLASSES CODE
84152	STREAM, STAGE CLASS CODE
84153	STREAMBANKS, GRAZING DAMAGE CODE
84154	CHANNEL, MAJOR ALTERATIONS CODE
84155	RIFFLE/RUNS, OCCURRENCE CODE
84156	POOL, DESCRIPTION CODE
84157	SANDBARS, LARGE, OCCURRENCE CODE
84158	LAND USE, NEAR STREAM, PREDOMINANT CODE
84159	STREAM,COVER (INSTREAM SHELTER FOR ADULT FISH), CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84160	STREAM, DEGRADATION RATING CODE
84161	STREAM, ORDER CODE
84162	LAND RESOURCE AREA CODE
84163	FLOW, STREAM, CLASSIFICATION CODE
84165	DISCHARGE EVENT OBSERVATION, YES=1 NO=0, CODE
84166	STORM HYDROGRAPH, DIRECTION, (RISE,FALL), CODE
84167	MICROSCOPIC EXAMINATION CODE
84168	AVIAN SPECIES ALPHA CODE (BIRDS)
84169	MAMMALIAN ALPHA SPECIES CODE
84170	ALPHA AGE TEXT CODE
84200	LATITUDE/LONGITUDE COORDINATES OF WELL, METHOD CODE
84201	NATIONAL REFERENCE DATUM, ALTITUDE(VERTICAL) CODE
84202	ALTITUDE METHOD CODE
85000	STREAM MILE, ACTUAL MILES
85014	HABITAT, 1970 ACRES THIS TYPE FOR THIS STATION
85015	HAB., ESTIMATED ACRES THIS TYPE THIS STATION
85016	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 1990
85017	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 2000
85018	TYPE CODES: 1=CLEAR CUT/2=SELECT CUT/3=RNGE DEVLP
85019	ACRES, NO. ALTERED FROM 1965-1970 (0-5 YEARS OLD)
85020	ACRES, NO. ALTERED 1960-1965 (5-10 YEARS OLD)
85021	ACRES, NO. ALTERED 1955-1960 (10-15 YEARS OLD)
85022	ACRES, NO. ALTERED 1950-1955 (15-20 YEARS OLD)
85023	ACRES, NO. ALTERED BEFORE 1950 (20+ YEARS OLD)
85024	ACRES,PREDICTED YRLY.AVE.TO BE ALTERED IN FUTURE
85025	LANDOWNERS, CODES FOR ALL IN STATE OF OREGON
85026	ACRES, CURRENT OWNED THIS LANDOWNER THIS STATION
85027	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1980
85028	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1990

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85029	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 2000
85030	LAND USES, CODES FOR ALL IN STATE OF OREGON
85031	ACRES, CURRENT DEDICATED TO THIS USE THIS STATION
85032	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1980
85033	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1990
85034	ACRES, ESTM. DEDICTD TO THIS USE BY YR.2000 --STA.
85035	HAB., INDICATED ANIMAL USES THIS TYPE IN WINTER
85036	HAB., INDICATED ANIMAL USES THIS TYPE IN SPRING
85037	HAB., INDICATED ANIMAL USES THIS TYPE IN SUMMER
85038	HAB., INDICATED ANIMAL USES THIS TYPE IN FALL
85039	HAB., INDICATED ANML USES THIS TYPE FOR WINTERING
85040	HAB., INDICATED ANML USES THIS TYPE FOR FEEDING
85041	HAB., INDICATED ANML USES TYPE FOR REARING YOUNG
85042	HAB., INDICATED BIRD USES THIS TYPE FOR NESTING
85043	HAB., INDICATED ANML USES THIS TYPE FOR SHELTER
85044	HAB., INDICATED ANML USES THIS TYPE FOR REST AREA
85045	ANML, SHOWS PRESENCE/ABSNC OF COMMENTS ON THIS ANML
85046	HAB.,ACRES OCCUPIED BY THIS ANML THIS UNIT & CO.
85050	ANIMALS ARE NOT PRESENT THIS STATION
85051	ANIMALS, ONLY A FEW ARE PRESENT THIS STATION
85052	ANIMALS COMMONLY SEEN; USE MODERATE THIS STATION
85053	ANIMALS FREQUENTLY SEEN; USE HEAVY THIS STATION
85070	OWNERSHIP (.1) AND ACCESS (.2) BY YEAR
85071	PRIVATE OWNERSHIP AND ACCESS MILEAGE
85072	FEDERAL OWNERSHIP AND ACCESS MILEAGE
85073	STATE OWNERSHIP AND ACCESS MILEAGE
85074	COUNTY OWNERSHIP AND ACCESS MILEAGE
85075	CITY OWNERSHIP AND ACCESS MILEAGE
85076	WATER YEAR DATA REFERS TO

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85077	CALENDAR YEAR DATA REFERS TO
85088	MONTHS POLLUTION IS A PROBLEM JAN THRU JUNE
85089	MONTHS POLLUTION IS A PROBLEM JULY TO DECEMBER
85090	MAN-CAUSED CHANNEL CHANGE IN MILES
85091	STREAM BANK HABITAT DESTROYED IN MILES
85092	STREAMBED SILTED IN MILES
85093	TURBIDITY PROBLEM IN MILES
85094	SEVERITY: 1=ELIMINATES 2=INTERFERES 3=NO PROBLEM
85095	DURATION OF TURBIDITY PROBLEM IN MONTHS
85096	SEASON OF NATURAL DRY CHANNEL 1=SP 2=SU 3=F 4=W
85097	NATURAL DRY CHANNEL IN MILES
85098	MAN-CAUSED DRY CHANNEL SEASON 1=SP 2=SU 3=F 4=W
85099	MAN-CAUSED DRY CHANNEL IN MILES
85100	YEAR BARRIER IS PRESENT
85101	NUMBER OF NATURAL BARRIERS
85102	MILES BLOCKED BY NATURAL BARRIERS
85103	NUMBER OF NATURAL BARRIERS TO BE REMOVED
85104	NUMBER OF DAMS AND MAN CAUSED OBSTRUCTIONS
85105	MILES BLOCKED BY DAMS OR MAN CAUSED OBSTRUCTIONS
85106	NUMBER OF DAMS TO BE ALTERED
85107	MILES OF STREAM OCCUPIED BY IMPOUNDMENT
85108	LOWER END OF SECTION COVERED BY THIS FORM
85109	UPPER END OF SECTION COVERED BY THIS FORM
85110	LOWER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85111	UPPER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85112	STREAM SURVEY:1=COMPLETE 2=INCOMPLETE 3=NONE
85113	ABUNDANCE: 1=FSHWY/TAG&R 2=SURVEY 3=EST PLUS 4=EST
85114	ABUNDANCE: N=S&ST 1=ABUNDANT 4=SCARCE RGH FSH 3=SCARCE
85116	SQUARE YARDS OF SPAWNING AREA IN 1970

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85117	SQUARE YARDS OF SPAWNING AREA IN 1980
85118	SQUARE YARDS OF SPAWNING AREA IN 1990
85119	SQUARE YARDS OF SPAWNING AREA IN 2000
85120	MILES OF REARING AREA IN 1970
85121	MILES OF REARING AREA IN 1980
85122	MILES OF REARING AREA IN 1990
85123	MILES OF REARING AREA IN 2000
85124	CATCH BY SPORT ANGLING IN 1970
85125	RECREATION DAYS SPENT ANGLING IN 1970
85126	RECREATION DAYS SPENT ANGLING IN 1980
85127	RECREATION DAYS SPENT ANGLING IN 1990
85128	RECREATION DAYS SPENT ANGLING IN 2000
85129	CONTRIBUTION TO COMMERCIAL CATCH IN 1970
85130	PERCENT OF TOTAL FISHING DONE FROM BOAT IN 1970
85131	PERCENT OF TOTAL FISHING DONE FROM BANK IN 1970
85132	PERCENT OF TOTAL FISHING DONE WITH LURE IN 1970
85133	PERCENT OF TOTAL FISHING DONE WITH BAIT IN 1970
85134	PERCENT OF TOTAL FISHING DONE WITH A FLY IN 1970
85146	YEAR THIS FACTOR HAS A LIMITING EFFECT
85157	MAN DAYS OF WATER SKIING
85158	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85159	MAN DAYS OF BOATING OTHER THAN ANGLING
85160	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85161	MAN DAYS OF SWIMMING
85162	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85163	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NOT PRESENT
85165	NUMBER OF MONTHS SUSPENDED SOLIDS ARE A PROBLEM
85167	NUMBER OF MONTHS PLANKTON IS A PROBLEM
85168	1=ELIMINATE PROD 2=REDUCE 3=NO INTER. 4=NOT PRES

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85169	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85170	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85171	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85172	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85173	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85174	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85175	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85176	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85177	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85178	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85179	YEAR THIS NUMBER OF FACILITIES PRESENT
85180	NUMBER OF BOAT RAMPS
85181	NUMBER OF MOORAGES
85182	NUMBER OF PICNIC AREAS
85183	NUMBER OF CAMP AREAS
85184	NUMBER OF RESORTS
85185	YEAR THIS ZONED AREA PRESENT
85186	ACRES SET ASIDE FOR OTHER BOATING
85187	ACRES SET ASIDE FOR WATER SKIING
85188	MILES OF SHORE LOST TO ACCESS BY HOME SITES
85189	TOTAL MILES OF SHORELINE
85193	WILL RECR BE INC BY RELEASE OF FINGERL 0=NO 1=YES
85195	CATCH AND RECREATION ESTIMATE 1=BEST 4=POOREST
85333	PRECIPITATION-SAMPLE COLLECTION TIME-CODE- NES
85538	GAMMA SCAN DATE (YR,MO,DAY)
85539	DATE OF REPORT (YR,MO,DAY)
85658	TIME NIGHT CO2 HR
85661	TIME, INTERVAL DAY CO2 HR

Appendix F

National EPA Water Quality Criteria Summary[1]

The following table presents the national water quality criteria that were used to assess water quality data on a station-by-station basis and within the entire study area. Criteria are, for the most part, maximum values (except for dissolved oxygen, pH, and as noted). Criteria exist in any of four categories: Fresh Acute, Drinking Water, Marine Acute, and Other. Acute criteria are the highest 1-hour average concentrations which should not result in unacceptable impacts to aquatic organisms in either fresh or marine waters, respectively. The Drinking Water criteria are intended for human consumption; while the Other criteria represents National Park Service or other concerns. Parameters are listed in ascending order by STORET code. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to obtain the criteria for all parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	00070				50[t]	TURBIDITY, JACKSON CANDLE UNITS	JTU	Physical
	00076				50[t]	TURBIDITY, HACH TURBIDIMETER, FORMAZIN TUR. UNITS	FTU	Physical
14808798	00154		250[s]			SULFATE (AS S) WHOLE WATER	MG/L	General Inorganic
7782447	00299				4.0[u]	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	Dissolved Oxygen
7782447	00300				4.0[u]	OXYGEN, DISSOLVED	MG/L	Dissolved Oxygen
	00400				≤6.5, ≥9.0[#]	PH	SU	Physical
	00403				≤6.5, ≥9.0[#]	PH, LAB	SU	Physical
	00406				≤6.5, ≥9.0[#]	PH, FIELD	SU	Physical

[1]Sources: (1) U.S. Environmental Protection Agency, Quality Criteria for Water 1995, Final Draft; (2) U.S. Environmental Protection Agency, 40 CFR 141 - National Primary Drinking Water Regulations, and 40 CFR 143 - National Secondary Drinking Water Regulations, July 1, 1994; and (3) Others as Noted in Footnotes.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
471341	00409				<200[=]	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS	UEQ/L	General Inorganic
17778880	00613		1			NITRITE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00615		1			NITRITE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00618		10			NITRATE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00620		10			NITRATE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00628		10			NITRITE + NITRATE, SUSPENDED AS N	MG/L	Nitrogen
17778880	00630		10			NITRITE PLUS NITRATE, TOTAL 1 DET.	MG/L	Nitrogen
17778880	00631		10			NITRITE PLUS NITRATE, DISSOLVED 1 DET.	MG/L	Nitrogen
57125	00718	22	200	1.0		CYANIDE, WEAK ACID, DISSOCIABLE, WATER, WHOLE	UG/L	General Inorganic
57125	00719	22	200	1.0		CYANIDE, FREE,IN WATER&WASTEWATERS, HBG METHOD	UG/L	General Inorganic
57125	00720	0.022	0.2	0.001		CYANIDE, TOTAL	MG/L	General Inorganic
57125	00722	0.022	0.2	0.001		CYANIDE, FREE (AMENABLE TO CHLORINATION)	MG/L	General Inorganic
57125	00723	22	200	1.0		CYANIDE, DISSOLVED STD METHOD	UG/L	General Inorganic
57125	00724	22	200	1.0		CYANIDE COMPLEXED TO A RANGE OF COMPNDS, WATER	UG/L	General Inorganic
16887006	00940	860	250[s]			CHLORIDE,TOTAL IN WATER	MG/L	General Inorganic
16887006	00941	860	250[s]			CHLORIDE, DISSOLVED IN WATER	MG/L	General Inorganic
14808798	00945		250[s]			SULFATE, TOTAL (AS SO4)	MG/L	General Inorganic
14808798	00946		250[s]			SULFATE, DISSOLVED (AS SO4)	MG/L	General Inorganic
1332214	00948		7000000			ASBESTOS, WHOLE SAMPLE	CNT/L	General Inorganic
16984488	00950		4.0			FLUORIDE, DISSOLVED AS F	MG/L	General Inorganic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
16984488	00951		4.0			FLUORIDE, TOTAL AS F	MG/L	General Inorganic
7782414	00953		4000			FLUORINE, TOTAL	UG/L	General Inorganic
7440382	00978	360	50	69		ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	UG/L	Metal
7782492	00981	20	50	300		SELENIUM,TOTAL RECOVERABLE IN WATER AS SE	UG/L	Metal
7440280	00982	1400*	2.0	2130*		THALLIUM, TOTAL RECOVERABLE IN WATER AS TL	UG/L	Metal
7782492	00990	20	50	300		SELENITE, TOTAL RECOVERABLE INORGANIC	UG/L	Metal
7440382	00991	360	50	69		ARSENIC, TOTAL RECOVERABLE TRIVALENT INORGANIC	UG/L	Metal
7440382	00995	360	50	69		ARSENIC, INORGANIC DISS	UG/L	Metal
7440382	00996	360	50	69		ARSENIC, INORGANIC SUSP	UG/L	Metal
7440382	00997	360	50	69		ARSENIC, INORGANIC TOT	UG/L	Metal
7440417	00998	130*	4.0			BERYLLIUM,TOTAL RECOVERABLE IN WATER AS BE	UG/L	Metal
7440382	01000	360	50	69		ARSENIC, DISSOLVED	UG/L	Metal
7440382	01001	360	50	69		ARSENIC, SUSPENDED	UG/L	Metal
7440382	01002	360	50	69		ARSENIC, TOTAL	UG/L	Metal
7440393	01005		2000			BARIUM, DISSOLVED	UG/L	Metal
7440393	01006		2000			BARIUM, SUSPENDED	UG/L	Metal
7440393	01007		2000			BARIUM, TOTAL	UG/L	Metal
7440393	01009		2000			BARIUM,TOTAL RECOVERABLE IN WATER AS BA	UG/L	Metal
7440417	01010	130*	4.0			BERYLLIUM, DISSOLVED	UG/L	Metal
7440417	01011	130*	4.0			BERYLLIUM, SUSPENDED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440417	01012	130*	4.0			BERYLLIUM, TOTAL	UG/L	Metal
7440439	01025	3.9+	5.0	43		CADMIUM, DISSOLVED	UG/L	Metal
7440439	01026	3.9+	5.0	43		CADMIUM, SUSPENDED	UG/L	Metal
7440439	01027	3.9+	5.0	43		CADMIUM, TOTAL	UG/L	Metal
7440473	01030		100			CHROMIUM, DISSOLVED	UG/L	Metal
7440473	01031		100			CHROMIUM, SUSPENDED	UG/L	Metal
7440473	01032	16	100	1100		CHROMIUM, HEXAVALENT	UG/L	Metal
16065831	01033	1700+	100	10300*		CHROMIUM, TRI-VAL	UG/L	Metal
7440473	01034		100			CHROMIUM, TOTAL	UG/L	Metal
7440508	01040	18+	1300a	2.9		COPPER, DISSOLVED	UG/L	Metal
7440508	01041	18+	1300a	2.9		COPPER, SUSPENDED	UG/L	Metal
7440508	01042	18+	1300a	2.9		COPPER, TOTAL	UG/L	Metal
7439921	01049	82+	15a	220		LEAD, DISSOLVED	UG/L	Metal
7439921	01050	82+	15a	220		LEAD, SUSPENDED	UG/L	Metal
7439921	01051	82+	15a	220		LEAD, TOTAL	UG/L	Metal
7440280	01057	1400*	2.0	2130*		THALLIUM, DISSOLVED	UG/L	Metal
7440280	01058	1400*	2.0	2130*		THALLIUM, SUSPENDED	UG/L	Metal
7440280	01059	1400*	2.0	2130*		THALLIUM, TOTAL	UG/L	Metal
7440020	01065	1400+	100	75		NICKEL, DISSOLVED	UG/L	Metal
7440020	01066	1400+	100	75		NICKEL, SUSPENDED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	01067	1400[+]	100	75		NICKEL, TOTAL	UG/L	Metal
7440020	01074	1400[+]	100	75		NICKEL, TOTAL RECOVERABLE IN WATER AS NI	UG/L	Metal
7440224	01075	4.1[+]	100[s]	0.12		SILVER, DISSOLVED	UG/L	Metal
7440224	01076	4.1[+]	100[s]	0.12		SILVER, SUSPENDED	UG/L	Metal
7440224	01077	4.1[+]	100[s]	0.12		SILVER, TOTAL	UG/L	Metal
7440224	01079	4.1[+]	100[s]	0.12		SILVER, TOTAL RECOVERABLE IN WATER AS AG	UG/L	Metal
7440508	01089	0.018[+]	1.3[a]	0.0029		COPPER AS SUSPENDED BLACK OXIDE IN WATER	MG/L	General Inorganic
7440666	01090	120[+]	5000[s]	95		ZINC, DISSOLVED	UG/L	Metal
7440666	01091	120[+]	5000[s]	95		ZINC, SUSPENDED	UG/L	Metal
7440666	01092	120[+]	5000[s]	95		ZINC, TOTAL	UG/L	Metal
7440666	01094	120[+]	5000[s]	95		ZINC, TOTAL RECOVERABLE IN WATER AS ZN	UG/L	Metal
7440360	01095	88[p]	6.0	1500[p]		ANTIMONY, DISSOLVED	UG/L	Metal
7440360	01096	88[p]	6.0	1500[p]		ANTIMONY, SUSPENDED	UG/L	Metal
7440360	01097	88[p]	6.0	1500[p]		ANTIMONY, TOTAL	UG/L	Metal
7440439	01113	3.9[+]	5.0	43		CADMIUM,TOTAL RECOVERABLE IN WATER AS CD	UG/L	Metal
7439921	01114	82[+]	15[a]	220		LEAD, TOTAL RECOVERABLE IN WATER AS PB	UG/L	Metal
7440473	01118		100			CHROMIUM TOTAL RECOVERABLE IN WATER AS CR	UG/L	Metal
7440508	01119	18[+]	1300[a]	2.9		COPPER, TOTAL RECOVERABLE IN WATER AS CU	UG/L	Metal
7440280	01124	1400[*]	2.0	2130[*]		THALLIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
7440280	01128	1400[*]	2.0	2130[*]		THALLIUM, TOTAL RECOVERABLE <95%	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	01145	20	50	300		SELENIUM, DISSOLVED	UG/L	Metal
7782492	01146	20	50	300		SELENIUM, SUSPENDED	UG/L	Metal
7782492	01147	20	50	300		SELENIUM, TOTAL	UG/L	Metal
7782492	01167	20	50	300		SELENIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
18540299	01220	16	100	1100		CHROMIUM, HEXAVALENT, DISSOLVED	UG/L	Metal
7440360	01268	88[p]	6.0	1500[p]		ANTIMONY (SB), WATER, TOTAL RECOVERABLE	UG/L	Metal
57125	01291	22	200	1.0		CYANIDE, FILTERABLE, TOTAL IN WATER	UG/L	General Inorganic
7440666	01303	0.120[+]	5.0[s]	0.095		ZINC, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440224	01304	0.0041[+]	0.1[s]	0.00012		SILVER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440508	01306	0.018[+]	1.3[a]	0.0029		COPPER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
18540299	01307	0.016	0.1	1.1		CHROMIUM, HEXAVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7440382	01309	0.36	0.05	0.069		ARSENIC, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440393	01311		2.0			BARIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440417	01312	0.13[*]	0.004			BERYLLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440439	01313	0.0039[+]	0.005	0.043		CADMIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
16065831	01314	1.7[+]	0.1	10.3[*]		CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7439921	01318	0.082[+]	0.015[a]	0.220		LEAD, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7439976	01321	0.0024	0.002	0.0021		MERCURY, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440020	01322	1.4[+]	0.1	0.075		NICKEL, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7782492	01323	0.020	0.050	0.300		SELENIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440280	01324	1.4*	0.002	2.13*		THALLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440611	01326		0.020c			URANIUM, POTENTIALLY DISSOLVED, WATER	MG/L	Metal
7440224	01523	4.1+	100s	0.12		SILVER, IONIC	UG/L	Metal
50328	03648		0.2			BENZO (A) PYRENE, LIQUID FRACTION, ELUTRIATE	UG/L	General Organic
122349	04035		4.0			SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
10028178	04124		20r			TRITIUM, TOTAL, WATER	PC/ML	Radiological
10028178	07000		20000r			TRITIUM, TOTAL	PC/L	Radiological
10028178	07005		20000r			TRITIUM, DISSOLVED	PC/L	Radiological
10028178	07010		20000r			TRITIUM, SUSPENDED	PC/L	Radiological
	09501		5.0			RADIUM 226, TOTAL	PC/L	Radiological
	09503		5.0			RADIUM 226, DISSOLVED	PC/L	Radiological
	09505		5.0			RADIUM 226, SUSPENDED	PC/L	Radiological
	11500		5.0			RADIUM 226 + RADIUM 228, DISSOLVED	PC/L	Radiological
	11501		5.0			RADIUM 228, TOTAL	PC/L	Radiological
	11503		5.0			RADIUM 226 + RADIUM 228, TOTAL	PC/L	Radiological
10098972	13501		8.0r			STRONTIUM 90, TOTAL	PC/L	Radiological
10098972	13503		8.0r			STRONTIUM 90, DISSOLVED	PC/L	Radiological
10098972	13505		8.0r			STRONTIUM 90, SUSPENDED	PC/L	Radiological
7782492	22675	20	50	300		SELENIUM, DISSOLVED ORGANIC	UG/L	Metal
7782492	22676	20	50	300		SELENIUM, HEXAVALENT, DISSOLVED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	22677	20	50	300		SELENIUM, TETRAVALENT, DISSOLVED	UG/L	Metal
7440382	22678	360	50	69		ARSENIC, DISSOLVED ORGANIC	UG/L	Metal
7440382	22679	850*	50	2319*		ARSENIC, PENTAVALENT,DISSOLVED	UG/L	Metal
7440382	22680	360	50	69		ARSENIC, TRIVALENT, DISSOLVED	UG/L	Metal
7440611	22703		20c			URANIUM, NATURAL DISSOLVED	UG/L	Metal
7440611	22705		20c			URANIUM, NATURAL SUSPENDED	UG/L	Metal
7440611	22706		20c			URANIUM, TOTAL AS U308	UG/L	Metal
7440611	22708		0.020c			URANIUM, NATURAL, TOTAL	MG/L	Radiological
7440611	28011		20c			URANIUM, NATURAL, TOTAL	UG/L	Radiological
88857	30191		7.0			DINOSEB, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
75990	30200		200			DALAPON, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
106934	30203		0.05			ETHANE, 1,2-DIBROMO-, WATER, WHOLE, RECOVERABLE	UG/L	Pesticide
	31501		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	CFU/100ML	Bacteriological
	31503		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, DELAY. M-ENDO	CFU/100ML	Bacteriological
	31504		1.0n		1000b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED. LES-ENDO	CFU/100ML	Bacteriological
	31505		1.0n		1000b	COLIFORM, TOTAL, MPN, CONF. TEST 35C (TUBE 31506)	MPN/100ML	Bacteriological
	31506		1.0n		1000b	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31507		1.0n		1000b	COLIFORM, TOTAL, MPN, COMP. TEST 35C (TUBE 31508)	MPN/100ML	Bacteriological
	31508		1.0n		1000b	COLIFORM, TOTAL, MPN, COMP. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31613				200^	FECAL COLIFORM, MEMBRANE FILTER, AGAR	CFU/100ML	Bacteriological

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	31614				200^	FECAL COLIFORM, MPN, TUBE CONFIGURATION	MPN/100ML	Bacteriological
	31615				200^	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	MPN/100ML	Bacteriological
	31616				200^	FECAL COLIFORM, MEMBRANE FILTER, BROTH, 44.5C	CFU/100ML	Bacteriological
	31617				200^	FECAL COLIFORM, MPN, EIJKMAN, 44.5C (TUBE 31618)	MPN/100ML	Bacteriological
	31625				200^	FECAL COLIFORM, MF, M-FC, 0.7 UM	CFU/100ML	Bacteriological
	31648				126^	E. COLI, MTEC, MF	CFU/100ML	Bacteriological
	31649				33^	ENTEROCOCCI, ME, MF	CFU/100ML	Bacteriological
67663	32003	28900*	100[t]			CARBON CHLOROFORM AND CARBON ALCOHOL EXTRS.,TOTAL	UG/L	General Organic
67663	32005	28900*	100[t]			CARBON CHLOROFORM EXTRACTABLES	UG/L	General Organic
67663	32021	28900*	100[t]			CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLES OF	UG/L	General Organic
67663	32022	28900*	100[t]			CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES OF	UG/L	General Organic
75274	32101		100[t]			BROMODICHLOROMETHANE, WHOLE WATER	UG/L	General Organic
56235	32102	35200*	5.0	50000*		CARBON TETRACHLORIDE, WHOLE WATER	UG/L	General Organic
107062	32103	118000*	5.0	113000*		1,2-DICHLOROETHANE,WHOLE WATER	UG/L	General Organic
75252	32104		100[t]			BROMOFORM, WHOLE WATER	UG/L	General Organic
124481	32105		100[t]			DIBROMOCHLOROMETHANE, WHOLE WATER	UG/L	General Organic
67663	32106	28900*	100[t]			CHLOROFORM, WHOLE WATER	UG/L	General Organic
56235	32260	35.2*	0.005	50*		CARBON TETRACHLORIDE EXTRACTABLES	MG/L	General Organic
67663	32270	28.9*	0.1[t]			CHLOROFORM EXTRACTABLES TOTAL	MG/L	General Organic
108883	34010	17500*	1000	6300*		TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
1330207	34020		10000			XYLENES IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic
83329	34205	1700*		970*		ACENAPHTHENE, TOTAL	UG/L	General Organic
83329	34206	1700*		970*		ACENAPHTHENE, DISSOLVED	UG/L	General Organic
83329	34207	1700*		970*		ACENAPHTHENE, SUSPENDED	UG/L	General Organic
107028	34210	68*		55*		ACROLEIN, TOTAL	UG/L	Pesticide
107028	34211	68*		55*		ACROLEIN, DISSOLVED	UG/L	Pesticide
107028	34212	68*		55*		ACROLEIN, SUSPENDED	UG/L	Pesticide
107131	34215	7550*				ACRYLONITRILE, TOTAL	UG/L	General Organic
107131	34216	7550*				ACRYLONITRILE, DISSOLVED	UG/L	General Organic
107131	34217	7550*				ACRYLONITRILE, SUSPENDED	UG/L	General Organic
71432	34235	5300*	5.0	5100*		BENZENE, DISSOLVED	UG/L	General Organic
71432	34236	5300*	5.0	5100*		BENZENE, SUSPENDED	UG/L	General Organic
92875	34239	2500*				BENZIDINE, DISSOLVED	UG/L	General Organic
92875	34240	2500*				BENZIDINE, SUSPENDED	UG/L	General Organic
58899	34265	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, DISSOLVED	UG/L	Pesticide
58899	34266	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, SUSPENDED	UG/L	Pesticide
75252	34288		100[t]			BROMOFORM, DISSOLVED	UG/L	General Organic
75252	34289		100[t]			BROMOFORM, SUSPENDED	UG/L	General Organic
56235	34297	35200*	5.0	50000*		CARBON TETRACHLORIDE, DISSOLVED	UG/L	General Organic
56235	34298	35200*	5.0	50000*		CARBON TETRACHLORIDE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108907	34301		100			CHLOROBENZENE, TOTAL	UG/L	General Organic
108907	34302		100			CHLOROBENZENE, DISSOLVED	UG/L	General Organic
108907	34303		100			CHLOROBENZENE, SUSPENDED	UG/L	General Organic
124481	34306		100[t]			CHLORODIBROMOMETHANE, TOTAL	UG/L	General Organic
124481	34307		100[t]			CHLORODIBROMOMETHANE, DISSOLVED	UG/L	General Organic
124481	34308		100[t]			CHLORODIBROMOMETHANE, SUSPENDED	UG/L	General Organic
67663	34316	28900[*]	100[t]			CHLOROFORM, DISSOLVED	UG/L	General Organic
67663	34317	28900[*]	100[t]			CHLOROFORM, SUSPENDED	UG/L	General Organic
57125	34325	0.022	0.2	0.001		CYANIDE, SUSPENDED	MG/L	General Inorganic
75274	34328		100[t]			DICHLOROBROMOMETHANE, DISSOLVED	UG/L	General Organic
75274	34329		100[t]			DICHLOROBROMOMETHANE, SUSPENDED	UG/L	General Organic
122667	34346	270[*]				1,2-DIPHENYLHYDRAZINE, TOTAL	UG/L	General Organic
122667	34347	270[*]				1,2-DIPHENYLHYDRAZINE, DISSOLVED	UG/L	General Organic
122667	34348	270[*]				1,2-DIPHENYLHYDRAZINE, SUSPENDED	UG/L	General Organic
33213659	34356	0.22		0.034		ENDOSULFAN, BETA, TOTAL	UG/L	Pesticide
33213659	34357	0.22		0.034		ENDOSULFAN, BETA, DISSOLVED	UG/L	Pesticide
33213659	34358	0.22		0.034		ENDOSULFAN, BETA, SUSPENDED	UG/L	Pesticide
959988	34361	0.22		0.034		ENDOSULFAN, ALPHA, TOTAL	UG/L	Pesticide
959988	34362	0.22		0.034		ENDOSULFAN, ALPHA, DISSOLVED	UG/L	Pesticide
959988	34363	0.22		0.034		ENDOSULFAN, ALPHA, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
100414	34371	32000*	700	430*		ETHYLBENZENE, TOTAL	UG/L	General Organic
100414	34372	32000*	700	430*		ETHYLBENZENE, DISSOLVED	UG/L	General Organic
100414	34373	32000*	700	430*		ETHYLBENZENE, SUSPENDED	UG/L	General Organic
206440	34376	3980*		40*		FLUORANTHENE, TOTAL	UG/L	General Organic
206440	34377	3980*		40*		FLUORANTHENE, DISSOLVED	UG/L	General Organic
206440	34378	3980*		40*		FLUORANTHENE, SUSPENDED	UG/L	General Organic
77474	34386	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, TOTAL	UG/L	General Organic
77474	34387	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, DISSOLVED	UG/L	General Organic
77474	34388	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, SUSPENDED	UG/L	General Organic
87683	34391	90*		32*		HEXACHLOROBUTADIENE, TOTAL	UG/L	General Organic
87683	34392	90*		32*		HEXACHLOROBUTADIENE, DISSOLVED	UG/L	General Organic
87683	34393	90*		32*		HEXACHLOROBUTADIENE, SUSPENDED	UG/L	General Organic
67721	34396	980*		940*		HEXACHLOROETHANE, TOTAL	UG/L	General Organic
67721	34397	980*		940*		HEXACHLOROETHANE, DISSOLVED	UG/L	General Organic
67721	34398	980*		940*		HEXACHLOROETHANE, SUSPENDED	UG/L	General Organic
118741	34401	6.0[p]	1.0			HEXACHLOROBENZENE, DISSOLVED	UG/L	General Organic
118741	34402	6.0[p]	1.0			HEXACHLOROBENZENE, SUSPENDED	UG/L	General Organic
193395	34403		0.40[c]			INDENO (1,2,3-CD) PYRENE, TOTAL	UG/L	General Organic
193395	34404		0.40[c]			INDENO (1,2,3-CD) PYRENE, DISSOLVED	UG/L	General Organic
193395	34405		0.40[c]			INDENO (1,2,3-CD) PYRENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
78591	34408	117000*		12900*		ISOPHORONE, TOTAL	UG/L	Pesticide
78591	34409	117000*		12900*		ISOPHORONE, DISSOLVED	UG/L	Pesticide
78591	34410	117000*		12900*		ISOPHORONE, SUSPENDED	UG/L	Pesticide
75092	34423		5.0			METHYLENE CHLORIDE, TOTAL	UG/L	General Organic
75092	34424		5.0			METHYLENE CHLORIDE, DISSOLVED	UG/L	General Organic
75092	34425		5.0			METHYLENE CHLORIDE, SUSPENDED	UG/L	General Organic
91203	34443	2300*		2350*		NAPHTHALENE, DISSOLVED	UG/L	General Organic
91203	34444	2300*		2350*		NAPHTHALENE, SUSPENDED	UG/L	General Organic
98953	34447	27000*		6680*		NITROBENZENE, TOTAL	UG/L	General Organic
98953	34448	27000*		6680*		NITROBENZENE, DISSOLVED	UG/L	General Organic
98953	34449	27000*		6680*		NITROBENZENE, SUSPENDED	UG/L	General Organic
59507	34452	30*				PARACHLOROMETA CRESOL, TOTAL	UG/L	General Organic
59507	34453	30*				PARACHLOROMETA CRESOL, DISSOLVED	UG/L	General Organic
59507	34454	30*				PARACHLOROMETA CRESOL, SUSPENDED	UG/L	General Organic
87865	34459	20***	1.0	13		PCP (PENTACHLOROPHENOL), DISSOLVED	UG/L	Pesticide
87865	34460	20***	1.0	13		PCP (PENTACHLOROPHENOL), SUSPENDED	UG/L	Pesticide
85018	34461	30p		7.7p		PHENANTHRENE, TOTAL	UG/L	General Organic
85018	34462	30p		7.7p		PHENANTHRENE, DISSOLVED	UG/L	General Organic
85018	34463	30p		7.7p		PHENANTHRENE, SUSPENDED	UG/L	General Organic
108952	34466	10200*		5800*		PHENOL, DISSOLVED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108952	34467	10200*		5800*		PHENOL, SUSPENDED	UG/L	General Organic
127184	34475	5280*	5.0	10200*		TETRACHLOROETHYLENE, TOTAL	UG/L	General Organic
127184	34476	5280*	5.0	10200*		TETRACHLOROETHYLENE, DISSOLVED	UG/L	General Organic
127184	34477	5280*	5.0	10200*		TETRACHLOROETHYLENE, SUSPENDED	UG/L	General Organic
108883	34481	17500*	1000	6300*		TOLUENE, DISSOLVED	UG/L	General Organic
108883	34482	17500*	1000	6300*		TOLUENE, SUSPENDED	UG/L	General Organic
79016	34485	45000*	5.0	2000*		TRICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
79016	34486	45000*	5.0	2000*		TRICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
75014	34493		2.0			VINYL CHLORIDE, DISSOLVED	UG/L	General Organic
75014	34494		2.0			VINYL CHLORIDE, SUSPENDED	UG/L	General Organic
75354	34501		7.0			1,1-DICHLOROETHYLENE, TOTAL	UG/L	General Organic
75354	34502		7.0			1,1-DICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
75354	34503		7.0			1,1-DICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
71556	34506		200	31200*		1,1,1-TRICHLOROETHANE, TOTAL	UG/L	General Organic
71556	34507		200	31200*		1,1,1-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
71556	34508		200	31200*		1,1,1-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79005	34511		5.0			1,1,2-TRICHLOROETHANE, TOTAL	UG/L	General Organic
79005	34512		5.0			1,1,2-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
79005	34513		5.0			1,1,2-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79345	34516			9020*		1,1,2,2-TETRACHLOROETHANE, TOTAL	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
79345	34517			9020*		1,1,2,2-TETRACHLOROETHANE, DISSOLVED	UG/L	General Organic
79345	34518			9020*		1,1,2,2-TETRACHLOROETHANE, SUSPENDED	UG/L	General Organic
107062	34531	118000*	5.0	113000*		1,2-DICHLOROETHANE, TOTAL	UG/L	General Organic
107062	34532	118000*	5.0	113000*		1,2-DICHLOROETHANE, DISSOLVED	UG/L	General Organic
107062	34533	118000*	5.0	113000*		1,2-DICHLOROETHANE, SUSPENDED	UG/L	General Organic
95501	34536		600			1,2-DICHLOROBENZENE, TOTAL	UG/L	General Organic
95501	34537		600			1,2-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
95501	34538		600			1,2-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
78875	34541		5.0			1,2-DICHLOROPROPANE, TOTAL	UG/L	General Organic
78875	34542		5.0			1,2-DICHLOROPROPANE, DISSOLVED	UG/L	General Organic
78875	34543		5.0			1,2-DICHLOROPROPANE, SUSPENDED	UG/L	General Organic
156605	34546		100			TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	General Organic
156605	34547		100			TRANS-1,2-DICHLOROETHENE, DISSOLVED	UG/L	General Organic
156605	34548		100			TRANS-1,2-DICHLOROETHENE, SUSPENDED	UG/L	General Organic
120821	34551		70			1,2,4-TRICHLOROBENZENE, TOTAL	UG/L	General Organic
120821	34552		70			1,2,4-TRICHLOROBENZENE, DISSOLVED	UG/L	General Organic
120821	34553		70			1,2,4-TRICHLOROBENZENE, SUSPENDED	UG/L	General Organic
541731	34566		600			1,3-DICHLOROBENZENE, TOTAL	UG/L	General Organic
541731	34567		600			1,3-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
541731	34568		600			1,3-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
106467	34571		75			1,4-DICHLOROBENZENE, TOTAL	UG/L	General Organic
106467	34572		75			1,4-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
106467	34573		75			1,4-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
95578	34586	4380*				2-CHLOROPHENOL, TOTAL	UG/L	General Organic
95578	34587	4380*				2-CHLOROPHENOL, DISSOLVED	UG/L	General Organic
95578	34588	4380*				2-CHLOROPHENOL, SUSPENDED	UG/L	General Organic
120832	34601	2020*				2,4-DICHLOROPHENOL, TOTAL	UG/L	General Organic
120832	34602	2020*				2,4-DICHLOROPHENOL, DISSOLVED	UG/L	General Organic
120832	34603	2020*				2,4-DICHLOROPHENOL, SUSPENDED	UG/L	General Organic
105679	34606	2120*				2,4-DIMETHYLPHENOL, TOTAL	UG/L	General Organic
105679	34607	2120*				2,4-DIMETHYLPHENOL, DISSOLVED	UG/L	General Organic
105679	34608	2120*				2,4-DIMETHYLPHENOL, SUSPENDED	UG/L	General Organic
121142	34611	330*		590*		2,4-DINITROTOLUENE, TOTAL	UG/L	General Organic
121142	34612	330*		590*		2,4-DINITROTOLUENE, DISSOLVED	UG/L	General Organic
121142	34613	330*		590*		2,4-DINITROTOLUENE, SUSPENDED	UG/L	General Organic
72548	34651	0.6*		3.6*		P,P'-DDD, DISSOLVED	UG/L	Pesticide
72548	34652	0.6*		3.6*		P,P'-DDD, SUSPENDED	UG/L	Pesticide
72559	34653	1050*		14*		P,P'-DDE, DISSOLVED	UG/L	Pesticide
72559	34654	1050*		14*		P,P'-DDE, SUSPENDED	UG/L	Pesticide
50293	34655	1.1		0.13		P,P'-DDT, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
50293	34656	1.1		0.13		P,P'-DDT, SUSPENDED	UG/L	Pesticide
1746016	34675	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), TOT	UG/L	General Organic
1746016	34676	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), DISS	UG/L	General Organic
1746016	34677	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), SUSP	UG/L	General Organic
108952	34694	10200*		5800*		PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	UG/L	General Organic
91203	34696	2300*		2350*		NAPHTHALENE, TOTAL	UG/L	General Organic
75990	38432		200			DALAPON, WATER, TOTAL	UG/L	Pesticide
75990	38433		200			DALAPON, WATER, DISSOLVED	UG/L	Pesticide
75990	38434		200			DALAPON, WATER, SUSPENDED	UG/L	Pesticide
96128	38437		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL	UG/L	Pesticide
96128	38438		0.2			DIBROMOCHLOROPROPANE, WATER, DISSOLVED	UG/L	Pesticide
96128	38439		0.2			DIBROMOCHLOROPROPANE WATER, SUSPENDED	UG/L	Pesticide
96128	38760		0.2			DBCP, WATER, TOTAL	UG/L	Pesticide
96128	38761		0.2			DBCP, WATER, DISSOLVED	UG/L	Pesticide
96128	38762		0.2			DBCP, WATER, SUSPENDED	UG/L	Pesticide
88857	38779		7.0			DINOSEB, DISSOLVED	UG/L	Pesticide
88857	38780		7.0			DINOSEB, SUSPENDED	UG/L	Pesticide
23135220	38865		200			OXAMYL, TOTAL	UG/L	Pesticide
23135220	38866		200			OXAMYL, DISSOLVED	UG/L	Pesticide
23135220	38867		200			OXAMYL, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
145733	38926		100			ENDOTHALL, WHOLE WATER SAMPLE	UG/L	Pesticide
2921882	38932	0.083		0.011		CHLORPYRIFOS, TOTAL RECOVERABLE	UG/L	Pesticide
2921882	38933	0.083		0.011		CHLORPYRIFOS, DISSOLVED	UG/L	Pesticide
2163806	38935		50			MONOSODIUM METHANEARSONATE (MSMA)	UG/L	Pesticide
2921882	39012	0.083		0.011		DURSBAN, FLAME PHOTOMETRIC, WATER SAMPLE	UG/L	Pesticide
56382	39015	0.065				ETHYLPARATHION, FLAME IONIFATION, WATER SAMPLE	UG/L	Pesticide
122349	39025		4.0			SIMAZINE, COULSON CONDUCTIVITY WATER SAMPLE	UG/L	Pesticide
87865	39032	20***	1.0	13		PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39033		3.0			ATRAZINE IN WHOLE WATER SAMPLE	UG/L	Pesticide
118741	39039	6.0[p]	1.0			HEXACHLOROBENZENE WATER SAMPLE, ELECTRON CPT	UG/L	Pesticide
93721	39045		50			2,4,5-TP INCLUDES ACIDS & SALTS WATER SAMPLE	UG/L	Pesticide
116063	39053		3.0			ALDICARB IN WHOLE WATER	UG/L	Pesticide
122349	39055		4.0			SIMAZINE IN WHOLE WATER	UG/L	Pesticide
117817	39100	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	UG/L	General Organic
117817	39103	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED	UG/L	General Organic
117817	39104	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED	UG/L	General Organic
	39117	0.94*		2.994*		PHTHLATE ESTERS IN WATER	MG/L	General Organic
75014	39175		2.0			VINYL CHLORIDE-WHOLE WATER SAMPLE	UG/L	General Organic
79016	39180	45000*	5.0	2000*		TRICHLOROETHYLENE-WHOLE WATER SAMPLE	UG/L	General Organic
50293	39300	1.1		0.13		P,P' DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
72548	39310	0.6*		3.6*		P,P' DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39320	1050*		14*		P,P' DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39330	3.0		1.3		ALDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39331	3.0		1.3		ALDRIN IN FILT. FRAC. OF WAT. SAMP.	UG/L	Pesticide
309002	39332	3.0		1.3		ALDRIN IN SUSP. FRAC. OF WAT. SAMP.	UG/L	Pesticide
58899	39340	2.0	0.2	0.16		GAMMA-BHC(LINDANE), WHOLE WATER	UG/L	Pesticide
58899	39341	2.0	0.2	0.16		GAMMA-BHC(LINDANE), DISSOLVED	UG/L	Pesticide
58899	39342	2.0	0.2	0.16		GAMMA-BHC(LINDANE), SUSPENDED	UG/L	Pesticide
57749	39350	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), WHOLE WATER	UG/L	Pesticide
57749	39352	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), DISSOLVED	UG/L	Pesticide
57749	39353	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), SUSPENDED	UG/L	Pesticide
72548	39360	0.6*		3.6*		DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72548	39361	0.6*		3.6*		DDD IN FILT. FRAC. OF WATER SMAPLE	UG/L	Pesticide
72548	39362	0.6*		3.6*		DDD IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39365	1050*		14*		DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39366	1050*		14*		DDE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39367	1050*		14*		DDE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39370	1.1		0.13		DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide
50293	39371	1.1		0.13		DDT IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39372	1.1		0.13		DDT IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
60571	39380	2.5		0.71		DIELDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
60571	39381	2.5		0.71		DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
60571	39382	2.5		0.71		DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
115297	39388	0.22		0.034		ENDOSULFAN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39390	0.18	2.0	0.037		ENDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39391	0.18	2.0	0.037		ENDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72208	39392	0.18	2.0	0.037		ENDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39400	0.73	3.0	0.21		TOXAPHENE IN WHOLE WATER SAMPLE	UG/L	Pesticide
8001352	39401	0.73	3.0	0.21		TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39402	0.73	3.0	0.21		TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39410	0.52	0.4	0.053		HEPTACHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	39411	0.52	0.4	0.053		HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39412	0.52	0.4	0.053		HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1024573	39420	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1024573	39421	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN FILT. FRAC. WATER SAMPLE	UG/L	Pesticide
1024573	39422	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN SUSP. FRAC. WATER SAMPLE	UG/L	Pesticide
72435	39478		40			METHOXYCHLOR IN WHOLE WATER DISSOLVED	UG/L	Pesticide
72435	39479		40			METHOXYCHLOR IN WHOLE WATER SUSPENDED	UG/L	Pesticide
72435	39480		40			METHOXYCHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
56382	39540	0.065				PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
56382	39542	0.065				PARATHION IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
56382	39543	0.065				PARATHION IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1912249	39630		3.0			ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39632		3.0			ATRAZINE DISSOLVED IN WATER	PPB	Pesticide
118741	39700	6.0[p]	1.0			HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	UG/L	General Organic
87683	39702	90[*]		32[*]		HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE	UG/L	General Organic
1918021	39720		500			PICLORAM IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39730		70			2,4-D IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39732		70			2,4-D IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
94757	39733		70			2,4-D IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39760		50			SILVEX IN WHOLE WATER SAMPLE	UG/L	Pesticide
93721	39762		50			SILVEX IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39763		50			SILVEX IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
58899	39782	2.0	0.2	0.16		LINDANE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1071836	39941		700			ROUNDUP IN WHOLE WATER SAMPLE (GLYPHOSATE)	UG/L	Pesticide
7782505	45650	0.019		0.013		CHLORINE, IN ORGANIC COMPOUNDS, WATER, WHOLE	MG/L	General Inorganic
56382	46315	0.065				ETHYL PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
58899	46322	2.0	0.2	0.16		LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	46326	0.52	0.4	0.053		HEPTACHLOR AND METABOLITES IN WHOLE H2O SAMPLE	UG/L	Pesticide
15972608	46342		2.0			ALACHLOR (LASSO), WATER, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782505	46472	0.019		0.013		CHLORINE, TOTAL RESIDUAL, AVERAGE VALUE, WATER	MG/L	General Inorganic
7782505	46473	0.019		0.013		CHLORINE, FREE AVAILABLE, AVERAGE VALUE, WATER	MG/L	General Inorganic
57125	46479	22	200	1.0		CYANIDE, DISSOLVED, WATER	UG/L	General Inorganic
7440382	46551	360	50	69		ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILTERED	UG/L	Metal
7440393	46558		2000			BARIUM, FIELD ACIDIFIED W/HNO3-LAB FILT	UG/L	Metal
7440439	46559	3.9[+]	5.0	43		CADMIUM,FIELD ACIDIFIED-HNO3-LAB FILTER	UG/L	Metal
7440473	46560		100			CHROMIUM, FIELD ACIDIFIED-HNO3-LAB FILT.	UG/L	Metal
7440508	46562	18[+]	1300[a]	2.9		COPPER, FIELD ACIDIFIED-HNO3- LAB FILTER.	UG/L	Metal
7439921	46564	82[+]	15[a]	220		LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED	UG/L	Metal
7440224	46566	4.1[+]	100[s]	0.12		SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.	UG/L	Metal
7440666	46567	120[+]	5000[s]	95		ZINC, EXTRACTABLE, FIELD ACID W/HNO3,LAB FILTR	UG/L	Metal
56382	49011	0.065				UNKNOWNS AS PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
7782505	50058	0.019		0.013		CHLORINE DOSE	MG/L	General Inorganic
7782505	50060	0.019		0.013		CHLORINE, TOTAL RESIDUAL	MG/L	General Inorganic
7782505	50064	0.019		0.013		CHLORINE, FREE AVAILABLE	MG/L	General Inorganic
7782505	50066	0.019		0.013		CHLORINE, COMBINED AVAILABLE	MG/L	General Inorganic
7782505	50074	0.019		0.013		CHLORITE, WHOLE WATER	MG/L	General Inorganic
	61215				200[^]	FECAL COLIFORM, GENERAL #/100ML	#/100ML	Bacteriological
16887006	70352	860	250[s]			CHLORIDE, ORGANIC	MG/L	General Organic
14797558	71850		44			NITRATE NITROGEN, TOTAL (AS NO3)	MG/L	Nitrogen

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
14797558	71851		44			NITRATE NITROGEN, DISSOLVED (AS NO3)	MG/L	Nitrogen
14797650	71855		3.3			NITRITE NITROGEN, TOTAL (AS NO2)	MG/L	Nitrogen
14797650	71856		3.3			NITRITE NITROGEN, DISSOLVED (AS NO2)	MG/L	Nitrogen
7439976	71890	2.4	2.0	2.1		MERCURY, DISSOLVED	UG/L	Metal
7439976	71895	2.4	2.0	2.1		MERCURY, SUSPENDED	UG/L	Metal
7439976	71900	2.4	2.0	2.1		MERCURY, TOTAL	UG/L	Metal
7439976	71901	2.4	2.0	2.1		MERCURY,TOTAL RECOVERABLE IN WATER AS HG	UG/L	Metal
7440439	71946	3.9[+]	5.0	43		CADMIUM, EXTRACTABLE	UG/L	Metal
7440473	71947		100			CHROMIUM, EXTRACTABLE	UG/L	Metal
7439921	71949	82[+]	15[a]	220		LEAD, EXTRACTABLE	UG/L	Metal
7440666	71950	120[+]	5000[s]	95		ZINC, EXTRACTABLE	UG/L	Metal
7440508	71951	18[+]	1300[a]	2.9		COPPER, EXTRACTABLE	UG/L	Metal
1336363	76011	2000	500	10000		PCBS, SUSPENDED, WATER	NG/L	General Organic
1336363	76012	2000	500	10000		PCBS, TOTAL RECOVERABLE, WATER	NG/L	General Organic
156592	77093		70			CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	UG/L	General Organic
100425	77128		100			STYRENE, WHOLE WATER	UG/L	General Organic
106489	77296			29700[*]		P-CHLOROPHENOL, WHOLE WATER	UG/L	General Organic
106934	77651		0.05			1,2-DIBROMOETHANE, WHOLE WATER	UG/L	General Organic
95954	77687	100[p]		240[p]		2,4,5-TRICHLOROPHENOL, WHOLE WATER	UG/L	General Organic
935955	77769			440[*]		2,3,5,6-TETRACHLOROPHENOL, WHOLE WATER	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
103231	77903		400			BIS (2-ETHYLHEXYL) ADIPATE, WHOLE WATER	UG/L	General Organic
18540299	78247	16	100	1100		CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE	UG/L	Metal
57125	78248	22	200	1.0		CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE	UG/L	Metal
	78456	11*		12*		HALOMETHANES, SUMMATION, WHOLE WATER	MG/L	General Organic
14808798	78462		250s			SULFATE, WATER, DISSOLVED AS S	MG/L	Metal
85007	78885		20			DIQUAT DIBROMIDE (REGLONE) WHOLE WATER SAMPLE	UG/L	Pesticide
7440611	80020		20c			URANIUM, DISS. BY EXTRACTION FLUOROMETRIC	UG/L	Radiological
16065831	80357	1700	100	10300*		CHROMIUM, TRIVALENT, DISSOLVED	UG/L	Metal
57125	81208	0.022	0.2	0.001		CYANIDE,FREE (NOT AMENABLE TO CHLORINATION)	MG/L	General Inorganic
608731	81283	100*		0.34*		BENZENEHEXACHLORIDE, WHOLE WATER	UG/L	Pesticide
88857	81287		7.0			DNBP(C10H12N2O5), WHOLE WATER SAMPLE	UG/L	Pesticide
26638197	81327	23000*	5.0	10300*		DICHLOROPROPANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81333	1120*		1970*		DICHLOROBENZENE ISOMER, WHOLE WATER SAMPLE	UG/L	General Organic
2921882	81403	0.083		0.011		DURSBAN (CHLOROPYRIFOS) WHOLE WATER SAMPLE	UG/L	Pesticide
1563662	81405		40			CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	UG/L	Pesticide
76017	81501	7240*		390*		PENTACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81524	1120*		1970*		DICHLOROBENZENE, WHOLE WATER SAMPLE	UG/L	General Organic
25322207	81549	9320*				TETRACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
26638197	81703	23*	0.005*	10.3*		DICHLOROPROPANE, WHOLE WATER SAMPLE	MG/L	General Organic
7440508	81750	18+	1300a	2.9		COPPER, INTERSTITIAL WATERFROM SEDIMENTS	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	81752	1400[+]	100	75		NICKEL, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
7440666	81754	120[+]	5000[s]	95		ZINC, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
25323891	81853	18000[*]				TRICHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
7439976	81931	2.4	2.0	2.1		MERCURY (HG) SUSPENDED FRACTION OF WATER	UG/G	Metal
7440666	81933	120[+]	5000[s]	95		ZINC (ZN) SUSPENDED FRACTION OF WATER	UG/G	Metal
7439921	81936	82[+]	15[a]	220		LEAD (PB) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440439	81937	3.9[+]	5.0	43		CADMIUM (CD) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81938		100			CHROMIUM (CR) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440508	81939	18[+]	1300[a]	2.9		COPPER (CU) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440666	81940	120[+]	5000[s]	95		ZINC (ZN) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81941		100			CHROMIUM (CR) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440508	81942	18[+]	1300[a]	2.9		COPPER (CU) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440666	81943	120[+]	5000[s]	95		ZINC (ZN) DISSOLVED ANIONIC SPECIES	UG/L	Metal
	82078				50[l]	TURBIDITY, FIELD	NTU	Physical
	82079				50[l]	TURBIDITY, LAB	NTU	Physical
88857	82226		7.0			2 SECONDARY BUTYL 4,6-DINITROPHENOL	UG/L	Pesticide
16887006	82295	860000	250000[s]			CHLORIDE DISSOLVED AS CL IN WATER	UG/L	General Inorganic
72435	82350		40			METHOXYCHLOR, DISSOLVED IN WATER	UG/L	Pesticide
72435	82351		40			METHOXYCHLOR, SUSPENDED IN WATER	UG/L	Pesticide
115297	82354	0.22		0.034		ENDOSULFAN, DISSOLVED IN WATER	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
115297	82355	0.22		0.034		ENDOSULFAN, SUSPENDED IN WATER	UG/L	Pesticide
57125	82573	0.022	0.2	0.001		CYANIDE/CHLORINATION IN WATER	MG/L	General Inorganic
1646873	82586		4.0			ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE	UG/L	General Organic
1646884	82587		2.0			ALDICARB SULFONE, WHOLE WATER, TOTAL RECOVERABLE	UG/L	General Organic
23135220	82613		200			OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
1563662	82615		40			CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
116063	82619		3.0			ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
33213659	82624	0.22		0.034		ENDOSULFAN, BETA, WH WATER, TOTAL RECOVERABLE	UG/L	Pesticide
96128	82625		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
7440382	82702	360	50	69		ARSENIC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440393	82703		2			BARIUM, FIELD ACIDIFIED, DECANTED, WATER	MG/L	Metal
7440417	82704	130*	4.0			BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440439	82705	3.9+	5.0	43		CADMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440473	82706		100			CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440508	82708	18+	1300[a]	2.9		COPPER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439921	82711	82+	15[a]	220		LEAD, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439976	82713	2.4	2.0	2.1		MERCURY, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440020	82715	1400+	100	75		NICKEL, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440224	82716	4.1+	100[s]	0.12		SILVER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440666	82719	120+	5000[s]	95		ZINC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal

Footnote Key:

*Insufficient Data to Develop Criteria. Value Presented is the L.O.E.L. - Lowest Observed Effect Level.

+Hardness Dependent Criteria (100 mg/L $CaCO_3$ Used).

***pH Dependent Criteria (7.8 pH Used).

=Rule of thumb criterion used by the NPS Air Quality Division for determining sensitivity to acid deposition.

^Freshwater bathing criterion, EPA geometric mean based on at least 5 samples equally spaced over a 30-day period; Enterococci marine water bathing criterion 35 CFU/100 ml.

#EPA freshwater aquatic life chronic criterion; marine criterion is ≤6.5, ≥8.5.

!Arizona state standard.

[a]EPA action level, 40 CFR 141.80.

[b]California and Florida state bathing water standards.

[c]A Compilation of Water Quality Goals, California Regional Water Quality Control Board Central Valley Region, Sacramento, California, September, 1991.

[n]Total coliform drinking water maximum contaminant level (1 cfu/100ml or 1 mpn/100ml) was not used in water quality criteria comparisons.

[p]Proposed Criterion.

[r]Average annual concentration assumed to produce a total body or organ dose of 4 mrem/year, 40 CFR 141.16.

[s]EPA National Secondary Drinking Water Regulation, 40 CFR 143.

[t]The maximum contaminant level for the sum of the concentrations of trihalomethanes is 100 µg/L, 40 CFR 141.12.

[u]Coldwater criterion one day minimum; warmwater criterion seven day mean minimum.

Appendix G

Inventory Data Evaluation and Analysis (IDEA)
Servicewide Inventory and Monitoring Program "Level I"
Parameter Groups

The following table provides the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameter groups (National Park Service 1993). In order to determine the presence and/or absence of data for each of these parameter groups in the park, the parameter groups had to be defined by STORET parameter codes. This table provides the STORET codes and parameter descriptions for each parameter comprising one of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameter groups. Additional parameters could have been incorporated into each group, but an effort was made to represent each group with the parameters deemed to most likely occur in STORET and parks. The Toxic Elements Parameter Group was defined as the EPA's Clean Water Act Section 304(a) Priority Toxic Pollutants (40 CFR 131.36). Parameters are listed in ascending order of STORET code within each parameter group. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to find all the parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

STORET Code	Water Temperature Parameter Group	C.A.S. Number
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	-
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	-
STORET Code	**Flow Parameter Group[1]**	**C.A.S. Number**
00056	FLOW RATE, GALLONS/DAY	-
00058	FLOW RATE, GALLONS/MIN.	-
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	-
00060	FLOW, STREAM, MEAN DAILY CFS	-
00061	FLOW, STREAM, INSTANTANEOUS CFS	-
00065	STAGE, STREAM (FEET)	-
00067	TIDE STAGE CODE	-
00072	STAGE, STREAM (METERS)	-

[1]Tide stage is included in the Flow Parameter Group for coastal parks.

STORET Code	Clarity/Turbidity Parameter Group	C.A.S. Number
00070	TURBIDITY, (JACKSON CANDLE UNITS)	-
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	-
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	-
00077	TRANSPARENCY, SECCHI DISC (INCHES)	-
00078	TRANSPARENCY, SECCHI DISC (METERS)	-
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	-
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	-
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	-
STORET Code	**Conductivity Parameter Group**	**C.A.S. Number**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	-
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	-
00096	SALINITY AT 25 DEGREES C (MG/ML)	-
00480	SALINITY - PARTS PER THOUSAND	-
STORET Code	**Dissolved Oxygen Parameter Group**	**C.A.S. Number**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	7782447
00300	OXYGEN, DISSOLVED (MG/L)	7782447
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	7782447
00389	OXYGEN, DISSOLVED, LAB ANAL. BY PROBE OF FIELD SAMPLE (MG/L)	7782447
STORET Code	**pH Parameter Group**	**C.A.S. Number**
00400	PH (STANDARD UNITS)	-
00403	PH, LAB (STANDARD UNITS)	-
00406	PH, FIELD (STANDARD UNITS)	-

STORET Code	Alkalinity Parameter Group	C.A.S. Number
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (µEQ/L)	471341
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	471341
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	77098
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	471341
00435	ACIDITY, TOTAL (MG/L AS CACO3)	471341
00440	BICARBONATE ION (MG/L AS HCO3)	71523
00445	CARBONATE ION (MG/L AS CO3)	3812326

STORET Code	Nitrate/Nitrogen Parameter Group	C.A.S. Number
00600	NITROGEN, TOTAL (MG/L AS N)	17778880
00602	NITROGEN, DISSOLVED (MG/L AS N)	17778880
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	17778880
00607	NITROGEN, ORGANIC, DISSOLVED (MG/L AS N)	17778880
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	17778880
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17778880
00612	AMMONIA, UNIONZED (MG/L AS N)	7664417
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	17778880
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17778880
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	17778880
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	17778880
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	17778880
00631	NITRITE PLUS NITRATE, DISSOLVED 1 DET. (MG/L AS N)	17778880
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	14798039
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	14798039
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	14797558
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	14797558
71855	NITRITE NITROGEN, TOTAL (MG/L AS NO2)	14797650
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	14797650

STORET Code	Phosphate/Phosphorus Parameter Group	C.A.S. Number
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	14265442
00655	PHOSPHATE, POLY (MG/L AS PO4)	14265442
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	14265442
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7723140
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	7723140
00670	PHOSPHORUS, TOTAL ORGANIC (MG/L AS P)	7723140
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7723140
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7723140
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7723140

STORET Code	Sulfates/Total Dissolved Solids/Hardness Parameter Group	C.A.S. Number
00900	HARDNESS, TOTAL (MG/L AS CACO3)	471341
00945	SULFATE, TOTAL (MG/L AS SO4)	14808798
00946	SULFATE, DISSOLVED (MG/L AS SO4)	14808798
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	-

STORET Code	Chlorophyll Parameter Group	C.A.S. Number
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	479618
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	479618
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	479618
32217	CHLOROPHYLL A (UG/L) FLUOROMETRIC UNCORRECTED	479618
32223	CHLOROPHYLL A (MG/M2) SPECTROPHOTOMETRIC CORRECTED	479618
32228	CHLOROPHYLL A (MG/M2) PERIPHYTON SPECTRO.	479618
32229	CHLOROPHYLL A (MG/M2) FLUOR. CORRECTED, SUBSTRATER	479618
32230	CHLOROPHYLL A (MG/L)	479618

STORET Code	Bacteria Parameter Group	C.A.S. Number
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI	-
31501	COLIFORM, TOT, MEMBRANE FILTER, IMMED., M-ENDO MED,35C	-
31503	COLIFORM, TOT, MEMBRANE FILTER, DELAY, M-ENDO MED, 35C	-
31504	COLIFORM, TOT, MEMBRANE FILTER, IMMED., LES-ENDO AGAR, 35C	-
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	-
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	-
31507	COLIFORM, TOT, MPN, COMPLETED TEST,35C(TUBE 31508)	-
31508	COLIFORM, TOT, MPN, COMPLETED TEST, TUBE CONFIG.	-
31613	FECAL COLIFORM, MEMBR, FILTER,M-FC AGAR,44.5C,24HR	-
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	-
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	-
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	-
31617	FECAL COLIFORM, MPN,EIJKMAN TEST,44.5C(TUBE 31618)	-
31625	FECAL COLIFORM, MF, M-FC, 0.7 UM	-
31648	E. COLI - MTEC-MF	-
31649	ENTEROCOCCI- ME-MF	-
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	-
31676	FECAL STREPTOCOCCI, MPN, KF BROTH, TUBE CONFIG.	-
31677	FECAL STREPTOCOCCI, MPN, AD-EVA, 35C (TUBE 31678)	-
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	-
61214	FECAL STREPTOCOCCI, GENERAL #/100ML	-
61215	FECAL COLIFORM, GENERAL #/100ML	-

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants)	C.A.S. Number
00718	CYANIDE, WEAK ACID, DISSOC. WATER, WHOLE (UG/L)	57125
00719	CYANIDE, FREE, IN WATER & WASTEWATERS, HBG (UG/L)	57125
00720	CYANIDE, TOTAL (MG/L AS CN)	57125
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) (MG/L)	57125

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	57125
00724	CYANIDE COMPLEXED TO A RANGE OF COMPNDS (UG/L)	57125
00969	CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00973	AMPHIBOLE ASBESTOS FIBERS/LITER	1332214
00976	AMBIGUOUS ASBESTOS FIBERS/LITER	1332214
00977	NON-AMPHIBOLE NON-CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00978	ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	7440382
00981	SELENIUM, TOTAL RECOVERABLE IN WATER AS SE (UG/L)	7782492
00982	THALLIUM, TOTAL RECOVERABLE IN WATER AS (UG/L)	7440280
00990	SELENITE, TOTAL RECOVERABLE INORGANIC (UG/L)	7782492
00991	ARSENIC, TOTAL RECOVER. TRIVALENT INORGANIC (UG/L)	7440382
00995	ARSENIC, INORGANIC DISSOLVED (UG/L AS AS)	7440382
00996	ARSENIC, INORGANIC SUSPENDED (UG/L AS AS)	7440382
00997	ARSENIC, INORGANIC TOTAL (UG/L AS AS)	7440382
00998	BERYLLIUM, TOTAL RECOVERABLE IN WATER AS BE (UG/L)	7440417
01000	ARSENIC, DISSOLVED (UG/L AS AS)	7440382
01001	ARSENIC, SUSPENDED (UG/L AS AS)	7440382
01002	ARSENIC, TOTAL (UG/L AS AS)	7440382
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	7440417
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)	7440417
01012	BERYLLIUM, TOTAL (UG/L AS BE)	7440417
01025	CADMIUM, DISSOLVED (UG/L AS CD)	7440439
01026	CADMIUM, SUSPENDED (UG/L AS CD)	7440439
01027	CADMIUM, TOTAL (UG/L AS CD)	7440439
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	7440473
01031	CHROMIUM, SUSPENDED (UG/L AS CR)	7440473
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	7440473
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	16065831
01034	CHROMIUM, TOTAL (UG/L AS CR)	7440473

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01040	COPPER, DISSOLVED (UG/L AS CU)	7440508
01041	COPPER, SUSPENDED (UG/L AS CU)	7440508
01042	COPPER, TOTAL (UG/L AS CU)	7440508
01049	LEAD, DISSOLVED (UG/L AS PB)	7439921
01050	LEAD, SUSPENDED (UG/L AS PB)	7439921
01051	LEAD, TOTAL (UG/L AS PB)	7439921
01057	THALLIUM, DISSOLVED (UG/L AS TL)	7440280
01058	THALLIUM, SUSPENDED (UG/L AS TL)	7440280
01059	THALLIUM, TOTAL (UG/L AS TL)	7440280
01065	NICKEL, DISSOLVED (UG/L AS NI)	7440020
01066	NICKEL, SUSPENDED (UG/L AS NI)	7440020
01067	NICKEL, TOTAL (UG/L AS NI)	7440020
01074	NICKEL, TOTAL RECOVERABLE IN WATER AS NI (UG/L)	7440020
01075	SILVER, DISSOLVED (UG/L AS AG)	7440224
01076	SILVER, SUSPENDED (UG/L AS AG)	7440224
01077	SILVER, TOTAL (UG/L AS AG)	7440224
01079	SILVER, TOTAL RECOVERABLE IN WATER AS AG (UG/L)	7440224
01089	COPPER AS SUSPENDED BLACK OXIDE IN WATER (MG/L)	7440508
01090	ZINC, DISSOLVED (UG/L AS ZN)	7440666
01091	ZINC, SUSPENDED (UG/L ZN)	7440666
01092	ZINC, TOTAL (UG/L AS ZN)	7440666
01094	ZINC, TOTAL RECOVERABLE IN WATER AS ZN (UG/L)	7440666
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	7440360
01096	ANTIMONY, SUSPENDED (UG/L AS SB)	7440360
01097	ANTIMONY, TOTAL (UG/L AS SB)	7440360
01113	CADMIUM, TOTAL RECOVERABLE IN WATER AS CD (UG/L)	7440439
01114	LEAD, TOTAL RECOVERABLE IN WATER AS PB (UG/L)	7439921
01118	CHROMIUM, TOTAL RECOVERABLE IN WATER AS CR (UG/L)	7440473
01119	COPPER,TOTAL RECOVERABLE IN WATER AS CU (UG/L)	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01124	THALLIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7440280
01128	THALLIUM,TOTAL RECOVERABLE <95%, UG/L AS TL	7440280
01138	SELENIUM, IN WATER, LBS/DAY	7782492
01145	SELENIUM, DISSOLVED (UG/L AS SE)	7782492
01146	SELENIUM, SUSPENDED (UG/L AS SE)	7782492
01147	SELENIUM, TOTAL (UG/L AS SE)	7782492
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7782492
01220	CHROMIUM, HEXAVALENT, DISSOLVED IN (UG/L AS CR)	18540299
01252	ARSENIC, LB/DAY/CFS STREAM FLOW	7440382
01253	CADMIUM, LB/DAY/CFS STREAM FLOW	7440439
01254	CHROMIUM, TOTAL (LBS/DAY/CFS STREAM FLOW)	7740473
01255	CHROMIUM, HEXAVALENT, LB/DAY/CFS STREAM FLOW	18540299
01256	COPPER, LB/DAY/CFS STREAM FLOW	7440508
01257	CYANIDE LB/DAY/CFS STREAM FLOW	57125
01259	LEAD, LB/DAY/CFS STREAM FLOW	7439921
01260	MERCURY, LB/DAY/CFS STREAM FLOW	7439976
01261	NICKEL, LB/DAY/CFS STREAM FLOW	7440020
01263	SILVER, LB/DAY/CFS STREAM FLOW	7440224
01264	ZINC LB/DAY/CFS STREAM FLOW	7440666
01268	ANTIMONY, (SB), WATER, TOTAL RECOVERABLE (UG/L)	7440360
01291	CYANIDE, FILTERABLE, TOTAL IN WATER (UG/L)	57125
01303	ZINC, POTENTIALLY DISSOLVED WATER (MG/L)	7440666
01304	SILVER, POTENTIALLY DISSOLVED WATER (MG/L)	7440224
01306	COPPER, POTENTIALLY DISSOLVED WATER (MG/L)	7440508
01307	CHROMIUM, HEXAVALENT, POTENT. DISS. WATER (MG/L)	18540299
01309	ARSENIC, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440382
01312	BERYLLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440417
01313	CADMIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440439

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01314	CHROMIUM, TRIVALENT, POTENT., DISS., WATER (MG/L)	16065831
01318	LEAD, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439921
01321	MERCURY, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439976
01322	NICKEL, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440020
01323	SELENIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7782492
01324	THALLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440280
01523	SILVER, IONIC (UG/L)	7440224
22675	SELENIUM, DISSOLVED ORGANIC (UG/L)	7782492
22676	SELENIUM, HEXAVALENT, DISSOLVED (UG/L)	7782492
22677	SELENIUM, TETRAVALENT, DISSOLVED	7782492
22678	ARSENIC, DISSOLVED ORGANIC (UG/L)	7440382
22679	ARSENIC, PENTAVALENT, DISSOLVED (UG/L)	7440382
22680	ARSENIC, TRIVALENT, DISSOLVED (UG/L)	7440382
30197	2-CHLOROETHYLVINYL ETHER,WATER,WHL,RECOVER (UG/L)	110758
30201	CHLOROMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74873
30202	BROMOMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74839
32003	CARBON CHLOROFORM AND CARBON ALCOHOL EXT. (UG/L)	67663
32005	CARBON CHLOROFORM EXTRACTABLES (UG/L)	67663
32021	CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLE (UG/L)	67663
32022	CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES (UG/L)	67663
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	75274
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	56235
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	107062
32104	BROMOFORM, WHOLE WATER, (UG/L)	75252
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	124481
32106	CHLOROFORM, WHOLE WATER (UG/L)	67663
32260	CARBON TETRACHLORIDE EXTRACTABLES (MG/L)	56235
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	67663

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	108883
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	71432
34198	BHC-DELTA, WATER, WHOLE (LBS/DAY)	319868
34200	ACENAPHTHYLENE, TOTAL (UG/L)	208968
34201	ACENAPHTHYLENE, DISSOLVED (UG/L)	208968
34202	ACENAPHTHYLENE, SUSPENDED (UG/L)	208968
34205	ACENAPHTHENE, TOTAL (UG/L)	83329
34206	ACENAPHTHENE, DISSOLVED (UG/L)	83329
34207	ACENAPHTHENE, SUSPENDED (UG/L)	83329
34210	ACROLEIN, TOTAL (UG/L)	107028
34211	ACROLEIN, DISSOLVED (UG/L)	107028
34212	ACROLEIN, SUSPENDED (UG/L)	107028
34215	ACRYLONITRILE, TOTAL (UG/L)	107131
34216	ACRYLONITRILE, DISSOLVED (UG/L)	107131
34217	ACRYLONITRILE, SUSPENDED (UG/L)	107131
34220	ANTHRACENE, TOTAL (UG/L)	120127
34221	ANTHRACENE, DISSOLVED (UG/L)	120127
34222	ANTHRACENE, SUSPENDED (UG/L)	120127
34225	ASBESTOS (FIBROUS) TOTAL (UG/L)	1332214
34226	ASBESTOS (FIBROUS) DISSOLVED (UG/L)	1332214
34227	ASBESTOS (FIBROUS) SUSPENDED (UG/L)	1332214
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	205992
34231	BENZO(B)FLUORANTHENE, DISSOLVED (UG/L)	205992
34232	BENZO(B)FLUORANTHENE, SUSPENDED (UG/L)	205992
34235	BENZENE, DISSOLVED (UG/L)	71432
34236	BENZENE, SUSPENDED (UG/L)	71432
34239	BENZIDINE, DISSOLVED (UG/L)	92875
34240	BENZIDINE, SUSPENDED (UG/L)	92875

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	207089
34243	BENZO(K)FLUORANTHENE, DISSOLVED (UG/L)	207089
34244	BENZO(K)FLUORANTHENE, SUSPENDED (UG/L)	207089
34247	BENZO-A-PYRENE, TOTAL (UG/L)	50328
34248	BENZO-A-PYRENE, DISSOLVED (UG/L)	50328
34249	BENZO-A-PYRENE, SUSPENDED (UG/L)	50328
34253	A-BHC-ALPHA, DISSOLVED (UG/L)	319846
34254	A-BHC-ALPHA, SUSPENDED (UG/L)	319846
34255	B-BHC-BETA, DISSOLVED (UG/L)	319857
34256	B-BHC-BETA, SUSPENDED (UG/L)	319857
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	319868
34260	DELTA BENZENE HEXACHLORIDE, DISSOLVED (UG/L)	319868
34261	DELTA BENZENE HEXACHLORIDE, SUSPENDED (UG/L)	319868
34265	R-BHC (LINDANE) GAMMA, DISSOLVED (UG/L)	58899
34266	R-BHC (LINDANE) GAMMA, SUSPENDED (UG/L)	58899
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	111444
34274	BIS (2-CHLOROETHYL) ETHER, DISSOLVED (UG/L)	111444
34275	BIS (2-CHLOROETHYL) ETHER, SUSPENDED (UG/L)	111444
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	111911
34279	BIS (2-CHLOROETHOXY) METHANE, DISSOLVED (UG/L)	111911
34280	BIS (2-CHLOROETHOXY) METHANE, SUSPENDED (UG/L)	111911
34288	BROMOFORM, DISSOLVED (UG/L)	75252
34289	BROMOFORM, SUSPENDED (UG/L)	75252
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	85687
34293	N-BUTYL BENZYL PHTHALATE, DISSOLVED (UG/L)	85687
34294	N-BUTYL BENZYL PHTHALATE, SUSPENDED (UG/L)	85687
34297	CARBON TETRACHLORIDE, DISSOLVED (UG/L)	56235
34298	CARBON TETRACHLORIDE, SUSPENDED (UG/L)	56235

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34301	CHLOROBENZENE, TOTAL (UG/L)	108907
34302	CHLOROBENZENE, DISSOLVED (UG/L)	108907
34303	CHLOROBENZENE, SUSPENDED (UG/L)	108907
34306	CHLORODIBROMOMETHANE, TOTAL (UG/L)	124481
34307	CHLORODIBROMOMETHANE, DISSOLVED (UG/L)	124481
34308	CHLORODIBROMOMETHANE, SUSPENDED (UG/L)	124481
34311	CHLOROETHANE, TOTAL (UG/L)	75003
34312	CHLOROETHANE, DISSOLVED (UG/L)	75003
34313	CHLOROETHANE, SUSPENDED (UG/L)	75003
34316	CHLOROFORM, DISSOLVED (UG/L)	67663
34317	CHLOROFORM, SUSPENDED (UG/L)	67663
34320	CHRYSENE, TOTAL (UG/L)	218019
34321	CHRYSENE, DISSOLVED (UG/L)	218019
34322	CHRYSENE, SUSPENDED (UG/L)	218019
34325	CYANIDE, SUSPENDED (MG/L)	57125
34327	DI-N-BUTYL PHTHALATE, DISSOLVED (UG/L)	84742
34328	DICHLOROBROMOMETHANE, DISSOLVED (UG/L)	75274
34329	DICHLOROBROMOMETHANE, SUSPENDED (UG/L)	75274
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	84662
34337	DIETHYL PHTHALATE, DISSOLVED (UG/L)	84662
34338	DIETHYL PHTHALATE, SUSPENDED (UG/L)	84662
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	131113
34342	DIMETHYL PHTHALATE, DISSOLVED (UG/L)	131113
34343	DIMETHYL PHTHALATE, SUSPENDED (UG/L)	131113
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	122667
34347	1,2-DIPHENYLHYDRAZINE, DISSOLVED (UG/L)	122667
34348	1,2-DIPHENYLHYDRAZINE, SUSPENDED (UG/L)	122667
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	1031078

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34352	ENDOSULFAN SULFATE, DISSOLVED (UG/L)	1031078
34353	ENDOSULFAN SULFATE, SUSPENDED (UG/L)	1031078
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	33213659
34357	ENDOSULFAN, BETA, DISSOLVED (UG/L)	33213659
34358	ENDOSULFAN, BETA, SUSPENDED (UG/L)	33213659
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	959988
34362	ENDOSULFAN, ALPHA, DISSOLVED (UG/L)	959988
34363	ENDOSULFAN, ALPHA, SUSPENDED (UG/L)	959988
34371	ETHYLBENZENE, TOTAL (UG/L)	100414
34372	ETHYLBENZENE, DISSOLVED (UG/L)	100414
34373	ETHYLBENZENE, SUSPENDED (UG/L)	100414
34376	FLUORANTHENE, TOTAL (UG/L)	206440
34377	FLUORANTHENE, DISSOLVED (UG/L)	206440
34378	FLUORANTHENE, SUSPENDED (UG/L)	206440
34381	FLUORENE, TOTAL (UG/L)	86737
34382	FLUORENE, DISSOLVED (UG/L)	86737
34383	FLUORENE, SUSPENDED (UG/L)	86737
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	77474
34387	HEXACHLOROCYCLOPENTADIENE, DISSOLVED (UG/L)	77474
34388	HEXACHLOROCYCLOPENTADIENE, SUSPENDED (UG/L)	77474
34391	HEXACHLOROBUTADIENE, TOTAL (UG/L)	87683
34392	HEXACHLOROBUTADIENE, DISSOLVED (UG/L)	87683
34393	HEXACHLOROBUTADIENE, SUSPENDED (UG/L)	87683
34396	HEXACHLOROETHANE, TOTAL (UG/L)	67721
34397	HEXACHLOROETHANE, DISSOLVED (UG/L)	67721
34398	HEXACHLOROETHANE, SUSPENDED (UG/L)	67721
34401	HEXACHLOROBENZENE, DISSOLVED (UG/L)	118741
34402	HEXACHLOROBENZENE, SUSPENDED (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	193395
34404	INDENO (1,2,3-CD) PYRENE, DISSOLVED (UG/L)	193395
34405	INDENO (1,2,3-CD) PYRENE, SUSPENDED (UG/L)	193395
34408	ISOPHORONE, TOTAL (UG/L)	78591
34409	ISOPHORONE, DISSOLVED (UG/L)	78591
34410	ISOPHORONE, SUSPENDED (UG/L)	78591
34413	METHYL BROMIDE, TOTAL (UG/L)	74839
34414	METHYL BROMIDE, DISSOLVED (UG/L)	74839
34415	METHYL BROMIDE, SUSPENDED (UG/L)	74839
34418	METHYL CHLORIDE, TOTAL (UG/L)	74873
34419	METHYL CHLORIDE, DISSOLVED (UG/L)	74873
34420	METHYL CHLORIDE, SUSPENDED (UG/L)	74873
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	75092
34424	METHYLENE CHLORIDE, DISSOLVED (UG/L)	75092
34425	METHYLENE CHLORIDE, SUSPENDED (UG/L)	75092
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	621647
34429	N-NITROSODI-N-PROPYLAMINE, DISSOLVED (UG/L)	621647
34430	N-NITROSODI-N-PROPYLAMINE, SUSPENDED (UG/L)	621647
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	86306
34434	N-NITROSODIPHENYLAMINE, DISSOLVED (UG/L)	86306
34435	N-NITROSODIPHENYLAMINE, SUSPENDED (UG/L)	86306
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	62759
34439	N-NITROSODIMETHYLAMINE, DISSOLVED (UG/L)	62759
34440	N-NITROSODIMETHYLAMINE, SUSPENDED (UG/L)	62759
34443	NAPHTHALENE, DISSOLVED (UG/L)	91203
34444	NAPHTHALENE, SUSPENDED (UG/L)	91203
34447	NITROBENZENE, TOTAL (UG/L)	98953
34448	NITROBENZENE, DISSOLVED (UG/L)	98953

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34449	NITROBENZENE, SUSPENDED (UG/L)	98953
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	59507
34453	PARACHLOROMETA CRESOL, DISSOLVED (UG/L)	59507
34454	PARACHLOROMETA CRESOL, SUSPENDED (UG/L)	59507
34457	PCB - 1242, DISSOLVED (UG/L)	53469219
34458	PCB - 1242, SUSPENDED (UG/L)	53469219
34459	PCP (PENTACHLOROPHENOL), DISSOLVED (UG/L)	87865
34460	PCP (PENTACHLOROPHENOL), SUSPENDED (UG/L)	87865
34461	PHENANTHRENE, TOTAL (UG/L)	85018
34462	PHENANTHRENE, DISSOLVED (UG/L)	85018
34463	PHENANTHRENE, SUSPENDED (UG/L)	85018
34466	PHENOL, DISSOLVED (UG/L)	108952
34467	PHENOL, SUSPENDED (UG/L)	108952
34469	PYRENE, TOTAL (UG/L)	129000
34470	PYRENE, DISSOLVED (UG/L)	129000
34471	PYRENE, SUSPENDED (UG/L)	129000
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	127184
34476	TETRACHLOROETHYLENE, DISSOLVED (UG/L)	127184
34477	TETRACHLOROETHYLENE, SUSPENDED (UG/L)	127184
34481	TOLUENE, DISSOLVED (UG/L)	108883
34482	TOLUENE, SUSPENDED (UG/L)	108883
34485	TRICHLOROETHYLENE, DISSOLVED (UG/L)	79016
34486	TRICHLOROETHYLENE, SUSPENDED (UG/L)	79016
34493	VINYL CHLORIDE, DISSOLVED (UG/L)	75014
34494	VINYL CHLORIDE, SUSPENDED (UG/L)	75014
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	75343
34497	1,1-DICHLOROETHANE, DISSOLVED (UG/L)	75343
34498	1,1-DICHLOROETHANE, SUSPENDED (UG/L)	75343

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	75354
34502	1,1-DICHLOROETHYLENE, DISSOLVED (UG/L)	75354
34503	1,1-DICHLOROETHYLENE, SUSPENDED (UG/L)	75354
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	71556
34507	1,1,1-TRICHLOROETHANE, DISSOLVED (UG/L)	71556
34508	1,1,1-TRICHLOROETHANE, SUSPENDED (UG/L)	71556
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	79005
34512	1,1,2-TRICHLOROETHANE, DISSOLVED (UG/L)	79005
34513	1,1,2-TRICHLOROETHANE, SUSPENDED (UG/L)	79005
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	79345
34517	1,1,2,2-TETRACHLOROETHANE, DISSOLVED (UG/L)	79345
34518	1,1,2,2-TETRACHLOROETHANE, SUSPENDED (UG/L)	79345
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	191242
34522	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, DISS. (UG/L)	191242
34523	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, SUSP. (UG/L)	191242
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	56553
34527	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, DISS. (UG/L)	56553
34528	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, SUSP. (UG/L)	56553
34531	1,2-DICHLOROETHANE, TOTAL (UG/L)	107062
34532	1,2-DICHLOROETHANE, DISSOLVED (UG/L)	107062
34533	1,2-DICHLOROETHANE, SUSPENDED (UG/L)	107062
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	95501
34537	1,2-DICHLOROBENZENE, DISSOLVED (UG/L)	95501
34538	1,2-DICHLOROBENZENE, SUSPENDED (UG/L)	95501
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	78875
34542	1,2-DICHLOROPROPANE, DISSOLVED (UG/L)	78875
34543	1,2-DICHLOROPROPANE, SUSPENDED (UG/L)	78875
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	156605

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34547	TRANS-1,2-DICHLOROETHENE, DISSOLVED (UG/L)	156605
34548	TRANS-1,2-DICHLOROETHENE, SUSPENDED (UG/L)	156605
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	120821
34552	1,2,4-TRICHLOROBENZENE, DISSOLVED (UG/L)	120821
34553	1,2,4-TRICHLOROBENZENE, SUSPENDED (UG/L)	120821
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	53703
34557	1,2,5,6-DIBENZANTHRACENE, DISSOLVED (UG/L)	53703
34558	1,2,5,6-DIBENZANTHRACENE, SUSPENDED (UG/L)	53703
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	542756
34562	1,3-DICHLOROPROPENE, DISSOLVED (UG/L)	542756
34563	1,3-DICHLOROPROPENE, SUSPENDED (UG/L)	542756
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	541731
34567	1,3-DICHLOROBENZENE, DISSOLVED (UG/L)	541731
34568	1,3-DICHLOROBENZENE, SUSPENDED (UG/L)	541731
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	106467
34572	1,4-DICHLOROBENZENE, DISSOLVED (UG/L)	106467
34573	1,4-DICHLOROBENZENE, SUSPENDED (UG/L)	106467
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	110758
34577	2-CHLOROETHYL VINYL ETHER, DISSOLVED (UG/L)	110758
34578	2-CHLOROETHYL VINYL ETHER, SUSPENDED (UG/L)	110758
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	91587
34582	2-CHLORONAPHTHALENE, DISSOLVED (UG/L)	91587
34583	2-CHLORONAPHTHALENE, SUSPENDED (UG/L)	91587
34586	2-CHLOROPHENOL, TOTAL (UG/L)	95578
34587	2-CHLOROPHENOL, DISSOLVED (UG/L)	95578
34588	2-CHLOROPHENOL, SUSPENDED (UG/L)	95578
34591	2-NITROPHENOL, TOTAL (UG/L)	88755
34592	2-NITROPHENOL, DISSOLVED (UG/L)	88755

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34593	2-NITROPHENOL, SUSPENDED (UG/L)	88755
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	117840
34597	DI-N-OCTYL PHTHALATE, DISSOLVED (UG/L)	117840
34598	DI-N-OCTYL PHTHALATE, SUSPENDED (UG/L)	117840
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	120832
34602	2,4-DICHLOROPHENOL, DISSOLVED (UG/L)	120832
34603	2,4-DICHLOROPHENOL, SUSPENDED (UG/L)	120832
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	105679
34607	2,4-DIMETHYLPHENOL, DISSOLVED (UG/L)	105679
34608	2,4-DIMETHYLPHENOL, SUSPENDED (UG/L)	105679
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	121142
34612	2,4-DINITROTOLUENE, DISSOLVED (UG/L)	121142
34613	2,4-DINITROTOLUENE, SUSPENDED (UG/L)	121142
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	51285
34617	2,4-DINITROPHENOL, DISSOLVED (UG/L)	51285
34618	2,4-DINITROPHENOL, SUSPENDED (UG/L)	51285
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	88062
34622	2,4,6-TRICHLOROPHENOL, DISSOLVED (UG/L)	88062
34623	2,4,6-TRICHLOROPHENOL, SUSPENDED (UG/L)	88062
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	606202
34627	2,6-DINITROTOLUENE, DISSOLVED (UG/L)	606202
34628	2,6-DINITROTOLUENE, SUSPENDED (UG/L)	606202
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	91941
34632	3,3'-DICHLOROBENZIDINE, DISSOLVED (UG/L)	91941
34633	3,3'-DICHLOROBENZIDINE, SUSPENDED (UG/L)	91941
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	101553
34637	4-BROMOPHENYL PHENYL ETHER, DISSOLVED (UG/L)	101553
34638	4-BROMOPHENYL PHENYL ETHER, SUSPENDED (UG/L)	101553

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	7005723
34642	4-CHLOROPHENYL PHENYL ETHER, DISSOLVED (UG/L)	7005723
34643	4-CHLOROPHENYL PHENYL ETHER, SUSPENDED (UG/L)	7005723
34646	4-NITROPHENOL, TOTAL (UG/L)	100027
34647	4-NITROPHENOL, DISSOLVED (UG/L)	100027
34648	4-NITROPHENOL, SUSPENDED (UG/L)	100027
34651	P,P'-DDD, DISSOLVED (UG/L)	72548
34652	P,P'-DDD, SUSPENDED (UG/L)	72548
34653	P,P'-DDE, DISSOLVED (UG/L)	72559
34654	P,P'-DDE, SUSPENDED (UG/L)	72559
34655	P,P'-DDT, DISSOLVED (UG/L)	50293
34656	P,P'-DDT, SUSPENDED (UG/L)	50293
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	534521
34658	DNOC (4,6-DINITRO-ORTHO-CRESOL), DISSOLVED (UG/L)	534521
34659	DNOC (4,6-DINITRO-ORTHO-CRESOL), SUSPENDED (UG/L)	534521
34662	PCB - 1221, DISSOLVED (UG/L)	11104282
34663	PCB - 1221, SUSPENDED (UG/L)	11104282
34665	PCB - 1232, DISSOLVED (UG/L)	11141165
34666	PCB - 1232, SUSPENDED (UG/L)	11141165
34671	PCB - 1016, TOTAL (UG/L)	12674112
34672	PCB - 1016, DISSOLVED (UG/L)	12674112
34673	PCB - 1016, SUSPENDED (UG/L)	12674112
34675	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD),TOT(UG/L)	1746016
34676	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(UG/L)	1746016
34677	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(UG/L)	1746016
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	108952
34696	NAPHTHALENE, TOTAL (UG/L)	91203
34750	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)TOT(PG/L)	1746016

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34751	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(PG/L)	1746016
34752	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(PG/L)	1746016
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	87865
39039	HEXACHLOROBENZENE WATER SAMPLE,ELECTRON CPT (UG/L)	118741
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	117817
39103	BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED, (UG/L)	117817
39104	BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED, (UG/L)	117817
39107	PHTHALATES,DIETHYLHEXYL SUS.FRAC.WTR DWT (MG/KG)	117817
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	84742
39114	DI-N-BUTYL PHTHALATE, SUSPENDED (UG/L)	84742
39115	PHTHALATES,DIBUTYL SUS.FRAC.WATER DWT (UG/KG)	84742
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	92875
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	75014
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	79016
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	309002
39331	ALDRIN IN FILT. FRAC. OF WAT. SAMP. (UG/L)	309002
39332	ALDRIN IN SUSP. FRAC. OF WAT. SAMP. (UG/L)	309002
39336	BHC-ALPHA, WATER, WHOLE (LBS/DAY)	319846
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319846
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319857
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	58899
39341	GAMMA-BHC(LINDANE), DISSOLVED (UG/L)	58899
39342	GAMMA-BHC(LINDANE), SUSPENDED (UG/L)	58899
39344	BHC-GAMMA, WATER, WHOLE (LBS/DAY)	58899
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	57749

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39352	CHLORDANE(TECH MIX & METABS), DISSOLVED (UG/L)	57749
39353	CHLORDANE(TECH MIX & METABS), SUSPENDED (UG/L)	57749
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39361	DDD IN FILT. FRAC. OF WATER SMAPLE (UG/L)	72548
39362	DDD IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72548
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39366	DDE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72559
39367	DDE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72559
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39371	DDT IN FILT. FRAC. OF WATER SAMPLE (UG/L)	50293
39372	DDT IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	50293
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	60571
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	60571
39382	DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	60571
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	72208
39391	ENDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72208
39392	ENDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72208
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	8001352
39401	TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	8001352
39402	TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	8001352
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	76448
39411	HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE (UG/L)	76448
39412	HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	76448
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	1024573
39421	HEPTACHLOR EPOXIDE IN FILT. FRAC. WAT. SAM. (UG/L)	1024573
39422	HEPTACHLOR EPOXIDE IN SUSP. FRAC. WAT. SAM. (UG/L)	1024573
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	11104282
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11141165

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	53469219
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12672296
39501	PCB - 1248 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	12672296
39502	PCB - 1248 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	12672296
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11097691
39505	PCB - 1254 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11097691
39506	PCB - 1254 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11097691
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11096825
39509	PCB - 1260 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11096825
39510	PCB - 1260 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11096825
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	118741
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	87683
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	58899
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	534521
46322	LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE (UG/L)	58899
46323	DELTA-BHC IN WHOLE WATER SAMPLE (UG/L)	319868
46326	HEPTACHLOR AND METABOLITES IN WH. H2O SAMP. (UG/L)	76448
46479	CYANIDE, DISSOLVED, WATER (UG/L)	57125
46551	ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILT. (UG/L)	7440382
46559	CADMIUM, FIELD ACIDIFIED-HNO3-LAB FILTER (UG/L-CD)	7440439
46560	CHROMIUM, FIELD ACIDIFIED-HN03-LAB FILT. (UG/L-CR)	7440473
46562	COPPER, FIELD ACIDIFIED-HNO3-LAB FILTER. (UG/L-CU)	7440508
46564	LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED (UG/L-PB)	7439921
46566	SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.(UG/L-AG)	7440224
46567	ZINC, EXTRACT. FIELD ACID W/HNO3, LAB FILT. (UG/L)	7440666
70012	PARACHLOROMETA CRESOL, WATER, WHOLE (LBS/DAY)	59507
70017	HEXACHLOROCYCLOPENTADIENE, WATER, WHOLE (LBS/DAY)	77474
70021	LEAD, (TCLP), WATER, TOTAL (MG/L)	7439921

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
71890	MERCURY, DISSOLVED (UG/L AS HG)	7439976
71895	MERCURY, SUSPENDED (UG/L AS HG)	7439976
71900	MERCURY, TOTAL (UG/L AS HG)	7439976
71901	MERCURY, TOTAL RECOVERABLE IN WATER AS HG (UG/L)	7439976
71946	CADMIUM, EXTRACTABLE (UG/L AS CD)	7440439
71947	CHROMIUM, EXTRACTABLE (UG/L AS CR)	7440473
71949	LEAD, EXTRACTABLE (UG/L AS PB)	7439921
71950	ZINC, EXTRACTABLE (UG/L AS ZN)	7440666
71951	COPPER, EXTRACTABLE (UG/L AS CU)	7440508
73063	CHLOROGUAIACOL,4-, TOTAL, WATER (UG/L)	16766306
73522	PROPANE, 2,2'-OXYBIS(1-CHLORO)- TOTAL (UG/L)	108601
77163	1,3-DICHLOROPROPENE-1, WHOLE WATER (UG/L)	542756
77354	1,1-DICHLORO-2,2-DIFLUOROETHANE WHOLE WATER (UG/L)	471432
77771	3-CHLORO-4-HYDROXYBENZOPHENONE, WHOLE WATER (UG/L)	55191203
78113	ETHYL BENZENE WHOLE WATER SAMPLE (UG/L)	100414
78124	BENZENE IN WATER (VOLATILE ANALYSIS) (UG/L)	71432
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) (UG/L)	108883
78208	2,4-DINITRO-O-CRESOL IN WHOLE WATER SAMPLE (UG/L)	534521
78247	CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE, WT (UG/L)	18540299
78248	CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE (UG/L)	57125
80357	CHROMIUM, TRIVALENT, DISSOLVED, AS CR	16065831
81208	CYANIDE, FREE (NOT AMEN. TO CHLORINATION) (MG/L)	57125
81210	CYANIDE - STATE OF ILLINOIS (MG/L)	57125
81214	CADMIUM - STATE OF ILLINOIS (MG/L)-COLD	7440439
81215	CHROMIUM - STATE OF ILLINOIS (MG/L), COLD DIGEST	18540299
81216	CHROMIUM(TRI)-STATE OF ILLINOIS (MG/L)-COLD DIGEST	16065831
81217	CHROMIUM, TOTAL - STATE OF ILLINOIS (MG/L) COLD DIGEST	7440473
81218	COPPER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
81220	LEAD, STATE OF ILLINOIS, MG/L, COLD DIGEST	7439921
81222	NICKEL - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440020
81223	SILVER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440224
81224	ZINC - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440666
81642	SILVER (AG) IN WATER POUNDS PER DAY (LBS/DAY)	7440224
81750	COPPER, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440508
81751	LEAD, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7439921
81752	NICKEL, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440020
81753	CADMIUM, INTERSTITIAL WATER FROM SEDIMENT	7440439
81754	ZINC, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440666
81766	HEPTACHLOR EPOXIDE IN EPILITHIC ALGAE SED. (UG/KG)	1024573
81931	MERCURY (HG) SUSPENDED FRACTION OF WATER (UG/G)	7439976
81932	CADMIUM (CD) SUSPENDED FRACTION OF WATER (UG/G)	7440439
81933	ZINC (ZN) SUSPENDED FRACTION OF WATER (UG/G)	7440666
81934	LEAD (PB) SUSPENDED FRACTION OF WATER (UG/G)	7439921
81936	LEAD (PB) DISSOLVED CATIONIC SPECIES (UG/L)	7439921
81937	CADMIUM (CD) DISSOLVED CATIONIC SPECIES (UG/L)	7440439
81938	CHROMIUM, DISSOLVED CATIONIC SPECIES (UG/L)	7440473
81939	COPPER (CU) DISSOLVED CATIONIC SPECIES (UG/L)	7440508
81940	ZINC (ZN) DISSOLVED CATIONIC SPECIES (UG/L)	7440666
81941	CHROMIUM, DISSOLVED ANIONIC SPECIES (UG/L)	7440473
81942	COPPER (CU) DISSOLVED ANIONIC SPECIES (UG/L)	7440508
81943	ZINC (ZN) DISSOLVED ANIONIC SPECIES (UG/L)	7440666
82058	CHROMIUM, TOTAL, PERCENT REMOVAL	7440473
82399	CHROMIUM, HEXAVALENT (KG/BATCH)	18540299
82512	M,P-DICHLOROBENZENE (MEASURES 1,3&1,4) TOT. (UG/L)	541731
82573	CYANIDE/CHLORINATION IN WATER (MG/L)	57125
82621	HEXACHLOROBENZENE, WATER, TOTAL RECOVER. (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
82622	ENDRIN ALDEHYDE, WH. WATER, TOTAL RECOVER. (UG/L)	7421934
82623	ENDOSULFAN SULFATE, WATER, TOTAL RECOVER. (UG/L)	1031078
82624	ENDOSULFAN, BETA, WH. WATER, TOTAL RECOVER. (UG/L)	33213659
82626	1,2-DIPHENYLHYDRAZINE, WATER, TOTAL RECOVER. (UG/L)	122667
82627	PARACHLOROMETA CRESOL, WATER, TOTAL RECOVER. (UG/L)	59507
82702	ARSENIC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440382
82704	BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440417
82705	CADMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440439
82706	CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440473
82708	COPPER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440508
82711	LEAD, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439921
82713	MERCURY, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439976
82715	NICKEL, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440020
82716	SILVER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440224
82719	ZINC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440666
85006	ZINC, TOTAL - (#/DAY)	7440666
85007	CHROMIUM, TOTAL (#/DAY)	7440473
85010	NICKEL, TOTAL - (#/DAY)	7440020
85013	MERCURY, TOTAL - (#/DAY)	7439976

Appendix H

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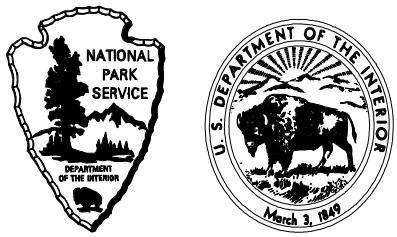
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